

Appendix A
JACOBS CONDITION ASSESSMENT 2019

FINAL REPORT

Wilsonville Wastewater Facility Condition Assessment Report



Prepared for

City of Wilsonville

April 2019

Condition Assessment

A condition assessment provides a snapshot of the physical state of assets and, in this assessment, the physical state of the individual assets. The assessment results offer information to help determine the remaining useful life of the entities and to gauge the effectiveness of the existing maintenance program. Information from the condition assessment also may be used for planning the actions needed to bring equipment back to satisfactory operational status, thereby ensuring reliability and prolonged life.

Jacobs performed the condition assessment of the Wilsonville Wastewater Treatment Plant (facility) and Lift Stations in April 2019, with external project personnel from Jacobs (see Appendix A).

In total, 322 major assets were assessed at the facility. A list of these assets is included as Appendix B. The detailed condition assessment results are reported in the ACES[®] software program that is accessible to any internet-capable computer at the facility.

1.0 Condition Rating System

The rating system employed for the condition assessment is shown in Table 1-1. It is adapted from the rating system documented in the International Infrastructure Management Manual¹. This system has been shown to be effective in identifying and expressing asset condition, and assisting in improving overall asset management practices.

The rating system uses scores from 1 to 5 to reflect the physical state of the asset, from best to worst, respectively. A score of 0 is assigned to an asset that does not exist or has been abandoned. A score of 0 is not included in the calculation of the overall condition rating of the facility. A score of 6 is used to denote an asset that exists but is not assessed for various reasons (e.g., it is inaccessible, cannot be removed from service, or cannot be located). When an asset cannot be assessed, it is conservatively assumed to be in the worst condition (unserviceable), and a score of 5 is used in calculations.

TABLE 1-1. Condition Asset Rating

Rating	Description of Condition
1	Very Good Condition Only normal maintenance required
2	Minor Defects Only Minor maintenance required—5% of the asset needs maintenance.
3	Backlog Maintenance Required to Return to Accepted Level of Service Significant maintenance required—10 to 20% of the asset needs maintenance.
4	Requires Renewal Significant renewal/upgrade—20 to 40% of the asset needs renewal.
5	Entity Unserviceable Over 50% of the asset requires replacement.

¹ Association of Local Government Engineering New Zealand, Inc. and the Institute of Public Works Engineering Australia. 2002. *International Infrastructure Management Manual*. Version 2.0.

2.0 Assessment Factors

Numerous condition assessment factors were evaluated by Jacobs to determine those that would best facilitate the condition assessment process and result in data that were most useful. While most factors are specific to the type of asset, the following are general condition assessment factors that are common to several types of assets:

- Corrosion
- Unusual noise, heat, or smell during operation
- Lack of evidence of preventive maintenance
- Lack of evidence of calibration
- Excessive vibration
- Thermography
- Leaking packing glands
- Evidence of wear
- Inability to perform designed duty
- Tagged-out
- Safety issues

During the Condition Assessment at the facility, where appropriate, infrared (IR) scans are taken of electrical and moving assets. During this year's assessment, no assets had abnormal heat characteristics.

Cathodic protection is assessed on an annual basis at the facility. Reports on the cathodic protection are provided independently of this report.

3.0 Data Collection and Assessment Process

The condition assessment was performed in three phases: assessment preparation, field assessment, and quality review.

3.1 Assessment Preparation

Figure 3-1 shows the steps involved in data collection, data review, and software setup prior to the deployment of the Jacobs personnel to the field. Basic information about the major assets to be inspected was downloaded from Maintenance Connection, the computerized maintenance management system (CMMS). This asset database was used as the basis for the field assessment. Each asset was categorized by type, and each asset type was assigned a series of questions used to evaluate its condition.

In addition, the assessment personnel reviewed O&M data and, where available, previous inspection records. The maintenance data inspected included preventive maintenance tasks, work order history, vibration analysis data, and thermographic data where applicable.

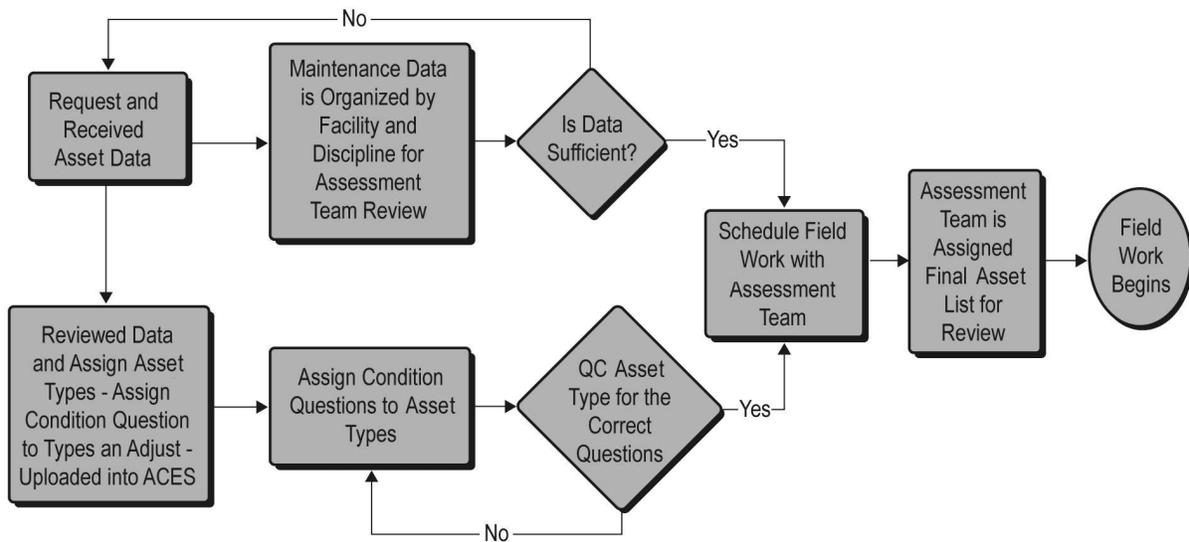


Figure 3-1. Condition Assessment Preparation Process

3.2 Field Assessment

Field condition assessment personnel use personnel computers with a wireless cards and ACES® software to perform the field condition assessment of the assets. Figure 3-2 provides an example of the computer screen to be filled out during a field assessment. Assets that are rated a 3 or higher are then photographed digitally. Photographs are uploaded to the facility server to provide a visual reference for the condition assessment.

Question	Answer	Comment
Missing Safety Guards	<input type="radio"/> NA <input type="radio"/> No <input checked="" type="radio"/> Yes	
Oil Problem at Inspection	<input type="radio"/> NA <input checked="" type="radio"/> No <input type="radio"/> Yes	
Stopped at Inspection	<input type="radio"/> NA <input checked="" type="radio"/> No <input type="radio"/> Yes	
Unusual Smell or Heat	<input type="radio"/> NA <input checked="" type="radio"/> No <input type="radio"/> Yes	
Excessive Noise	<input type="radio"/> NA <input checked="" type="radio"/> No <input type="radio"/> Yes	
Excessive Vibration	<input type="radio"/> NA <input checked="" type="radio"/> No <input type="radio"/> Yes	
Missing Components	<input type="radio"/> NA <input checked="" type="radio"/> No <input type="radio"/> Yes	
Excessive Oil or Grease	<input type="radio"/> NA <input checked="" type="radio"/> No <input type="radio"/> Yes	
Corrosion	0 - N/A	
Drive Shaft	0 - N/A	
Bearing	0 - N/A	
Coating	0 - N/A	
Belt or Chain	0 - N/A	
Air Filter	0 - N/A	
Structural Integrity	0 - N/A	
Couplings	0 - N/A	
Oil Seal	0 - N/A	

Figure 3-2. Field Assessment Data Input Screen

Once the field condition assessment information and photographs were gathered electronically and uploaded to the server, Jacobs personnel are then able to access the Condition Assessment information from the SCADA terminals. Figure 3-3 shows the work flow of the field assessment process. Condition assessment personnel also reviewed the maintenance data and updated the condition assessments as appropriate.

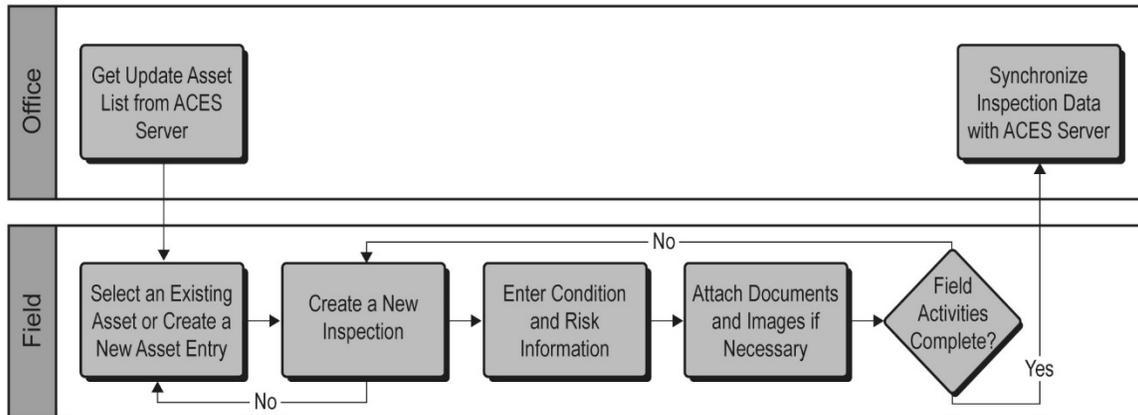


Figure 3-3. Field Assessment Workflow

Figure 3-4 depicts the hardware layout that is used at the facility for the ACES[®] software and condition assessment process.

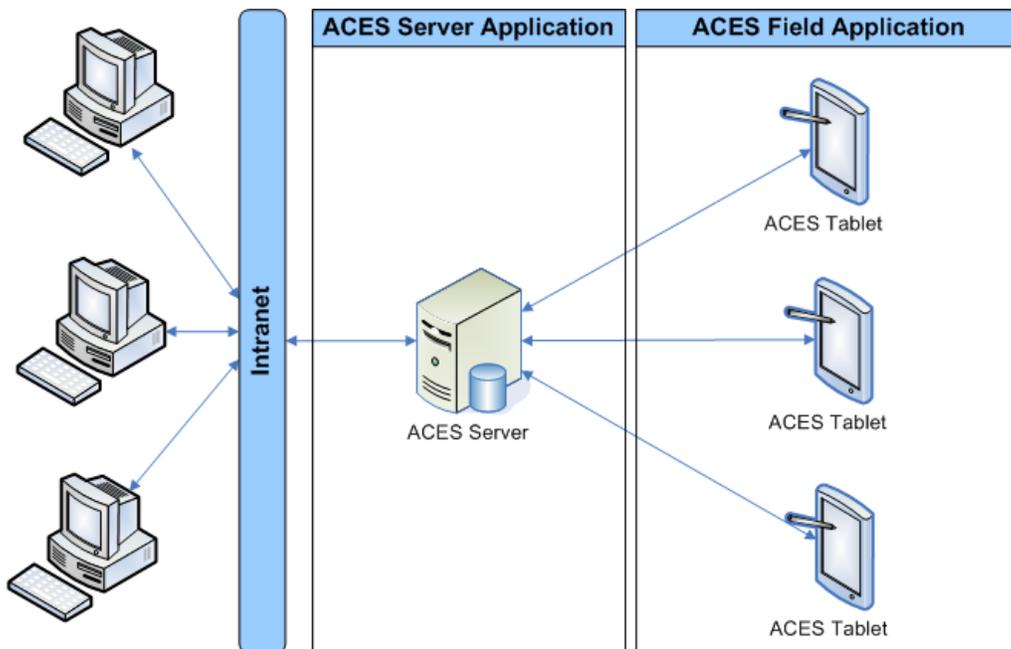


Figure 3-4. Hardware Layouts at Wilsonville Wastewater Treatment Facility for the Asset Condition Evaluation System (ACES)

3.3 Quality Review

At the end of each day of field assessment, the condition assessment field personnel participate in a quality review process to ensure that consistent ratings were assigned to the assets. Upon completion of the review, the records were updated as necessary. This quality review process is critical to the reliability of the condition assessment process. Figure 3-5 shows the steps involved in the quality review process.

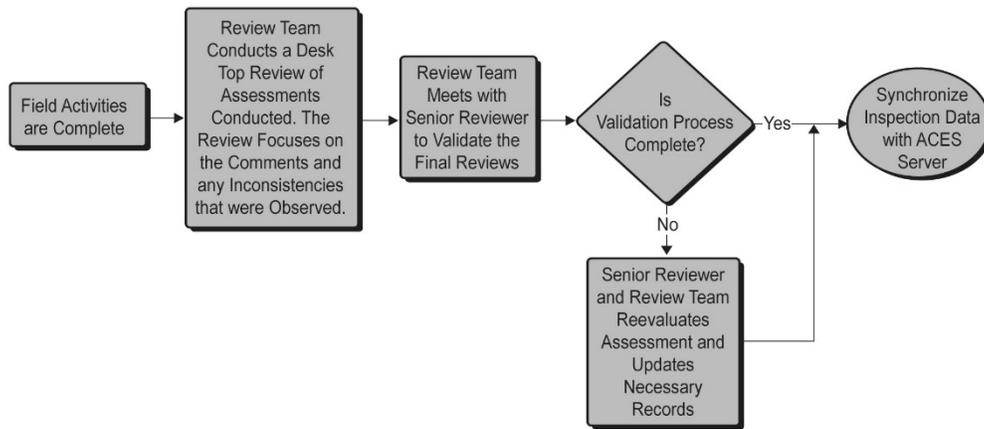


Figure 3-5. Condition Assessment Quality Review Process

4.0 Results of Assessment

Details of the individual assessments are captured in the ACES[®] software. Summary reports can be obtained by using ACES[®] software at the facility. The appendixes contain the following summaries and reports:

- **Appendix A, Condition Assessment Personnel:** contains a description of the personnel involved in the condition assessment
- **Appendix B, Asset List:** contains the complete list of assets and the condition rating of each.
- **Appendix C, IR Report:** Infrared inspection found no anomalies this inspection cycle.
- **Appendix D, Condition Roll-up by Location Report:** contains asset condition by location (process areas).
- **Appendix E, Condition Asset Spread Report:** contains the spread of asset conditions.
- **Appendix F, Single Asset Reports:** contains reports on individual assets, including comments and photos.

Appendix A
Condition Assessment Personnel

Ronald Thomas / CRL

Regional Reliability / Maintenance Specialist

EDUCATION

Operation of Wastewater Treatment Plants, Volume I, and Water Distribution System

O&M, California State University, Sacramento, California

OMI University I and II, Management Training

CERTIFICATIONS

CWEA Grade IV Maintenance Technologist

Idaho Class I Wastewater Operator

Idaho Class I Distribution Operator

Oregon Class I Wastewater Operator

Snell Class I Infrared Technologist

FAA Private Pilot Certificated

Flygt Factory Mutual Certification

Certified Reliability Leader Association of Assset Management Professionals

Profile

Mr. Thomas assists Jacobs Western U.S. facilities with development and management of world-class maintenance programs. He evaluates the mechanical and electrical condition of facilities under Jacobs management, and those of prospective Jacobs clients, to determine appropriate maintenance and repair strategies. Mr. Thomas promotes skill enhancement, CMMS optimization, and technical expertise throughout Jacobs regional enterprise.

Experience

West/Central Regional Maintenance Specialist Jacobs, Boise, Idaho

As Maintenance Specialist for Jacobs Central Region, Mr. Thomas supports projects with CMMS implementation, database maintenance, and technical support. Other duties include equipment / facility condition assessment, predictive maintenance, project risk management, and project support as needed to assure Jacobs maintenance policies and procedures and contractual obligations are met.

Recently Mr. Thomas has evaluated current equipment condition using infrared thermography, vibration testing, ultrasonic monitoring, and physical inspection for the Upper Occoquin Sewerage Agency in Manassas, Virginia, San Diego County Water Authority Twin Oaks Water Plant in San Marcos, California, Hartfield-Jackson Atlanta Airport (Electrical/HVAC), and numerous other municipal and industrial facilities. He is responsible for entering data into Asset Condition Evaluation System Asset Management Program and verifying its accuracy.

Appendix B
Condition Assessment Major Asset List

Asset ID	Description	Asset Type	System	Location
MEMP-LS-03-P-1	Memorial Park Lift Pump #1	PUMP CENT	Memorial Park LS	Memorial Park Liftstation
MEMP-LS-03-P-2	Memorial Park Lift Pump #2	PUMP CENT	Memorial Park LS	Memorial Park Liftstation
TOWNCENTER-LS-02-P-1	Town Center Lift Pump #1	PUMP CENT	Town Center LS	Town Center Liftstation
TOWNCENTER-LS-02-P-2	Town Center Lift Pump #2	PUMP CENT	Town Center LS	Town Center Liftstation
CANC-LS-07-P-1	Canyon Creek Lift Pump #1	PUMP CENT	Canyon Creek LS	Canyon Creek Liftstation
CANC-LS-07-P-2	Canyon Creek Lift Pump #2	PUMP CENT	Canyon Creek LS	Canyon Creek Liftstation
PGB-P-45-2-2	Filtrate Pump #1	PUMP CENT	Filtration	Process Gallery
PGB-P-45-2-1	Plant Drain Pump #1	PUMP CENT	Support Equipment	Process Gallery
MORL-LS-08-P1	Morey's Landing Lift Pump #1	PUMP CENT	Moreys LS	Moreys Landing Liftstation
MORL-LS-08-P2	Morey's Landing Lift Pump #2	PUMP CENT	Moreys LS	Moreys Landing Liftstation
CHAR-LS-01-P-1	Charbonneau Lift Pump #1	PUMP CENT	Charbonneau LS	Charbonneau Liftstation
CHAR-LS-01-P-2	Charbonneau Lift Pump #2	PUMP CENT	Charbonneau LS	Charbonneau Liftstation
PG-P-80-2-1	Gravity Belt Washwater Pump #1	PUMP CENT	Solids Handling	Process Gallery
PG-P-80-2-2	Gravity Belt Washwater Pump #2	PUMP CENT	Solids Handling	Process Gallery
LCP96-10000	Plant Drain Pump Control Panel	CONTROL PANEL	Support Equipment	Plant Drain
PDC70-12	UV Power Distribution Panel	CONTROL PANEL	Disinfection	U.V. Channel
LCP78-20400	Thermal Heater Control Panel	CONTROL PANEL	Solids Handling	D&D
LCP78-13	Bio Solids Dryer Control Panel	CONTROL PANEL	Solids Handling	D&D
LCP78-11	Centrifuge #1 Control Panel	CONTROL PANEL	Solids Handling	D&D
LCP78-12	Centrifuge #2 Control Panel	CONTROL PANEL	Solids Handling	D&D
PG-LCP-40-5-3	Aeration Blower #3 Controls	CONTROL PANEL	Secondary Treatment	Process Gallery
PG-LCP-40-5-1	Aeration Blower #1 Controls	CONTROL PANEL	Secondary Treatment	Process Gallery
LCP50-10103	Sec Clarifier #3 Control Panel	CONTROL PANEL	Secondary Treatment	Sand Filter Rec
PG-LCP-80-4	Gallery Control Panel	CONTROL PANEL	Secondary Treatment	Process Gallery
LCP70-12	UV Main Control Panel	CONTROL PANEL	Disinfection	U.V. Channel
MEMP-LCP-03	Memorial Park Control Panel	CONTROL PANEL	Memorial Park LS	Memorial Park Liftstation
UV-LCP-70-1	UV Control Panel	CONTROL PANEL	Effluent	Effluent Channel
LCP40-50004	Blower #4 Control Panel	CONTROL PANEL	Secondary Treatment	Sec Process
LCP40-50005	Blower #5 Control Panel	CONTROL PANEL	Secondary Treatment	Sec Process
LCP40-50006	Blower #6 Control Panel	CONTROL PANEL	Secondary Treatment	Sec Process
PG-LCP-40-5-2	Aeration Blower #2 Controls	CONTROL PANEL	Secondary Treatment	Process Gallery
EXF78-01	Exhaust Fan #1	FAN	Solids Handling	D&D
EXF78-02	Exhaust Fan #2	FAN	Solids Handling	D&D
EXF78-03	Exhaust Fan #3	FAN	Solids Handling	D&D
EXF78-04	Exhaust Fan #4	FAN	Solids Handling	D&D
PG-40-EF-01	Process Gallery Exhaust fan #1	FAN	Support Equipment	Process Gallery

PG-40-EF-02	Process Gallery Exhaust fan #2	FAN	Support Equipment	Process Gallery
PG-40-EF-03	Process Gallery Exhaust fan #3	FAN	Support Equipment	
FAN78-40500	Dryer Cooling Tower Fan	FAN	Solids Handling	D&D
CTW55-11001	Cooling Tower Fan #1	FAN	Cooling	Cooling
CTW55-11002	Cooling Tower Fan #2	FAN	Cooling	Cooling
FAN91-10501	Odor Control Fan #1	FAN	Odor Control	D&D
FAN91-10502	Odor Control Fan #2	FAN	Odor Control	D&D
FAN91-20501	Inline Stack Fan #1	FAN	Odor Control	D&D
FAN91-20502	Inline Stack Fan #2	FAN	Odor Control	D&D
FAN91-30501	Aeration Basin Ex Fan 30501	FAN	Secondary Treatment	Aeration Basin
FAN91-30502	Aeration Basin Em Bypass Fan	FAN	Secondary Treatment	Aeration Basin
MEMP-LS-03-AUX	Memorial Park Auxillary Engine	GENERATOR	Memorial Park LS	Memorial Park Liftstation
CANC-LS-07-AUX	Canyon Creek Auxillary Engine	GENERATOR	Building	Canyon Creek Liftstation
MORL-LS-08-AUX	Morey's Lndng Auxillary Engine	GENERATOR	Moreys LS	Moreys Landing Liftstation
CHAR-LS-01-AUX	Charbonneau Auxillary Engine	GENERATOR	Charbonneau LS	Charbonneau Liftstation
GEN78-01	D&D Area Generator Set	GENERATOR	Support Equipment	D&D
GEN40-01	Secondary Area Generator Set	GENERATOR	Support Equipment	Secondary Clarifier
GEN-M-100-4	Onan Portable Gas Generator	GENERATOR	Support Equipment	Yard
GEN-M-100-3	Generator Cat Olympian	GENERATOR	Support Equipment	Yard
LET10-12100	Level Element 10-12100	INSTRUMENT	Preliminary	Headworks
LET10-12200	Level Element 10-12200	INSTRUMENT	Preliminary	Headworks
LSH10-13400	Level Switch 10-13400	INSTRUMENT	Preliminary	Headworks
LI10-12100	Level Indicator 10-12100	INSTRUMENT	Preliminary	Headworks
LI10-12200	Level Indicator 10-12200	INSTRUMENT	Preliminary	Headworks
HW-39-1	Headworks-UVAS Signal Transmit	INSTRUMENT	Pretreatment	Headworks
LET50-20200	Level Element 50-20200	INSTRUMENT	Secondary Treatment	Secondary Clarifier
LI50-20200	Level Indicator 50-20200	INSTRUMENT	Secondary Treatment	Secondary Clarifier
GAS-M-70-1	Biosystems Gas Monitor	INSTRUMENT	Support Equipment	Process Control Laboratory
AE_AIT78-10600	Visibility / Dust Monitor	INSTRUMENT	Solids Handling	D&D
AIT40-30502	D.O. Analyzer 40-30502	INSTRUMENT	Secondary Treatment	Aeration Basin
AIT40-12501	AIT 40-12501	INSTRUMENT	Secondary Treatment	Sec Process
AIT40-12502	AIT 40-12502	INSTRUMENT	Secondary Treatment	Sec Process
LE40-12702	Level Element 40-12702	INSTRUMENT	Secondary Treatment	Sec Process
LET53-11000	Level Element 53-11000	INSTRUMENT	Secondary Treatment	Flow Control
LSH55-10201	Level Switch 55-10201	INSTRUMENT	Cooling	Cooling
LSH55-10202	Level Switch 55-10202	INSTRUMENT	Cooling	Cooling
VSH55-11101	Velocity Switch 55-11101	INSTRUMENT	Cooling	Cooling
VSH55-11102	Velocity Switch 55-11102	INSTRUMENT	Cooling	Cooling
LIT60-10101	Disk Filter LIT 60-10101	INSTRUMENT	Filtration	Filter
LIT60-10102	Disk Filter LIT 60-10102	INSTRUMENT	Filtration	Filter
BS-LE-82-1-2	Bio Storage Tank Lvl Monitor 2	INSTRUMENT	Solids Handling	Bio Storage Tank 2 (Center)
BS-LE-82-1-3	Bio Storage Tank Lvl Monitor 3	INSTRUMENT	Solids Handling	Bio Storage Tank 3 (West)

BS-LE-82-1-4	Bio Storage Tank Lvl Monitor 4	INSTRUMENT	Solids Handling	Bio Storage Tank 4 (North)
BS-LE-82-1-5	Bio Storage Tank Lvl Monitor 5	INSTRUMENT	Solids Handling	Bio Storage Tank 5 (South)
ST-H Transducer	TWAS Flow Transducer	INSTRUMENT	Solids Handling	Process Gallery
PG-LE/LIT 80-5-2	Sensor, level measure, TBio we	INSTRUMENT	Solids Handling	Process Gallery
PIT40-50502	Pressure Transmitter 40-50502	INSTRUMENT	Secondary Treatment	Sec Process
HS40-41000	Hi Pressure Switch 40-41000	INSTRUMENT	Secondary Treatment	Sec Process
AB-AE-40-2-DWYER	AB Blower #2 Airflow Sensor	INSTRUMENT	Secondary Treatment	Aeration Basin
AB-AE-40-3-DWYER	AB Blower #3 Airflow Sensor	INSTRUMENT	Secondary Treatment	Aeration Basin
AB-AE-40-1-DWYER	AB Blower #1 Airflow Sensor	INSTRUMENT	Secondary Treatment	Aeration Basin
AE40-30501	D.O. Analyzer 40-30501	INSTRUMENT	Secondary Treatment	Sec Process
LI40-12702	Level Indicator 40-12702	INSTRUMENT	Secondary Treatment	Aeration Basin
LE40-12701	Level Element 40-12701	INSTRUMENT	Secondary Treatment	Sec Process
LIT40-12701	Level Transmitter 40-12701	INSTRUMENT	Secondary Treatment	Sec Process
LIT40-12702	Level Transmitter 40-12702	INSTRUMENT	Secondary Treatment	Sec Process
HW-pH-1	Influent pH Probe	INSTRUMENT	Influent	Influent Channel
PIT40-50501	Pressure Transmitter 40-50501	INSTRUMENT	Secondary Treatment	Sec Process
AIT40-30601	D.O. Analyzer 40-30601	INSTRUMENT	Secondary Treatment	Aeration Basin
AIT40-30602	D.O. Analyzer 40-30602	INSTRUMENT	Secondary Treatment	Aeration Basin
AIT40-30603	D.O. Analyzer 40-30603	INSTRUMENT	Secondary Treatment	Aeration Basin
LET40-12701	Level Element 40-12701	INSTRUMENT	Secondary Treatment	Aeration Basin
LET40-12702	Level Element 40-12702	INSTRUMENT	Secondary Treatment	Aeration Basin
LI40-12701	Level Indicator 40-12701	INSTRUMENT	Secondary Treatment	Aeration Basin
AE40-30502	D.O. Analyzer 40-30502	INSTRUMENT	Secondary Treatment	Aeration Basin
AE40-30503	D.O. Analyzer 40-30503	INSTRUMENT	Secondary Treatment	Aeration Basin
AE40-30601	D.O. Analyzer 40-30601	INSTRUMENT	Secondary Treatment	Aeration Basin
AE40-30602	D.O. Analyzer 40-30602	INSTRUMENT	Secondary Treatment	Aeration Basin
AIT40-30501	D.O. Analyzer 40-30501	INSTRUMENT	Secondary Treatment	Aeration Basin
AIT40-30503	D.O. Analyzer 40-30503	INSTRUMENT	Secondary Treatment	Aeration Basin
AE70-20700	Turbidity Analyzer 70-20700	INSTRUMENT	Disinfection	U.V. Channel
AIT70-20700	Turbidity Indicator 70-20700	INSTRUMENT	Disinfection	U.V. Channel
LET70-10500	UV Channel #1 LET 70-10500	INSTRUMENT	Disinfection	U.V. Channel
LI70-10500	UV Channel #1 LI 70-10500	INSTRUMENT	Disinfection	U.V. Channel
AE40-12501	D.O. Analyzer 40-12501	INSTRUMENT	Secondary Treatment	Aeration Basin
AE40-12502	D.O. Analyzer 40-12502	INSTRUMENT	Secondary Treatment	Aeration Basin
MCC10-10A	MCC 10A	MCC	Preliminary	Headworks
MCC10-10B	MCC 10B	MCC	Preliminary	Headworks
MCC40-01A	MCC Panel 40-01A	MCC	Secondary Treatment	Sec Process
MCC40-01B	MCC Panel 40-01B	MCC	Secondary Treatment	Sec Process
MCC40-02A	MCC Panel 40-02A	MCC	Secondary Treatment	Sec Process

MCC40-02B	MCC Panel 40-02B	MCC	Secondary Treatment	Sec Process
MCC78-01A	MCC 78-01A	MCC	Solids Handling	D&D
MCC78-01B	MCC 78-01B	MCC	Solids Handling	D&D
MCC95-01	MCC 95-01	MCC	Building	Control Building
W3-M-90-1-1	W-3 Pump #1 Motor	MOTOR	Support Equipment	W-3 Reuse Station
W3-M-90-1-2	W-3 Pump #2 Motor	MOTOR	Support Equipment	W-3 Reuse Station
W3-M-90-1-3	W-3 Pump #3 Motor	MOTOR	Support Equipment	W-3 Reuse Station
PGB-M-40-5-2-M	Aeration Basin Blower Motor #2	MOTOR	Secondary Treatment	Process Gallery
PGB-M-40-5-3-M	Aeration Basin Blower Motor #3	MOTOR	Secondary Treatment	Process Gallery
PGB-M-40-5-1-M	Aeration Basin Blower Motor #1	MOTOR	Secondary Treatment	Process Gallery
FLT60-10001	Disk Filter Drive Motor #1	MOTOR	Filtration	Filter
FLT60-10002	Disk Filter Drive Motor #2	MOTOR	Filtration	Filter
UV-70-S-1-1	Effluent Composite Sampler #1	SAMPLER	Effluent	Effluent Channe
UV-70-S-1-2	Effluent Composite Sampler #2	SAMPLER	Effluent	Effluent Channe
SAM10-11000	Composite Sampler #1	SAMPLER	Preliminary	Headworks
MEMP-LS-03	Memorial Park Lift Station	SITE	Memorial Park LS	Memorial Park Liftstation
TOWNCENTER-LS-02	Town Center Lift Station	SITE	Town Center LS	Town Center Liftstation
CANC-LS-07	Canyon Creek Lift Station	SITE	Canyon Creek LS	Canyon Creek Liftstation
CORC-LS-06	Corral Creek Lift Station	SITE	Corral Creek LS	Corral Creek Liftstation
RIVG-LS-05	Rivergreen Liftstation	SITE	River Green LS	River Green Liftstation
MORL-LS-08	Morey's Landing Lift Station	SITE	Moreys LS	Moreys Landing Liftstation
CHAR-LS-01	Charbonneau Lift Station	SITE	Charbonneau LS	Charbonneau Liftstation
RIVV-LS-04	River Village Lift Station	SITE	River Green LS	River Village Liftstation
CORCRK-LS-1	Corral Creek Lift Pump #1	SUB PUMP	Corral Creek LS	Corral Creek Liftstation
CORCRK-LS-2	Corral Creek Lift Pump #2	SUB PUMP	Corral Creek LS	Corral Creek Liftstation
RIVG-LS-1	Rivergreen Lift Pump #1	SUB PUMP	River Green LS	River Green Liftstation
RIVG-LS-2	Rivergreen Lift Pump #2	SUB PUMP	River Green LS	River Green Liftstation
RV-LS-1	River Village Lift Pump #1	SUB PUMP	River Green LS	River Village Liftstation
RV-LS-2	River Village Lift Pump #2	SUB PUMP	River Green LS	River Village Liftstation
PGB-P-40-01	Process Gallery Sump Pump #1	SUB PUMP	Support Equipment	Process Gallery
PGB-P-40-02	Process Gallery Sump Pump #2	SUB PUMP	Support Equipment	Process Gallery
UV-M-70-1	UV Reaction Chamber	TANK	Effluent	Effluent Channel
VLV78-21100	Rotary Valve	VALVE	Support Equipment	D&D
VFD90-00103	W3 Pump #3 VFD	VFD	Effluent	Sec Process
VFD90-00102	W3 Pump #2 VFD	VFD	Effluent	Sec Process
VFD90-00101	W3 Pump #1 VFD	VFD	Effluent	Sec Process
VFD45-02001	Filtrate Pump VFD	VFD	Solids Handling	Sec Process
VFD45-02002	East Basin Drain Pump VFD	VFD	Secondary Treatment	Sec Process
VFD50-03001	RAS Pump #1 VFD	VFD	Secondary Treatment	Sec Process
VFD82-10001	GBT Feed Pump #1 VFD	VFD	Solids Handling	Sec Process
VFD82-10002	GBT Feed Pump #2 VFD	VFD	Secondary Treatment	Sec Process

VFD82-20001	Centrifuge Feed Pump #1 VFD	VFD	Secondary Treatment	Sec Process
VFD82-20002	Centrifuge Feed Pump #2 VFD	VFD	Secondary Treatment	Sec Process
VFD50-03002	RAS Pump #2 VFD	VFD	Secondary Treatment	Sec Process
VFD50-03003	RAS Pump #3 VFD	VFD	Secondary Treatment	Sec Process
VFD50-03004	RAS Pump #4 VFD	VFD	Secondary Treatment	Sec Process
VFD53-10001	Secondary Effluent Pump #1 VFD	VFD	Secondary Treatment	Sec Process
VFD53-10002	Secondary Effluent Pump #2 VFD	VFD	Secondary Treatment	Sec Process
VFD53-10003	Secondary Effluent Pump #3 VFD	VFD	Secondary Treatment	Sec Process
UV-PLC-70-1	SLC-500-03 #7, Trojan UV Allen	PLC	Effluent	Effluent Channel
PG-PLC-5-2	Allen-Bradley PLC 5 #2	PLC	Solids Handling	Process Gallery
PG-PLC-80-4-3	Gravity Belt Allen-Bradley PLC	PLC	Solids Handling	Process Gallery
UV-M-70-4	UV Online Transmission Monitor	PLC	Disinfection	
PGB-P-80-6	Thickened Biosolids Pump	PUMP PD	Solids Handling	Process Gallery
PGB-P-80-7	TWAS Progressing Cavity Pump	PUMP PD	Solids Handling	Process Gallery
UV-M-70	Trojan UV 4000 UV System	UV UNIT	Effluent	Effluent Channel
UV-M-70-1A	UV Bank 1A	UV UNIT	Disinfection	U.V. Channel
UV-M-70-1B	UV Bank 1B	UV UNIT	Disinfection	U.V. Channel
FE70-20500	Flow Meter 70-20500	FLOW METER	Effluent	U.V. Channel
FE96-11000	Flow Element 96-11000	FLOW METER	Support Equipment	Plant Drain
FET96-11000	Flow Indicator 96-11000	FLOW METER	Support Equipment	Plant Drain
FE10-10101	Flow Element 10-10101	FLOW METER	Preliminary	Headworks
FE10-10102	Flow Element 10-10102	FLOW METER	Preliminary	Headworks
FIT10-10102	Flow Indicator 10-10102	FLOW METER	Preliminary	Headworks
TWAS	TWAS Flow Meter	FLOW METER	Solids Handling	-
FIT70-20000	UV Channel #2 Flow Meter	FLOW METER	Disinfection	U.V. Channel
FE50-00303	Flow Element 50-00303	FLOW METER	Secondary Treatment	Sec Process
FE50-00304	Flow Element 50-00304	FLOW METER	Secondary Treatment	Sec Process
FE50-41000	Flow Element 50-41000	FLOW METER	Secondary Treatment	Sec Process
FIT50-41000	Flow Element 50-41000	FLOW METER	Secondary Treatment	Sec Process
FIT50-00304	Flow Element 50-00304	FLOW METER	Secondary Treatment	Sec Process
FIT40-41000	Flow Element 40-41000	FLOW METER	Secondary Treatment	Sec Process
FE90-10000	W1 Water Flow Element	FLOW METER	Effluent	U.V. Channel
UV-FE/FIT-70-3	Effluent Flow Meter	FLOW METER	Effluent	Effluent Channe
FE50-00302	Flow Element 50-00302	FLOW METER	Secondary Treatment	Sec Process
FIT50-00301	Flow Element 50-00301	FLOW METER	Secondary Treatment	Sec Process
FIT50-00302	Flow Element 50-00302	FLOW METER	Secondary Treatment	Sec Process
FIT50-00303	Flow Element 50-00303	FLOW METER	Secondary Treatment	Sec Process
FIT40-30001	Flow Element 40-30001	FLOW METER	Secondary Treatment	Sec Process
FIT40-30002	Flow Element 40-30002	FLOW METER	Secondary Treatment	Sec Process
FIT40-30003	Flow Transmitter 40-30003	FLOW METER	Secondary Treatment	Sec Process
FIT40-30101	Flow Element 40-30101	FLOW METER	Secondary Treatment	Sec Process

FIT40-30102	Flow Element 40-30102	FLOW METER	Secondary Treatment	Sec Process
FIT40-30103	Flow Transmitter 40-30103	FLOW METER	Secondary Treatment	Sec Process
FE40-30101	Flow Element 40-30101	FLOW METER	Secondary Treatment	Sec Process
FE40-30102	Flow Element 40-30102	FLOW METER	Secondary Treatment	Sec Process
FE40-30103	Flow Element 40-30103	FLOW METER	Secondary Treatment	Sec Process
FE50-00301	Flow Element 50-00301	FLOW METER	Secondary Treatment	Sec Process
FIT40-12001	Flow Transmitter 40-12001	FLOW METER	Secondary Treatment	Sec Process
FIT40-12002	Flow Transmitter 40-12002	FLOW METER	Secondary Treatment	Sec Process
FIT10-10101	Flow Indicator 10-10101	FLOW METER	Preliminary	Headworks
FE40-12001	Flow Element 40-12001	FLOW METER	Secondary Treatment	Sec Process
FE40-12002	Flow Element 40-12002	FLOW METER	Secondary Treatment	Sec Process
FE40-30001	Flow Element 40-30001	FLOW METER	Secondary Treatment	Sec Process
FE40-30002	Flow Element 40-30002	FLOW METER	Secondary Treatment	Sec Process
FE40-30003	Flow Element 40-30003	FLOW METER	Secondary Treatment	Sec Process
PG-M-81-1	Polymer Mix / Feed Unit #1	PUMP METERING	Solids Handling	Process Gallery
PG-M-81-2	Polymer Injector / Mixer #2	PUMP METERING	Solids Handling	Process Gallery
PG-P-51-1	Pump, chemical metering NaOCl	PUMP METERING	Solids Handling	Process Gallery
W-3-M-90-1	W-3 Strainer / Motor	STRAINER	Support Equipment	W-3 Reuse Station
PG-M-80-3-1	GBT Hydraulic Unit #1	HYDRAULIC	Solids Handling	Process Gallery
PG-M-80-3-2	GBT Hydraulic Unit #2	HYDRAULIC	Solids Handling	Process Gallery
SHOP-M-30-2-1	Plant Air compressor #1	AIR COMPRESSOR	Support Equipment	Shop
SHOP-M-30-2-2	Plant Air Compressor #2	AIR COMPRESSOR	Support Equipment	Shop
PD-PG-1AKB9	Plant Drain Air Compressor	AIR COMPRESSOR	Support Equipment	Process Gallery
CF-051	Non Condensable Gas Exhauster	BLOWER	Solids Handling	D&D
BS-M-82-1-1	Biosolids Storage Blower #1	BLOWER	Solids Handling	Bio Storage Tank
BS-M-82-1-2	Biosolids Storage Blower #2	BLOWER	Solids Handling	Bio Storage Tank
BLW40-50004	Aeration Blower #4	BLOWER	Secondary Treatment	Sec Process
BLW40-50005	Aeration Blower #5	BLOWER	Secondary Treatment	Sec Process
BLW40-50006	Aeration Blower #6	BLOWER	Secondary Treatment	Sec Process
PGB-M-40-5-1	Aeration Basin Blower #1	BLOWER	Secondary Treatment	Process Gallery
PGB-M-40-5-2	Aeration Basin Blower #2	BLOWER	Secondary Treatment	Process Gallery
PGB-M-40-5-3	Aeration Basin Blower #3	BLOWER	Secondary Treatment	Process Gallery
CEN78-30101	Centrifuge #1	CENTRIFUGE	Solids Handling	D&D
CEN78-30102	Centrifuge #2	CENTRIFUGE	Solids Handling	D&D
SC-50-1-2	Secondary Clarifier #2	CLARIFIER	Secondary Clarification	Secondary Clarifier #2
SC-50-1-1	Secondary Clarifier #1	CLARIFIER	Secondary Clarification	Secondary Clarifier #1
CLR50-00103	Secondary Clarifier #3	CLARIFIER	Secondary Treatment	Secondary Clarifier
BS-M-82-5	Biosolids Storage Air Diffuser	DIFFUSER	Solids Handling	Biosolids Storage Tanks
FLT91-20001	Odor Control Filter 20001	FILTER	Odor Control	D&D
FLT91-20002	Odor Control Filter 20002	FILTER	Odor Control	D&D
DF60-10001	Disk Filter #1	FILTER	Filtration	Filter
DF60-10002	Disk Filter #2	FILTER	Filtration	Filter

SC-M-50-1-2	Secondary Clarifier, #2 Mechan	GEARBOX	Secondary Treatment	Secondary Clarifier
SC-M-50-1-1	Secondary Clarifier, #1 Mechan	GEARBOX	Secondary Treatment	Secondary Clarifier
PG-M-80-4-1	Gravity Belt Thickener #1	GRAVITY BELT	Solids Handling	Process Gallery
PG-M-80-4-2	Gravity Belt Thickener #2	GRAVITY BELT	Solids Handling	Process Gallery
UV-M-70-5	UV Module Winch Motor	HOIST	Pretreatment	Headworks
MAU78-01	Make Up Air Unit	HVAC	Solids Handling	D&D
ACU78-01	Air Conditioner ACU78-01	HVAC	Support Equipment	D&D
ACU78-02	Air Conditioner ACU78-02	HVAC	Support Equipment	D&D
AHU78-02	Heater AHU78-02	HVAC	Support Equipment	D&D
AHU78-01	Heater AHU78-01	HVAC	Solids Handling	D&D
OB-95-ASU-1	Operations Air Supply Unit #1	HVAC	Building	Operations Building
OB-95-ASU-2	Operations Air Supply Unit #2	HVAC	Building	Control Bldg.(dig. blwrs./MCC)
PG-40-ACU-1	Galley Air Control Unit	HVAC	Support Equipment	Process Gallery
PG-40-ASU-1	Gallery Air Supply Unit #1	HVAC	Support Equipment	Process Gallery
PG-40-ASU-2	Gallery Air Supply Unit #2	HVAC	Support Equipment	Process Gallery
MXR10-30100	Grit Basin Mixer	MIXER	Preliminary	Headworks
MXR40-20005	Anaerobic Mixer #5	MIXER	Secondary Treatment	Aeration Basin
MXR40-20001	Anaerobic Mixer #1	MIXER	Secondary Treatment	Aeration Basin
MXR40-20002	Anaerobic Mixer #2	MIXER	Secondary Treatment	Aeration Basin
MXR40-20004	Anaerobic Mixer #4	MIXER	Secondary Treatment	Aeration Basin
MXR40-20003	Anaerobic Mixer #3	MIXER	Secondary Treatment	Aeration Basin
MXR40-20006	Anaerobic Mixer #6	MIXER	Secondary Treatment	Aeration Basin
PG-M-81-3	Polymer Injector / Mixer #1	MIXER	Solids Handling	Process Gallery
SCR10-13001	Manual Bar Screen	SCREEN	Preliminary	Headworks
SCR10-13003	Influent Screen #3	SCREEN	Preliminary	Headworks
SCR10-13002	Influent Screen #2	SCREEN	Preliminary	Headworks
AB-G-40-1	Slide Gate AB-G-40-1	VALVE SLIDE	Secondary Treatment	Aeration Basin Effluent Channe
AB-G-40-2	Slide Gate AB-G-40-2	VALVE SLIDE	Secondary Treatment	Aeration Basin Effluent Channe
Biosolids Cake Trail	Biosolids Cake Trailer	ROLLING STOCK	Solids Handling	Shop
Ford F150	Ford Service Truck	ROLLING STOCK	Support Equipment	Yard
Ford Truck-Roberts	Ford Truck-Roberts	ROLLING STOCK	Support Equipment	Treatment Plant
JohnDeere6410	John Deere 6410 Tractor	ROLLING STOCK	Support Equipment	Shop
SWC10-20501	Screenings Washer Compactor #1	WASHER	Preliminary	Headworks
SWC10-20502	Screenings Washer Compactor #2	WASHER	Preliminary	Headworks
SC-50-1-3	Sec Clarifier #1 Weir Washer	WASHER	Secondary Treatment	Secondary Clarifier
SC-50-1-4	Sec Clarifier #2 Weir Washer	WASHER	Secondary Treatment	Secondary Clarifier
CONTROL-Fire Alarms	Fire Alarms in Laboratory Hall	ALARM	Building	Control Building
TNK78-20100	Dryer Cake Bin	BIN	Solids Handling	D&D
78BLD-01	Dewatering and Drying Building	BUILDING	Solids Handling	D&D
Building-Shop	Shop	BUILDING	Building	Shop
CTW78-40500	Dryer Condensate Cooling Tower	CHILLER	Solids Handling	D&D
CT-55-11001	Cooling Tower #1	CHILLER	Cooling	Cooling
CT-55-11002	Cooling Tower #2	CHILLER	Cooling	Cooling

GCCL10-31500	Grit Classifier 31500	CLASSIFIER	Preliminary	Headworks
GYC10-31100	Grit Cyclone 31100	CLASSIFIER-CYCLONE	Preliminary	Headworks
SHOP-M-30-2-3	Portable Air Compressor	COMPRESSOR-AIR	Support Equipment	Shop
CNV78-30201	Cent #1 Discharge Conveyor	CONVEYOR	Solids Handling	D&D
CNV78-30202	Cent #2 Discharge Conveyor	CONVEYOR	Solids Handling	D&D
CTE78-10201	Retractable Loadout Chute #1	CONVEYOR	Solids Handling	D&D
CTE78-10202	Retractable Loadout Chute #2	CONVEYOR	Solids Handling	D&D
CTE78-10203	Retractable Loadout Chute #3	CONVEYOR	Solids Handling	D&D
CNV78-20300	Dryer Feed Conveyor	CONVEYOR	Solids Handling	D&D
CNV78-10000	Dry Product Transfer Conveyor	CONVEYOR	Solids Handling	D&D
CNV78-10100	Load Out Distribution Conveyor	CONVEYOR	Solids Handling	D&D
CNV78-20800	Dryer Discharge Conveyor	CONVEYOR	Solids Handling	D&D
CNV78-20900	Dry Product Cooling Conveyor	CONVEYOR	Solids Handling	D&D
CNV78-20200	Cake Bin Discharge Conveyor	CONVEYOR	Solids Handling	D&D
HTR78-20400	Thermal Heater System	HEATER-IMMERSION	Solids Handling	D&D
SCB78-20600	Vent Scrubber / Condenser	ODOR EQUIP	Solids Handling	D&D
HUM91-11500	Foul Air Humidifier	ODOR EQUIP	Solids Handling	D&D
PLB78-31001	Centrifuge #1 Polyblend Unit	POLYBLEND	Solids Handling	D&D
PLB78-31002	Centrifuge #2 Polyblend Unit	POLYBLEND	Solids Handling	D&D
PMP10-30500	Grit Pump 30500	PUMP-CENT	Preliminary	Headworks
PMP70-21500	Effluent Turbidity Sample Pump	PUMP-CENT	Disinfection	U.V. Channel
PMP50-03001	RAS Pump #1	PUMP-CENT	Secondary Treatment	Process Gallery
PMP50-03004	RAS Pump #4	PUMP-CENT	Secondary Treatment	Process Gallery
PMP50-03002	RAS Pump #2	PUMP-CENT	Secondary Treatment	Process Gallery
PMP50-03003	RAS Pump #3	PUMP-CENT	Secondary Treatment	Process Gallery
PMP50-20100	Secondary Scum Pump	PUMP-CENT	Support Equipment	Sec Process
PMP78-41000	Dryer Cooling Tower Spray Pump	PUMP-CENT	Solids Handling	D&D
PMP55-10501	Cooling Tower Pump #1	PUMP-CENT	Cooling	Cooling
PMP55-10502	Cooling Tower Pump #2	PUMP-CENT	Cooling	Cooling
PMP60-11001	Disk Filter Backwash Pump #1	PUMP-CENT	Filtration	Filter
PMP60-11002	Disk Filter Backwash Pump #2	PUMP-CENT	Filtration	Filter
JD Portable Pump	John Deere Portable Pump	PUMP-CENT	Support Equipment	Shop
PMP82-20001	Centrifuge Feed Pump #1	PUMP-PROG CAV	Solids Handling	D&D
PMP82-20002	Centrifuge Feed Pump #2	PUMP-PROG CAV	Solids Handling	D&D
PMP96-10001	Plant Drain Pump #1	PUMP-SUB	Support Equipment	Plant Drain
PMP96-10002	Plant Drain Pump #2	PUMP-SUB	Support Equipment	Plant Drain
PMP10-10500	Vactor Sump Pump	PUMP-SUB	Preliminary	Headworks
PMP50-01003	Sec Clarifier #3 Spray Pump	PUMP-SUB	Secondary Treatment	Secondary Clarifier
PMP82-10001	GBT Feed Pump #1	PUMP-SUB	Solids Handling	Sludge Storage
PMP82-10002	GBT Feed Pump #2	PUMP-SUB	Solids Handling	Sludge Storage
PMP78-40100	Dryer Condenser Sump Pump	PUMP-SUB	Solids Handling	D&D

W3-P-90-1-1	W-3 Pump #1	PUMP-VERT TURBINE	Support Equipment	W-3 Reuse Station
W3-P-90-1-2	W-3 Pump #2	PUMP-VERT TURBINE	Support Equipment	W-3 Reuse Station
W3-P-90-1-3	W-3 Pump #3	PUMP-VERT TURBINE	Support Equipment	W-3 Reuse Station
PMP53-10003	Secondary Effluent Pump #3	PUMP-VERT TURBINE	Secondary Treatment	Flow Control
PMP53-10001	Secondary Effluent Pump #1	PUMP-VERT TURBINE	Secondary Treatment	Flow Control
PMP53-10002	Secondary Effluent Pump #2	PUMP-VERT TURBINE	Secondary Treatment	Flow Control
SCADA	Wastewater Plant SCADA system	SCADA	Support Equipment	Operations Building
WE78-10500	Truck Scale	SCALE	Support Equipment	D&D
10BLD-01	Headworks Structure	STRUCTURE	Preliminary	Headworks
UVD70-20000	UV Channel #2	STRUCTURE	Disinfection	U.V. Channel
40BLD-01	Secondary Process Facility	STRUCTURE	Secondary Treatment	Secondary Clarifier
55BLD-01	Cooling Structure	STRUCTURE	Cooling	Cooling
60BLD-01	Disk Filter Structure	STRUCTURE	Filtration	Filter
53BLD-01	Flow Control Structure	STRUCTURE	Secondary Treatment	Flow Control
95BLD-01	Operations Building	STRUCTURE	Building	Operations Building
70BLD-01	UV Disinfection Structure	STRUCTURE	Disinfection	U.V. Channel
Bldg-PG	Process Gallery	STRUCTURE	Secondary Treatment	Process Gallery
PGB	Process Gallery Basement	STRUCTURE	Solids Handling	Process Gallery
SWBD40-01A	Switchboard SWBD40-01A	SWITCHGEAR	Secondary Treatment	Sec Process
SWBD40-02A	Switchboard SWBD40-02A	SWITCHGEAR	Secondary Treatment	Sec Process
BS-T-1	Biosolids Storage Tank 1(east)	TANK-CONCRETE	Solids Handling	Bio Storage Tank
BS-T-2	Biosolids Storage Tank 2 (Ctr)	TANK-CONCRETE	Solids Handling	Bio Storage Tank
BS-T-3	Biosolids Storage 3 (Wst)	TANK-CONCRETE	Solids Handling	Bio Storage Tank
BS-T-4	Biosolids Storage 4 (NCCC)	TANK-CONCRETE	Solids Handling	Bio Storage Tank
BS-T-5	Biosolids Storage 5 (SCCC)	TANK-CONCRETE	Solids Handling	Bio Storage Tank
82BLD-01	Sludge Storage Basin-Biofilter	TANK-CONCRETE	Solids Handling	Bio Solids Storage
TX-40-01	Transformer 40-01	TRANSFORMER	Support Equipment	Sec Process
UPS78-01	UPS 78-01	UPS	Support Equipment	D&D
Battery-UPS	Process Gallery UPS	UPS	Secondary Treatment	Process Gallery
UPS40-01	UPS 40-01	UPS	Support Equipment	Sec Process
Battery-UPS1	UPS Battery Backup	UPS	Building	Control Building
UVM70-20001	UV Module #1 Ozonia	UV SYSTEM	Disinfection	U.V. Channel
UVM70-20002	UV Module #2 Ozonia	UV SYSTEM	Disinfection	U.V. Channel
UVM70-20003	UV Module #3 Ozonia	UV SYSTEM	Disinfection	U.V. Channel
ARV96-12001	Air Release Valve 96-12001	VALVE-ARV	Support Equipment	Plant Drain
FV10-20101	Flow Valve 10-20101	VALVE-BUTTERFLY	Preliminary	Headworks
FV10-20102	Flow Valve 10-20102	VALVE-BUTTERFLY	Preliminary	Headworks
FV10-12102	Flow Valve 10-12102	VALVE-BUTTERFLY	Preliminary	Headworks
FV10-20302	Flow Valve 10-20302	VALVE-BUTTERFLY	Preliminary	Headworks
FV10-30200	Flow Valve 10-30200	VALVE-BUTTERFLY	Preliminary	Headworks

FV10-30600	Flow Valve 10-30600	VALVE-BUTTERFLY	Preliminary	Headworks
FV91-21502	Flow Control Valve 91-21502	VALVE-BUTTERFLY	Solids Handling	Bio Storage Tank
FCV50-41000	Flow Control Valve 50-41000	VALVE-BUTTERFLY	Secondary Treatment	Sec Process
FV55-10501	Flow Valve 55-10501	VALVE-BUTTERFLY	Cooling	Cooling
FV55-10502	Flow Valve 55-10502	VALVE-BUTTERFLY	Cooling	Cooling
FV91-21001	Flow Control Valve 91-21001	VALVE-BUTTERFLY	Solids Handling	Bio Storage Tank
FV91-21002	Flow Control Valve 91-21002	VALVE-BUTTERFLY	Solids Handling	Bio Storage Tank
FV91-21501	Flow Control Valve 91-21501	VALVE-BUTTERFLY	Solids Handling	Bio Storage Tank
FCV40-30002	Flow Control Valve 40-30002	VALVE-BUTTERFLY	Secondary Treatment	Sec Process
FCV40-30003	Flow Control Valve 40-30003	VALVE-BUTTERFLY	Secondary Treatment	Sec Process
FCV40-30101	Flow Control Valve 40-30101	VALVE-BUTTERFLY	Secondary Treatment	Sec Process
FCV40-30102	Flow Control Valve 40-30102	VALVE-BUTTERFLY	Secondary Treatment	Sec Process
FCV40-30103	Flow Control Valve 40-30103	VALVE-BUTTERFLY	Secondary Treatment	Sec Process
FV91-11600	Humidifier Flow Valve	VALVE-BUTTERFLY	Solids Handling	D&D
FV10-12101	Flow Valve 10-12101	VALVE-BUTTERFLY	Preliminary	Headworks
FV10-13500	Flow Valve 10-13500	VALVE-BUTTERFLY	Preliminary	Headworks
FCV-30101	Flow Control Valve 40-30101	VALVE-BUTTERFLY	Secondary Treatment	Sec Process
FCV40-12001	Flow Control Valve 40-12001	VALVE-BUTTERFLY	Secondary Treatment	Sec Process
FCV40-12002	Flow Control Valve 40-12002	VALVE-BUTTERFLY	Secondary Treatment	Sec Process
FCV40-30001	Flow Control Valve 40-30001	VALVE-BUTTERFLY	Secondary Treatment	Sec Process
GTE10-12500	Influent Channel Gate #1	VALVE-SLIDE	Preliminary	Headworks
GTE10-12501	Influent Channel Gate #2	VALVE-SLIDE	Preliminary	Headworks
GTE10-12502	Influent Channel Gate 12502	VALVE-SLIDE	Preliminary	Headworks
GTE10-12601	Screen Channel Inf Gate #1	VALVE-SLIDE	Preliminary	Headworks
GTE10-12602	Screen Channel Inf Gate #2	VALVE-SLIDE	Preliminary	Headworks
GTE10-12603	Screen Channel Inf Gate #3	VALVE-SLIDE	Preliminary	Headworks
GTE70-10001	UV Channel Inf Gate #1	VALVE-SLIDE	Disinfection	U.V. Channel
GTE70-10002	UV Channel Weir Gate #1	VALVE-SLIDE	Disinfection	U.V. Channel
GTE40-21003	Aeration Basin Effluent Weir	VALVE-SLIDE	Secondary Treatment	Aeration Basin
SL78-10300	Load Out Slide Gate	VALVE-SLIDE	Solids Handling	D&D
GTE53-12000	Secondary Effluent Gate Valve	VALVE-SLIDE	Secondary Treatment	Aeration Basin
GTE10-12701	Screen Channel Eff Gate #1	VALVE-SLIDE	Preliminary	Headworks
GTE10-12702	Screen Channel Eff Gate #2	VALVE-SLIDE	Preliminary	Headworks
GTE10-12703	Screen Channel Eff Gate #3	VALVE-SLIDE	Preliminary	Headworks
GTE10-32101	Grit Basin Influent Gate	VALVE-SLIDE	Preliminary	Headworks
GTE10-32102	Grit Basin Effluent Gate	VALVE-SLIDE	Preliminary	Headworks
GTE10-32103	Grit Basin Bypass Gate	VALVE-SLIDE	Preliminary	Headworks
CNV78-20700	Bio Solids Dryer	DRYER	Solids Handling	D&D
GV10-19301	Flow Valve 10-19301	VALVE-KNIFE	Preliminary	Headworks

GV10-19302	Flow Valve 10-19302	VALVE-KNIFE	Preliminary	Headworks
WT578-42000	Cooling Water Treatment Sys.	CHEMICAL FEED SYSTEM	Support Equipment	D&D

Replace Cost	Install Year	Age	Typical Life	Life Expectancy	Review Date	Flag
\$23,000	1998	21	25	25.00	4/3/2019	
\$23,000	1998	21	25	20.00	4/3/2019	
\$10,000	1998	21	10	10.00	4/3/2019	
\$10,000	1998	21	10	na	4/3/2019	
\$23,000	1998	21	25	25.00	4/3/2019	
\$23,000	1998	21	25	25.00	4/3/2019	
\$10,000	1998	21	10	10.00	4/4/2019	
\$10,000	1998	21	10	10.00	4/5/2019	
\$23,000	1998	21	25	25.00	4/3/2019	
\$23,000	1998	21	25	25.00	4/3/2019	
\$23,000	1998	21	25	25.00	4/3/2019	
\$23,000	1998	21	25	25.00	4/3/2019	
\$7,500	1998	21	20	NA	4/4/2019	Not Evaluated
\$7,500	1998	21	20	NA	4/4/2019	Not Evaluated
\$7,122	2013	6	15	15.00	4/1/2019	
\$88,000	2013	6	15	15.00	4/2/2019	
\$27,000	2013	6	15	15.00	4/2/2019	
\$151,666	2013	6	15	15.00	4/2/2019	
\$24,000	2013	6	15	15.00	4/2/2019	
\$24,000	2013	6	15	15.00	4/2/2019	
\$12,000	1998	21	15	12.00	4/3/2019	
\$12,000	1998	21	15	12.00	4/3/2019	
\$6,000	2013	6	15	15.00	4/4/2019	
\$12,000	1998	21	15	15.00	4/5/2019	
\$56,700	2013	6	15	15.00	4/5/2019	
\$20,000	1998	21	15	15.00	4/3/2019	
\$12,000	1998	21	15	15.00	4/3/2019	
\$12,000	1998	21	15	15.00	4/3/2019	
\$12,000	1998	21	15	15.00	4/3/2019	
\$12,000	1998	21	15	15.00	4/3/2019	
\$12,000	1998	21	15	12.00	4/3/2019	
\$1,629	2013	6	15	15.00	4/2/2019	
\$1,629	2013	6	15	15.00	4/2/2019	
\$1,629	2013	6	15	15.00	4/2/2019	
\$1,629	2013	6	15	15.00	4/2/2019	
\$8,500	1998	21	15	15.00	4/4/2019	

\$8,500	1998	21	15	15.00	4/4/2019	
\$8,500	1998	21	15	15.00	4/4/2019	
\$18,795	2013	6	15	na	4/4/2019	Not Evaluated
\$18,795	2013	6	15	NA	4/4/2019	Not Evaluated
\$18,795	2013	6	15	NA	4/4/2019	Not Evaluated
\$32,063	2013	6	15	15.00	4/3/2019	
\$32,063	2013	6	15	15.00	4/3/2019	
\$5,240	2013	6	15	15.00	4/3/2019	
\$5,240	2013	6	15	15.00	4/3/2019	
\$6,510	2013	6	15	12.00	4/3/2019	
\$6,510	2013	6	15	15.00	4/3/2019	
\$7,500	1998	21	20	20.00	4/3/2019	
\$4,500	1998	21	20	20.00	4/3/2019	
\$4,500	1998	21	20	20.00	4/3/2019	
\$4,500	1998	21	20	20.00	4/3/2019	
\$175,000	2013	6	20	20.00	4/4/2019	
\$195,000	2013	6	20	NA	4/4/2019	
\$70,000	2013	6	20	NA	4/4/2019	Not Evaluated
\$50,000	1998	21	20	NA	4/4/2019	Not Evaluated
\$987	2013	6	15	12.00	4/1/2019	
\$987	2013	6	15	15.00	4/1/2019	
\$493	2013	6	15	15.00	4/1/2019	
\$987	2013	6	15	12.00	4/1/2019	
\$987	2013	6	15	15.00	4/1/2019	
\$2,500	2013	6	15	15.00	4/1/2019	
\$987	2013	6	15	15.00	4/4/2019	
\$987	2013	6	15	15.00	4/4/2019	
\$5,500	2013	6	15	15.00	4/4/2019	
\$3,600	2013	6	15	15.00	4/4/2019	
\$1,546	2013	6	15	15.00	4/4/2019	
\$1,546	2013	6	15	15.00	4/4/2019	
\$1,546	2013	6	15	15.00	4/4/2019	
\$987	2013	6	15	15.00	4/4/2019	
\$987	2013	6	15	15.00	4/4/2019	
\$493	2013	6	15	NA	4/4/2019	Not Evaluated
\$493	2013	6	15	NA	4/4/2019	Not Evaluated
\$493	2013	6	15	NA	4/4/2019	Not Evaluated
\$493	2013	6	15	NA	4/4/2019	Not Evaluated
\$987	2013	6	15	15.00	4/4/2019	
\$987	2013	6	15	15.00	4/4/2019	
\$2,500	1998	21	15	15.00	4/4/2019	
\$2,500	1998	21	15	15.00	4/4/2019	

\$2,500	1998	21	15	15.00	4/4/2019	
\$2,500	1998	21	15	15.00	4/4/2019	
\$6,000	1998	21	30	na	4/4/2019	Not Evaluated
\$2,500	1998	21	15	NA	4/4/2019	Not Evaluated
\$2,500	2013	6	15	15.00	4/3/2019	
\$2,500	2013	6	15	NA	4/3/2019	Non Existent
\$2,500	1998	21	15	NA	4/3/2019	Non Existent
\$2,500	1998	21	15	NA	4/3/2019	Non Existent
\$2,500	1998	21	15	NA	4/3/2019	Non Existent
\$1,556	2013	6	10	10.00	4/3/2019	
\$987	2013	6	15	15.00	4/2/2019	
\$987	2013	6	15	15.00	4/2/2019	
\$987	2013	6	15	15.00	4/2/2019	
\$987	2013	6	15	15.00	4/2/2019	
\$2,500	2013	6	10	10.00	4/3/2019	
\$2,500	2013	6	15	15.00	4/3/2019	
\$1,546	2013	6	15	15.00	4/2/2019	
\$1,546	2013	6	15	15.00	4/2/2019	
\$1,546	2013	6	15	15.00	4/2/2019	
\$987	2013	6	15	15.00	4/2/2019	
\$987	2013	6	15	15.00	4/2/2019	
\$987	2013	6	15	15.00	4/2/2019	
\$1,556	2013	6	10	10.00	4/2/2019	
\$1,556	2013	6	10	10.00	4/2/2019	
\$1,556	2013	6	10	10.00	4/2/2019	
\$1,556	2013	6	10	10.00	4/2/2019	
\$1,546	2013	6	15	15.00	4/2/2019	
\$1,546	2013	6	15	15.00	4/2/2019	
\$956	2013	6	10	10.00	4/2/2019	
\$1,546	2013	6	15	15.00	4/2/2019	
\$987	2013	6	15	15.00	4/2/2019	
\$987	2013	6	15	15.00	4/2/2019	
\$1,556	2013	6	10	10.00	4/2/2019	
\$1,556	2013	6	10	10.00	4/2/2019	
\$40,000	2013	6	30	30.00	4/1/2019	
\$40,000	2013	6	30	30.00	4/1/2019	
\$120,000	2013	6	30	30.00	4/2/2019	
\$120,000	2013	6	30	30.00	4/2/2019	
\$120,000	2013	6	30	30.00	4/2/2019	

\$12,500	2013	6	15	15.00	4/3/2019	
\$12,500	2013	6	15	15.00	4/3/2019	
\$12,500	2013	6	15	15.00	4/3/2019	
\$12,500	2013	6	15	15.00	4/3/2019	
\$12,500	2013	6	15	15.00	4/3/2019	
\$12,500	2013	6	15	15.00	4/3/2019	
\$12,500	2013	6	15	15.00	4/3/2019	
\$12,500	2013	6	15	15.00	4/3/2019	
\$5,000	1998	21	12	12.00	4/3/2019	
\$5,000	1998	21	12	NA	4/4/2019	Non Existent
\$5,000	1998	21	12	NA	4/4/2019	Not Evaluated
\$6,000	1998	21	12	NA	4/5/2019	Not Evaluated
\$28,000	1998	21	15	NA	4/4/2019	Not Evaluated
\$28,000	1998	21	15	NA	4/4/2019	Not Evaluated
\$24,000	1998	21	15	12.00	4/2/2019	
\$54,000	1998	21	15	12.00	4/3/2019	
\$54,000	1998	21	15	12.00	4/3/2019	
\$3,693	2013	6	30	30.00	4/1/2019	
\$3,693	2013	6	30	30.00	4/1/2019	
\$3,693	2013	6	30	30.00	4/1/2019	
\$3,693	2013	6	30	30.00	4/1/2019	
\$2,884	2013	6	30	30.00	4/1/2019	
\$6,000	1998	21	30	NA	4/4/2019	Not Evaluated
\$3,693	2013	6	30	30.00	4/5/2019	
\$3,693	2013	6	30	30.00	4/3/2019	
\$3,693	2013	6	30	30.00	4/3/2019	
\$3,693	2013	6	30	30.00	4/3/2019	
\$3,693	2013	6	30	30.00	4/3/2019	
\$3,693	2013	6	30	30.00	4/3/2019	
\$3,693	2013	6	30	30.00	4/3/2019	
\$3,693	2013	6	30	30.00	4/3/2019	
\$3,693	2013	6	30	30.00	4/3/2019	
\$3,693	2013	6	30	30.00	4/3/2019	
\$20,000	2013	6	30	30.00	4/3/2019	
\$3,693	2013	6	30	NA	4/3/2019	
\$3,693	2013	6	30	30.00	4/3/2019	
\$3,693	2013	6	30	30.00	4/3/2019	
\$3,693	2013	6	30	30.00	4/3/2019	
\$1,170	2013	6	30	30.00	4/2/2019	
\$3,693	2013	6	30	30.00	4/2/2019	
\$3,693	2013	6	30	30.00	4/2/2019	
\$3,693	2013	6	30	30.00	4/2/2019	

\$3,693	2013	6	30	30.00	4/2/2019	
\$3,693	2013	6	30	30.00	4/2/2019	
\$3,693	2013	6	30	30.00	4/2/2019	
\$3,693	2013	6	30	30.00	4/2/2019	
\$3,693	2013	6	30	30.00	4/2/2019	
\$3,693	2013	6	30	30.00	4/2/2019	
\$3,693	2013	6	30	30.00	4/2/2019	
\$3,693	2013	6	30	30.00	4/2/2019	
\$5,830	2013	6	30	30.00	4/1/2019	
\$3,693	2013	6	30	30.00	4/2/2019	
\$3,693	2013	6	30	30.00	4/2/2019	
\$3,693	2013	6	30	30.00	4/2/2019	
\$3,693	2013	6	30	30.00	4/2/2019	
\$3,693	2013	6	30	30.00	4/2/2019	
\$6,500	1998	21	10	NA	4/4/2019	Not Evaluated
\$6,500	1998	21	10	NA	4/4/2019	Not Evaluated
\$3,500	1998	21	15	NA	4/4/2019	Not Evaluated
\$20,000	1998	21	15	12.00	4/2/2019	
\$5,000	1998	21	15	NA	4/4/2019	Not Evaluated
\$5,000	1998	21	15	NA	4/4/2019	Not Evaluated
\$5,000	1998	21	15	0.00	4/4/2019	
\$5,000	1998	21	15	12.00	4/4/2019	
\$1,000	2013	6	10	10.00	4/5/2019	
\$3,500	2013	6	15	15.00	4/3/2019	
\$7,800	1998	21	10	8.00	4/3/2019	
\$7,800	1998	21	10	10.00	4/3/2019	
\$86,917	2013	6	20	20.00	4/3/2019	
\$86,917	2013	6	20	20.00	4/3/2019	
\$86,917	2013	6	20	20.00	4/3/2019	
\$27,000	1998	21	20	20.00	4/3/2019	
\$27,000	1998	21	20	16.00	4/3/2019	
\$27,000	1998	21	20	20.00	4/3/2019	
\$360,000	2013	6	30	30.00	4/3/2019	
\$360,000	2013	6	30	30.00	4/3/2019	
\$150,000	1998	21	30	24.00	4/2/2019	
\$150,000	1998	21	30	24.00	4/2/2019	
\$163,654	2013	6	30	30.00	4/3/2019	
\$23,300	2013	6	10	NA	4/4/2019	Can not Access
\$10,361	2013	6	10	8.00	4/3/2019	
\$10,361	2013	6	10	8.00	4/3/2019	
\$142,607	2013	6	20	20.00	4/4/2019	
\$142,607	2013	6	20	20.00	4/4/2019	

\$48,000	1998	21	30	30.00	4/2/2019	
\$48,000	1998	21	30	30.00	4/2/2019	
\$100,000	1998	21	20	NA	4/4/2019	Not Evaluated
\$100,000	1998	21	20	NA	4/4/2019	Not Evaluated
\$3,500	1998	21	20	NA	4/2/2019	Non Existent
\$9,300	2013	6	15	15.00	4/2/2019	
\$5,000	2013	6	15	15.00	4/2/2019	
\$5,000	2013	6	15	15.00	4/2/2019	
\$5,000	2013	6	15	NA	4/2/2019	Non Existent
\$5,000	2013	6	15	15.00	4/3/2019	
\$9,300	1998	21	15	15.00	4/4/2019	
\$9,300	1998	21	15	15.00	4/4/2019	
\$12,000	1998	21	15	15.00	4/4/2019	
\$8,500	1998	21	15	15.00	4/4/2019	
\$8,500	1998	21	15	15.00	4/4/2019	
\$17,485	2013	6	15	15.00	4/1/2019	
\$15,963	2013	6	15	0.00	4/2/2019	
\$15,963	2013	6	15	0.00	4/2/2019	
\$15,963	2013	6	15	0.00	4/2/2019	
\$15,963	2013	6	15	0.00	4/2/2019	
\$15,963	2013	6	15	15.00	4/2/2019	
\$15,963	2013	6	15	15.00	4/2/2019	
\$6,500	1998	21	10	NA	4/4/2019	Not Evaluated
\$5,000	2013	6	30	30.00	4/1/2019	
\$66,000	2013	6	20	20.00	4/1/2019	
\$66,000	2013	6	20	20.00	4/1/2019	
\$6,155	1998	21	30	30.00	4/2/2019	
\$6,155	1998	21	30	30.00	4/2/2019	
\$30,000	2013	6	25	NA	4/4/2019	Not Evaluated
\$18,500	2008	11	15	NA	4/4/2019	Not Evaluated
\$18,500	2010	9	15	NA	4/4/2019	Not Evaluated
\$35,000	1998	21	30	na	4/4/2019	Not Evaluated
\$42,000	2013	6	20	16.00	4/1/2019	
\$42,000	2013	6	20	16.00	4/1/2019	
\$8,500	1998	21	15	12.00	4/2/2019	
\$8,500	1998	21	15	12.00	4/2/2019	
\$24,000	2013	6	20	20.00	4/4/2019	
\$125,000	2013	6	30	30.00	4/3/2019	
\$1,168,750	2013	6	50	50.00	4/2/2019	
\$175,000	1998	21	50	40.00	4/4/2019	
\$125,188	2013	6	15	na	4/4/2019	Not Evaluated
\$123,079	2013	6	20	NA	4/4/2019	Not Evaluated
\$123,079	2013	6	20	NA	4/4/2019	Not Evaluated

\$42,118	2013	6	15	15.00	4/1/2019	
\$26,000	2013	6	15	15.00	4/1/2019	
\$1,000	1998	21	10	NA	4/4/2019	Not Evaluated
\$26,666	2013	6	10	10.00	4/2/2019	
\$26,666	2013	6	10	10.00	4/2/2019	
\$21,620	2013	6	10	10.00	4/3/2019	
\$21,620	2013	6	10	10.00	4/3/2019	
\$21,620	2013	6	10	8.00	4/3/2019	
\$54,667	2013	6	15	15.00	4/3/2019	
\$26,666	2013	6	10	10.00	4/3/2019	
\$44,800	2013	6	10	10.00	4/3/2019	
\$89,000	2013	6	10	5.00	4/3/2019	
\$99,500	2013	6	10	na	4/3/2019	
\$34,200	2013	6	10	10.00	4/3/2019	
\$299,662	2013	6	15	15.00	4/2/2019	
\$99,642	2013	6	10	10.00	4/3/2019	
\$210,920	2013	6	10	10.00	4/3/2019	
\$19,100	2013	6	10	8.00	4/2/2019	
\$19,100	2013	6	10	8.00	4/2/2019	
\$11,267	2013	6	25	25.00	4/1/2019	
\$4,500	2013	6	10	10.00	4/2/2019	
\$29,894	2013	6	20	20.00	4/3/2019	
\$29,894	2013	6	20	20.00	4/3/2019	
\$29,894	2013	6	20	20.00	4/3/2019	
\$29,894	2013	6	20	20.00	4/3/2019	
\$13,269	2013	6	10	10.00	4/4/2019	
\$3,500	2013	6	20	NA	4/4/2019	Not Evaluated
\$25,624	2013	6	20	NA	4/4/2019	Not Evaluated
\$25,624	2013	6	20	NA	4/4/2019	Not Evaluated
\$12,000	2013	6	20	20.00	4/4/2019	
\$12,000	2013	6	20	20.00	4/4/2019	
\$20,000	2008	11	20	NA	4/4/2019	Not Evaluated
\$16,222	2013	6	15	0.00	4/3/2019	
\$16,222	2013	6	15	0.00	4/3/2019	
\$9,429	2013	6	10	5.00	4/1/2019	
\$9,429	2013	6	10	0.00	4/1/2019	
\$5,059	2013	6	10	5.00	4/1/2019	
\$1,200	2013	6	10	na	4/3/2019	Not Evaluated
\$12,856	2013	6	10	NA	4/4/2019	Not Evaluated
\$12,856	2013	6	10	NA	4/4/2019	Not Evaluated
\$8,697	2013	6	10	10.00	4/4/2019	

\$24,000	1998	21	20	16.00	4/2/2019	
\$24,000	1998	21	20	16.00	4/2/2019	
\$24,000	1998	21	20	16.00	4/2/2019	
\$39,308	2013	6	20	20.00	4/4/2019	
\$39,308	2013	6	20	20.00	4/4/2019	
\$39,308	2013	6	20	20.00	4/4/2019	
\$76,000	2013	6	20	20.00	4/4/2019	
\$24,910	2013	6	20	20.00	4/2/2019	
\$840,000	2013	6	50	50.00	4/1/2019	
\$40,000	2013	6	25	25.00	4/2/2019	
\$797,500	1998	21	50	50.00	4/5/2019	
\$75,000	2013	6	50	50.00	4/4/2019	
\$50,000	2013	6	50	50.00	4/4/2019	
\$75,000	2013	6	50	50.00	4/4/2019	
\$960,000	1998	21	50	50.00	4/4/2019	
\$100,000	2013	6	50	NA	4/4/2019	
\$797,500	1998	21	50	50.00	4/5/2019	
\$797,500	1998	21	50	50.00	4/4/2019	
\$4,019	2013	6	20	20.00	4/2/2019	
\$4,019	2013	6	20	20.00	4/2/2019	
\$35,000	1998	21	50	50.00	4/4/2019	
\$35,000	1998	21	50	50.00	4/4/2019	
\$35,000	1998	21	50	50.00	4/4/2019	
\$35,000	1998	21	50	50.00	4/4/2019	
\$35,000	1998	21	50	50.00	4/4/2019	
\$690,625	1998	21	50	50.00	4/4/2019	
\$12,000	1998	21	30	30.00	4/3/2019	
\$18,000	2013	6	20	20.00	4/2/2019	
\$18,000	2013	6	20	20.00	4/2/2019	
\$18,000	2013	6	20	20.00	4/3/2019	
\$18,000	2013	6	20	20.00	4/4/2019	
\$54,000	2013	6	15	15.00	4/2/2019	
\$54,000	2013	6	15	15.00	4/2/2019	
\$54,000	2013	6	15	15.00	4/2/2019	
\$2,500	2013	6	15	15.00	4/1/2019	
\$10,000	2013	6	20	20.00	4/2/2019	
\$10,000	2013	6	20	20.00	4/2/2019	
\$10,000	2013	6	20	NA	4/2/2019	Non Existent
\$10,000	2013	6	20	NA	4/2/2019	Non Existent
\$10,000	2013	6	20	NA	4/2/2019	Non Existent

\$10,000	2013	6	20	NA	4/2/2019	Non Existent
\$229	2013	6	10	10.00	4/4/2019	
\$10,000	2013	6	20	20.00	4/3/2019	
\$10,000	2013	6	20	NA	4/4/2019	Not Evaluated
\$10,000	2013	6	20	NA	4/4/2019	Not Evaluated
\$229	2013	6	10	10.00	4/4/2019	
\$229	2013	6	10	10.00	4/4/2019	
\$229	2013	6	10	10.00	4/4/2019	
\$10,000	2013	6	20	20.00	4/2/2019	
\$10,000	2013	6	20	20.00	4/2/2019	
\$10,000	2013	6	20	20.00	4/2/2019	
\$10,000	2013	6	20	20.00	4/2/2019	
\$10,000	2013	6	20	20.00	4/2/2019	
\$229	2013	6	10	10.00	4/3/2019	
\$10,000	2013	6	20	NA	4/2/2019	Non Existent
\$10,000	2013	6	20	NA	4/2/2019	Non Existent
\$10,000	2013	6	20	20.00	4/2/2019	
\$10,000	2013	6	20	20.00	4/2/2019	
\$10,000	2013	6	20	20.00	4/2/2019	
\$10,000	2013	6	20	20.00	4/2/2019	
\$3,050	2013	6	30	30.00	4/1/2019	
\$3,050	2013	6	30	30.00	4/1/2019	
\$4,565	2013	6	30	30.00	4/1/2019	
\$4,565	2013	6	30	30.00	4/1/2019	
\$4,565	2013	6	30	30.00	4/1/2019	
\$4,695	2013	6	30	30.00	4/1/2019	
\$4,115	2013	6	30	30.00	4/2/2019	
\$8,660	2013	6	30	30.00	4/2/2019	
\$6,155	2013	6	30	30.00	4/2/2019	
\$6,600	2013	6	20	20.00	4/3/2019	
\$7,500	2013	6	30	NA	4/4/2019	Non Existent
\$4,695	2013	6	30	30.00	4/1/2019	
\$4,695	2013	6	30	30.00	4/1/2019	
\$4,695	2013	6	30	30.00	4/1/2019	
\$5,480	2013	6	30	30.00	4/1/2019	
\$5,925	2013	6	30	30.00	4/1/2019	
\$5,245	2013	6	30	30.00	4/1/2019	
\$938,501	2013	6	20	na	4/3/2019	
\$8,625	2013	6	30	30.00	4/2/2019	

\$8,625	2013	6	30	30.00	4/2/2019	
\$20,435	2013	6	10	NA	4/4/2019	Not Evaluated

Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.19	9.60
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.19	9.60
Incomplete - With Flags		
Incomplete - With Flags		
Incomplete - With Flags		
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.19	8.59
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.19	8.59
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.13	8.59
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.06	8.59
Good. Condition Grade 2. Minor wear.	1.69	14.14
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.06	8.59
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.30	11.31
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.22	4.37
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.22	9.60
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.22	9.60
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.10	4.37
Incomplete		
Incomplete - With Flags		
Incomplete - With Flags		
Good. Condition Grade 2. Minor wear.	1.65	18.13
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.24	12.74
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.20	12.74
Good. Condition Grade 2. Minor wear.	1.65	18.13
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.24	12.74
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.29	12.74
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.06	12.74
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.06	12.74
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.29	9.60
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.47	6.18
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.29	12.74
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.12	12.74
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.29	12.74
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.24	12.74
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.24	12.74
Incomplete - With Flags		
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.24	12.74
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.24	12.74
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.24	12.74
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.24	12.74

Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.13	6.36
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.13	6.36
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.13	6.36
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.13	6.36
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.13	6.36
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.00	6.36
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.13	6.36
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.13	6.36
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.13	6.36
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.13	6.36
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.13	6.36
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.13	6.36
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.13	6.36
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.13	6.36
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.13	6.36
Incomplete - With Flags		
Incomplete - With Flags		
Incomplete - With Flags		
Good. Condition Grade 2. Minor wear.	1.64	15.15
Incomplete - With Flags		
Incomplete - With Flags		
Very poor. Grade 5. Requires complete rehabilitation or replacement. Failed.	5.00	34.59
Good. Condition Grade 2. Minor wear.	1.77	15.15
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.25	9.60
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.40	3.04
Good. Condition Grade 2. Minor wear.	1.53	18.13
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.47	12.74
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.00	9.61
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.00	9.61
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.00	9.61
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.36	10.74
Good. Condition Grade 2. Minor wear.	1.50	16.95
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.36	10.74
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.22	8.33
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.22	8.33
Good. Condition Grade 2. Minor wear.	1.50	10.80
Good. Condition Grade 2. Minor wear.	1.83	10.80
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.17	4.80
Good. Condition Grade 2. Minor wear.	1.50	7.48
Good. Condition Grade 2. Minor wear.	1.50	7.48
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.14	8.08
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.14	8.08

Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.25	8.74
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.25	8.74
Incomplete - With Flags		
Incomplete - With Flags		
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.25	4.37
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.00	1.60
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.00	1.30
Incomplete - With Flags		
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.25	4.37
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.25	4.37
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.25	4.37
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.25	4.37
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.25	4.37
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.25	4.37
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.25	4.37
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.11	10.74
Very poor. Grade 5. Requires complete rehabilitation or replacement. Failed.	5.00	38.70
Very poor. Grade 5. Requires complete rehabilitation or replacement. Failed.	5.00	38.70
Very poor. Grade 5. Requires complete rehabilitation or replacement. Failed.	5.00	38.70
Very poor. Grade 5. Requires complete rehabilitation or replacement. Failed.	5.00	38.70
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.22	10.74
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.22	10.74
Incomplete - With Flags		
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.00	7.89
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.20	7.89
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.20	7.89
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.33	10.74
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.33	10.74
Incomplete - With Flags		
Good. Condition Grade 2. Minor wear.	1.60	9.30
Good. Condition Grade 2. Minor wear.	1.60	9.30
Good. Condition Grade 2. Minor wear.	1.75	9.25
Good. Condition Grade 2. Minor wear.	1.75	9.25
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.00	8.47
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.17	8.80
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.40	7.81
Good. Condition Grade 2. Minor wear.	1.95	11.72
Incomplete - With Flags		
Incomplete - With Flags		
Incomplete - With Flags		

Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.20	7.80
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.29	7.80
Incomplete - With Flags		
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.25	7.82
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.25	7.82
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.27	7.82
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.27	7.82
Good. Condition Grade 2. Minor wear.	2.33	12.88
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.25	7.82
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.44	7.82
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.31	7.82
Poor. Condition Grade 4. Unable to meet level of service life. Failure imminent.	3.38	23.00
Poor. Condition Grade 4. Unable to meet level of service life. Failure imminent.	3.13	23.00
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.31	7.82
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.29	8.16
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.10	11.76
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.20	11.76
Good. Condition Grade 2. Minor wear.	2.25	12.04
Good. Condition Grade 2. Minor wear.	2.25	12.04
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.22	14.69
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.33	14.69
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.07	10.74
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.15	10.74
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.15	10.74
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.15	10.74
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.17	14.69
Incomplete - With Flags		
Incomplete - With Flags		
Incomplete - With Flags		
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.24	10.74
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.28	10.74
Incomplete - With Flags		
Very poor. Grade 5. Requires complete rehabilitation or replacement. Failed.	5.00	38.70
Very poor. Grade 5. Requires complete rehabilitation or replacement. Failed.	5.00	38.70
Poor. Condition Grade 4. Unable to meet level of service life. Failure imminent.	3.00	29.38
Very poor. Grade 5. Requires complete rehabilitation or replacement. Failed.	5.00	38.70
Poor. Condition Grade 4. Unable to meet level of service life. Failure imminent.	3.00	33.34
Incomplete - With Flags		
Incomplete - With Flags		
Incomplete - With Flags		
Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.14	14.69

Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	1.33	4.76
Incomplete - With Flags		

Appendix C

IR Report

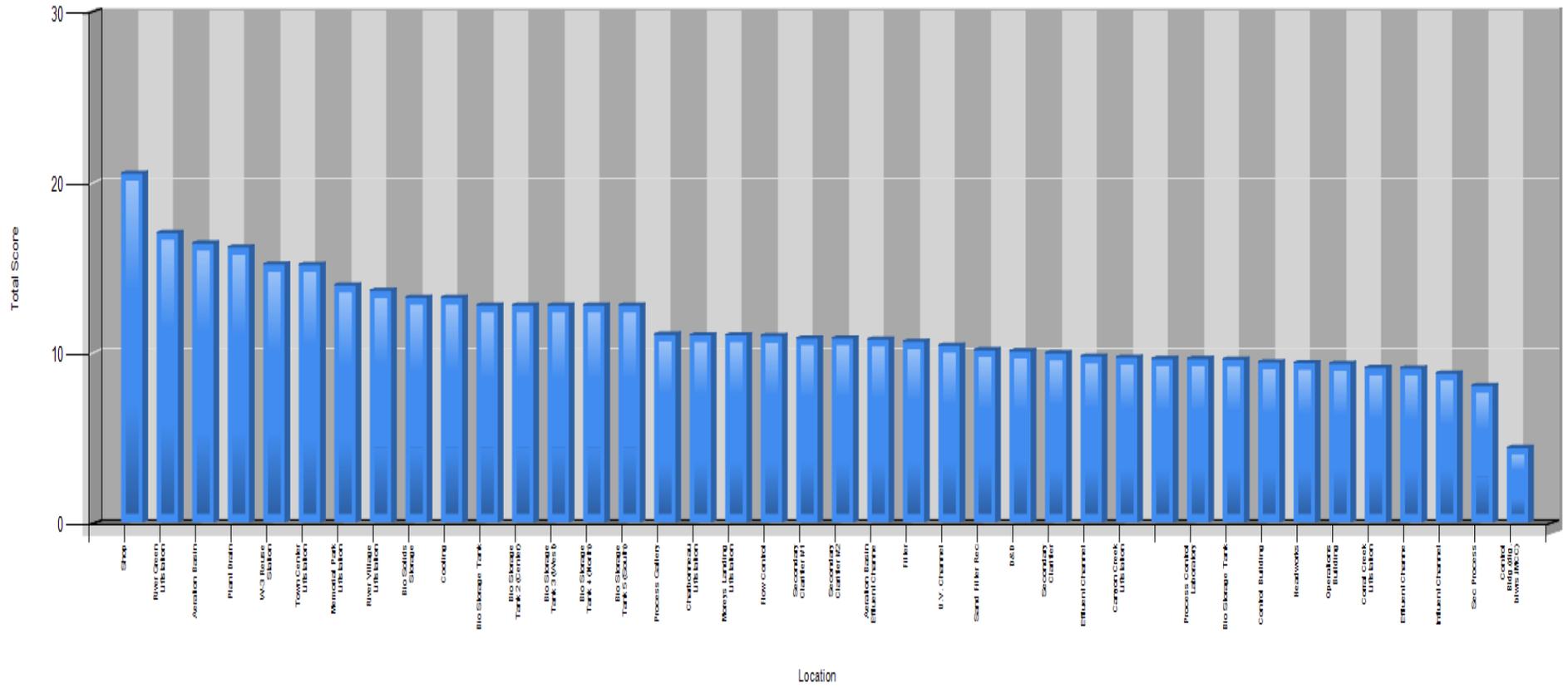
No infrared (IR) anomalies were found, no reports generated

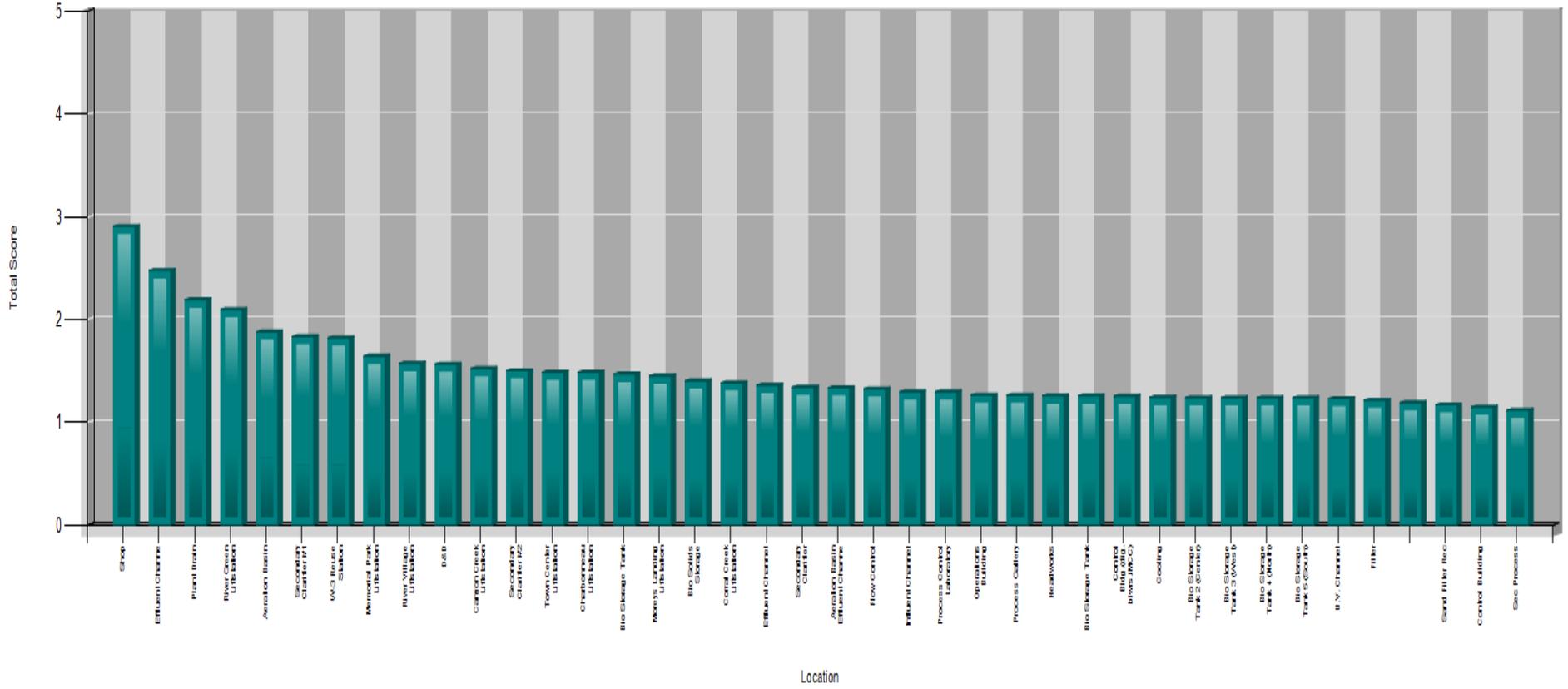
Appendix D
Condition Roll-up by Location Report

Location	Number of Assets	Location Total Weight	Location Condition Score	Location Total Risk	Location Consequence	Location Likelihood
	1	1	1.19	9.60	5.05	1.90
Aeration Basin	25	25	1.88	16.38	5.01	3.19
Aeration Basin Effluent Channe	2	2	1.33	10.74	5.65	1.90
Bio Solids Storage	1	1	1.40	13.20	5.50	2.40
Bio Storage Tank	10	10	1.25	9.56	4.36	2.25
Bio Storage Tank	1	1	1.47	12.74	4.90	2.60
Bio Storage Tank 2 (Center)	1	1	1.24	12.74	4.90	2.60
Bio Storage Tank 3 (West)	1	1	1.24	12.74	4.90	2.60
Bio Storage Tank 4 (North)	1	1	1.24	12.74	4.90	2.60
Bio Storage Tank 5 (South)	1	1	1.24	12.74	4.90	2.60
Canyon Creek Liftstation	4	4	1.52	9.68	4.26	2.28
Charbonneau Liftstation	4	4	1.48	10.98	5.05	2.18
Control Bldg.(dig. blwrs./MCC)	1	1	1.25	4.37	1.90	2.30
Control Building	3	3	1.14	9.40	4.15	2.27
Cooling	1	1	1.24	13.20	5.50	2.40
Corral Creek Liftstation	3	3	1.38	9.07	4.00	2.27
D&D	52	52	1.56	10.05	4.18	2.33
Effluent Channe	3	3	2.48	9.04	2.07	2.92
Effluent Channel	4	4	1.36	9.74	4.15	2.35
Filter	9	9	1.21	10.61	5.13	2.07
Flow Control	5	5	1.32	10.95	5.11	2.14
Headworks	40	40	1.25	9.36	3.62	2.52
Influent Channel	1	1	1.29	8.74	4.60	1.90
Memorial Park Liftstation	5	5	1.64	13.92	5.95	2.34
Moreys Landing Liftstation	4	4	1.45	10.98	5.05	2.18
Operations Building	3	3	1.26	9.31	3.60	2.50
Plant Drain	6	6	2.19	16.15	4.18	3.49
Process Control Laboratory	1	1	1.29	9.60	5.05	1.90
Process Gallery	27	27	1.26	11.03	5.04	2.19
River Green Liftstation	3	3	2.10	17.00	5.05	3.37
River Village Liftstation	3	3	1.57	13.60	4.00	3.40
Sand Filter Rec	1	1	1.17	10.12	5.95	1.70
Sec Process	76	76	1.11	8.01	3.68	2.16
Secondary Clarifier	8	8	1.34	9.93	4.19	2.50
Secondary Clarifier #1	1	1	1.83	10.80	4.00	2.70
Secondary Clarifier #2	1	1	1.50	10.80	4.00	2.70
Shop	3	3	2.91	20.49	4.55	4.38
Town Center Liftstation	3	3	1.48	15.12	4.30	3.52

U.V. Channel	18	18	1.23	10.38	4.53	2.32
W-3 Reuse Station	7	7	1.82	15.15	5.05	3.00

Location	Number of Assets	Location Total Weight	Location Condition Score	Location Total Risk	Location Consequence	Location Likelihood
	1	1	1.19	9.60	5.05	1.90
Aeration Basin	25	25	1.88	16.38	5.01	3.19
Aeration Basin Effluent Channe	2	2	1.33	10.74	5.65	1.90
Bio Solids Storage	1	1	1.40	13.20	5.50	2.40
Bio Storage Tank	10	10	1.25	9.56	4.36	2.25
Bio Storage Tank	1	1	1.47	12.74	4.90	2.60
Bio Storage Tank 2 (Center)	1	1	1.24	12.74	4.90	2.60
Bio Storage Tank 3 (West)	1	1	1.24	12.74	4.90	2.60
Bio Storage Tank 4 (North)	1	1	1.24	12.74	4.90	2.60
Bio Storage Tank 5 (South)	1	1	1.24	12.74	4.90	2.60
Canyon Creek Liftstation	4	4	1.52	9.68	4.26	2.28
Charbonneau Liftstation	4	4	1.48	10.98	5.05	2.18
Control Bldg.(dig. blwrs./MCC)	1	1	1.25	4.37	1.90	2.30
Control Building	3	3	1.14	9.40	4.15	2.27
Cooling	1	1	1.24	13.20	5.50	2.40
Corral Creek Liftstation	3	3	1.38	9.07	4.00	2.27
D&D	52	52	1.56	10.05	4.18	2.33
Effluent Channe	3	3	2.48	9.04	2.07	2.92
Effluent Channel	4	4	1.36	9.74	4.15	2.35
Filter	9	9	1.21	10.61	5.13	2.07
Flow Control	5	5	1.32	10.95	5.11	2.14
Headworks	40	40	1.25	9.36	3.62	2.52
Influent Channel	1	1	1.29	8.74	4.60	1.90
Memorial Park Liftstation	5	5	1.64	13.92	5.95	2.34
Moreys Landing Liftstation	4	4	1.45	10.98	5.05	2.18
Operations Building	3	3	1.26	9.31	3.60	2.50
Plant Drain	6	6	2.19	16.15	4.18	3.49
Process Control Laboratory	1	1	1.29	9.60	5.05	1.90
Process Gallery	27	27	1.26	11.03	5.04	2.19
River Green Liftstation	3	3	2.10	17.00	5.05	3.37
River Village Liftstation	3	3	1.57	13.60	4.00	3.40
Sand Filter Rec	1	1	1.17	10.12	5.95	1.70
Sec Process	76	76	1.11	8.01	3.68	2.16
Secondary Clarifier	8	8	1.34	9.93	4.19	2.50
Secondary Clarifier #1	1	1	1.83	10.80	4.00	2.70
Secondary Clarifier #2	1	1	1.50	10.80	4.00	2.70
Shop	3	3	2.91	20.49	4.55	4.38
Town Center Liftstation	3	3	1.48	15.12	4.30	3.52
U.V. Channel	18	18	1.23	10.38	4.53	2.32
W-3 Reuse Station	7	7	1.82	15.15	5.05	3.00





Appendix E
Condition Asset Spread Report

Appendix F
Single Asset Report

Asset Description	Canyon Creek Auxillary Engine	System	Building
Asset Type	GENERATOR	Location	Canyon Creek Liftstation
Asset ID	CANC-LS-07-AUX	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
Air Filter		1 Excellent			
All Components		1 yes			
All Safety Guards Present		1 yes			
Automatic Transfer Switch			X	Non Existent	Auxillary engine
Battery/ Charging System		2 Minor			
Control Gauges (Hour Meters Volts & Amps)		2 Good			
Control Switches		2 Good			
Cooling System			X	Non Existent	Air cooled engine
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Exhaust System		1 Excellent			
Heater Jacket			X	Non Existent	Air cooled engine
Hoses and Belts		1 Excellent			
Monitoring Panel		1 Excellent			
Oil OK at Inspection		1 yes			
Oil Pressure		1 Good			
Running at Inspection		1 yes			
Starting System		1 Proper Operation			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.22 Consequence Score 1.90

Risk Score 4.37 Likelihood Score 2.30

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Operations Air Supply Unit #2	System	Building
Asset Type	HVAC	Location	Control Bldg.(dig. blwrs./MCC)
Asset ID	OB-95-ASU-2	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Corrosion		2 Minor			
Operating at Inspection		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.25 Consequence Score 1.90

Risk Score 4.37 Likelihood Score 2.30

Photo(s)



Asset Description	Fire Alarms in Laboratory Hall	System	Building
Asset Type	ALARM	Location	Control Building
Asset ID	CONTROL-Fire Alarms	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
All Components		1 yes			
All Safety Features Present		1 yes			
Connections Ok		1 yes			
Corrosion - Metal		1 Like New			
Display Ok		1 yes			
Installation/Accessibility		1 Installed properly, easy to access			
Mounting		1 Excellent			
Obsolescence		1 Current, Supported			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.00	Consequence Score	3.85
Risk Score	8.47	Likelihood Score	2.20



Asset Description **MCC 95-01**

System **Building**

Asset Type **MCC**

Location **Control Building**

Asset ID **MCC95-01**

Inspection Date **4/4/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Connections Ok		1 yes			
Correct Components		1 yes			
Corrosion - Structural Metal Condition?		1 Like new			
Good House Keeping		1 yes			
Infrared		2 Normal			
Installation/ Accessibility		1 Excellent			
Internal Condition		2 Minor			
Structural Integrity		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.33

Consequence Score 4.60

Risk Score 10.12

Likelihood Score 2.20

Photo(s)



Asset Description **UPS Battery Backup**

System

Building

Asset Type **UPS**

Location

Control Building

Asset ID **Battery-UPS1**

Inspection Date

4/4/2019

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Acceptable Noise		1 yes			
Acceptable Smell or Heat		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
Ambient Environment		1 No Environmental Impact			
Control Switches		2 Good			
Good Housekeeping		1 Yes			
Monitoring Panel		1 Excellent			
Obsolescence		1 Current, Supported			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.10

Consequence Score 4.00

Risk Score 9.60

Likelihood Score 2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Operations Air Supply Unit #1	System	Building
Asset Type	HVAC	Location	Operations Building
Asset ID	OB-95-ASU-1	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Corrosion		2 Minor			
Operating at Inspection		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.25 Consequence Score 1.90

Risk Score 4.37 Likelihood Score 2.30

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Operations Building	System	Building
Asset Type	STRUCTURE	Location	Operations Building
Asset ID	95BLD-01	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Access Doors		1 1			
Architectural - Ceilings		1 Acceptable			
Architectural - Floors		2 Good			
Architectural - Roof		2 Somewhat Acceptable			
Architectural - Windows - Physical Integrity/Appearance		2 Good			
Corrosion - Cathodic Protection			X	Non Existent	
Corrosion - Concrete		1 Like New Condition			
Corrosion - Mechanical/Piping Metal Condition		1 Like New			
Corrosion - Metal		2 Minor Corrosion			
Corrosion - Pipes		1 Like new condition			
Corrosion - Soil Resistivity			X	Not Evaluated	
Corrosion - Visible Coating Condition		2 Minor damage			
Corrosion - Visible Concrete Condition		1 Like new			
Duct Work		1 Excellent			
External Wall		1 Very Good			
Fire Extinguisher Present/Certification Current		1 yes			
Handrails		1 Very Good			
Installation		1 Excellent			
Internal Wall		2 Good			
Lighting		1 Very Good			
Pipe System		1 Excellent			
Safety (General Review)		1 Very Good			
Stairs		1 Very Good			
Structural - Above Grade - Structure Irregularities/Code		1 No Irregularities			
Structural - Aboveground Pipe			X	Non Existent	
Structural - Building and System Piping		2 Flexibility and bracing provided			
Structural - Columns		1 Very Good			
Structural - Condition of Foundations		1 No movement			
Structural - Connections in Lateral Force Resisting Systems		1 Direct Positive Connection Between Horizontal Transfer Elements (Diaphragm Or Bracing) And V			
Structural - Equipment Anchorage - Epoxy-Cast-In-Place or Wedge Anchors		1 Anchors/Bolts All Present And Fully Embedded And/Or Threaded			
Structural - Load Path/Redundancy		1 Complete Load Path To Foundation – 3 Or More Vertical Resisting Elements In Each Direction			
Structural - Piping Connections to Above Ground Facilities			X	Non Existent	
Structural - Seismic		1 FEMA 154 score>3			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.23

Consequence Score 5.50

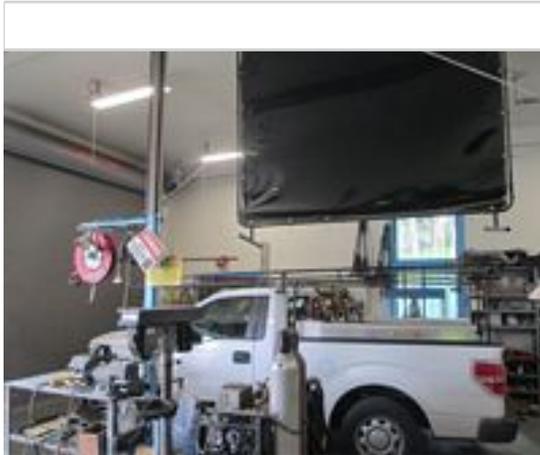
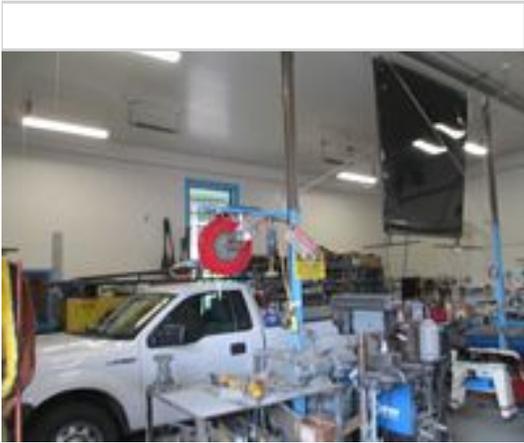
Risk Score 15.40

Likelihood Score 2.80

Photo(s)



Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Canyon Creek Lift Pump #1	System	Canyon Creek LS
Asset Type	PUMP CENT	Location	Canyon Creek Liftstation
Asset ID	CANC-LS-07-P-1	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Absence of Pump Cavitations		1 yes			
Acceptable Noise		1 yes			
All Safety Guards Present		1 yes			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Mounting		1 Excellent			
Vibration Analysis		3 -Fair .15 - .31 inches/sec			0.20" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.43 Consequence Score 5.05

Risk Score 9.60 Likelihood Score 1.90

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Canyon Creek Lift Pump #2	System	Canyon Creek LS
Asset Type	PUMP CENT	Location	Canyon Creek Liftstation
Asset ID	CANC-LS-07-P-2	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Absence of Pump Cavitations		1 yes			
Acceptable Noise		1 yes			
All Safety Guards Present		1 yes			
Corrosion - Structural Metal Condition?		1 Like new			
Mounting		1 Excellent			
Vibration Analysis		3 -Fair .15 - .31 inches/sec			0.25" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.29 Consequence Score 5.05

Risk Score 9.60 Likelihood Score 1.90

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Canyon Creek Lift Station	System	Canyon Creek LS
Asset Type	SITE	Location	Canyon Creek Liftstation
Asset ID	CANC-LS-07	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Civil - Drainage		1 Normal maintenance			
Civil- Fences and Security		1 Normal maintenance			
Civil- Flood Protection		1 Normal maintenance			
Civil- Roads		2 5% needs maintenance			
Civil- Vegetation and Landscaping		2 5% needs maintenance			
Site Access		3 Average			
Site Lighting Adequate		5 No			

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 2.14

Consequence Score 5.05

Risk Score 15.15

Likelihood Score 3.00

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description **Charbonneau Auxillary Engine** System **Charbonneau LS**
 Asset Type **GENERATOR** Location **Charbonneau Liftstation**
 Asset ID **CHAR-LS-01-AUX** Inspection Date **4/3/2019**
 Comments Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
Air Filter		1 Excellent			
All Components		1 yes			
All Safety Guards Present		1 yes			
Automatic Transfer Switch			X	Non Existent	Auxillary engine
Battery/ Charging System		2 Minor			
Control Gauges (Hour Meters Volts & Amps)		2 Good			
Control Switches		2 Good			
Cooling System			X	Non Existent	Air cooled engine
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Exhaust System		1 Excellent			
Heater Jacket			X	Non Existent	Air cooled engine
Hoses and Belts		1 Excellent			
Monitoring Panel		1 Excellent			
Oil OK at Inspection		1 yes			
Oil Pressure		1 Good			
Running at Inspection		1 yes			
Starting System		1 Proper Operation			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.22 Consequence Score 5.05

Risk Score 9.60 Likelihood Score 1.90

Photo(s)



Asset Description	Charbonneau Lift Pump #1	System	Charbonneau LS
Asset Type	PUMP CENT	Location	Charbonneau Liftstation
Asset ID	CHAR-LS-01-P-1	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Absence of Pump Cavitations		1 yes			
Acceptable Noise		1 yes			
All Safety Guards Present		1 yes			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Mounting		1 Excellent			
Vibration Analysis		3 -Fair .15 - .31 inches/sec			0.19" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.43 Consequence Score 5.05

Risk Score 9.60 Likelihood Score 1.90

Photo(s)



Asset Description	Charbonneau Lift Pump #2	System	Charbonneau LS
Asset Type	PUMP CENT	Location	Charbonneau Liftstation
Asset ID	CHAR-LS-01-P-2	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Absence of Pump Cavitations		1 yes			
Acceptable Noise		1 yes			
All Safety Guards Present		1 yes			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Mounting		1 Excellent			
Vibration Analysis		3 -Fair .15 - .31 inches/sec			0.23" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.43 Consequence Score 5.05

Risk Score 9.60 Likelihood Score 1.90

Photo(s)



Asset Description	Charbonneau Lift Station	System	Charbonneau LS
Asset Type	SITE	Location	Charbonneau Liftstation
Asset ID	CHAR-LS-01	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Civil - Drainage		2 5% needs maintenance			
Civil- Fences and Security		1 Normal maintenance			
Civil- Flood Protection		1 Normal maintenance			
Civil- Roads		1 Normal maintenance			
Civil- Vegetation and Landscaping		2 5% needs maintenance			
Site Access		1 Very Good			
Site Lighting Adequate		5 No			

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 1.86 Consequence Score 5.05

Risk Score 15.15 Likelihood Score 3.00

Photo(s)







Wilsonville Asset Condition Assessment Report

Asset Description	Cooling Tower #1	System	Cooling
Asset Type	CHILLER	Location	Cooling
Asset ID	CT-55-11001	Inspection Date	4/4/2019
Comments	The cooling tower and associated equipment was not in operation (not necessary this time of year), and covered to prevent fouling from pine needles from adjacent trees.	Flag	Not Evaluated

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks					
Acceptable Smell or Heat					
All Components					
All Safety Features Present					
Ambient Environment					
Belt/Chain					
Controls					
Corrosion - Metal					
Drain System Clogs					
Drawings Available					
Duct Work					
Feed Water Pump					
Installation/Accessibility					
Insulation					
Make Up Water System					
Obsolescence					
Pipe Alignment					
Piping/Connections					
Pressure Vessel					
Refrigerant Compressor/Motor					
Refrigerant Monitoring System					
Safety Interlocks					
Valves					

Condition Category Incomplete

Condition Score 0

Consequence Score 4.45

Risk Score 0

Likelihood Score 0

Photo(s)



Photo(s)



Asset Description	Cooling Tower Fan #1	System	Cooling
Asset Type	FAN	Location	Cooling
Asset ID	CTW55-11001	Inspection Date	4/4/2019
Comments	The cooling tower and associated equipment was not in operation (not necessary this time of year), and covered to prevent fouling from pine needles from adjacent trees.	Flag	Not Evaluated

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise					
Acceptable Oil/Grease					
Acceptable Smell or Heat					
Acceptable Vibration					
All Components					
All Safety Guards Present					
Belt					
Controls					
Corrosion - Structural Metal Condition?					
Duct Work					
Fan and Fan Motor					
Installation/ Accessibility					
Structural Integrity					
Support					

Condition Category	Incomplete		
Condition Score	0	Consequence Score	5.05
Risk Score	0	Likelihood Score	0

Photo(s)



Asset Description	Cooling Tower Fan #2	System	Cooling
Asset Type	FAN	Location	Cooling
Asset ID	CTW55-11002	Inspection Date	4/4/2019
Comments	The cooling tower and associated equipment was not in operation (not necessary this time of year), and covered to prevent fouling from pine needles from adjacent trees.	Flag	Not Evaluated

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise					
Acceptable Oil/Grease					
Acceptable Smell or Heat					
Acceptable Vibration					
All Components					
All Safety Guards Present					
Belt					
Controls					
Corrosion - Structural Metal Condition?					
Duct Work					
Fan and Fan Motor					
Installation/ Accessibility					
Structural Integrity					
Support					

Condition Category	Incomplete		
Condition Score	0	Consequence Score	5.05
Risk Score	0	Likelihood Score	0

Photo(s)



Photo(s)



Wilsonville Asset Condition Assessment Report

Asset Description	Level Switch 55-10201	System	Cooling
Asset Type	INSTRUMENT	Location	Cooling
Asset ID	LSH55-10201	Inspection Date	4/4/2019
Comments	The cooling tower and associated equipment was not in operation (not necessary this time of year), and covered to prevent fouling from pine needles from adjacent trees.	Flag	Not Evaluated

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks					
Acceptable Smell or Heat					
Acceptable Wire Labeling					
All Components					
Calibration					
Connections Ok					
Display Ok					
Indicator					
Installation/ Accessibility					
Operating at Inspection					
Tubing / Connections					

Condition Category Incomplete

Condition Score 0

Consequence Score 4.90

Risk Score 0

Likelihood Score 0

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Level Switch 55-10202	System	Cooling
Asset Type	INSTRUMENT	Location	Cooling
Asset ID	LSH55-10202	Inspection Date	4/4/2019
Comments	The cooling tower and associated equipment was not in operation (not necessary this time of year), and covered to prevent fouling from pine needles from adjacent trees.	Flag	Not Evaluated

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks					
Acceptable Smell or Heat					
Acceptable Wire Labeling					
All Components					
Calibration					
Connections Ok					
Display Ok					
Indicator					
Installation/ Accessibility					
Operating at Inspection					
Tubing / Connections					

Condition Category Incomplete

Condition Score 0

Consequence Score 4.90

Risk Score 0

Likelihood Score 0

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Velocity Switch 55-11101	System	Cooling
Asset Type	INSTRUMENT	Location	Cooling
Asset ID	VSH55-11101	Inspection Date	4/4/2019
Comments	The cooling tower and associated equipment was not in operation (not necessary this time of year), and covered to prevent fouling from pine needles from adjacent trees.	Flag	Not Evaluated

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks					
Acceptable Smell or Heat					
Acceptable Wire Labeling					
All Components					
Calibration					
Connections Ok					
Display Ok					
Indicator					
Installation/ Accessibility					
Operating at Inspection					
Tubing / Connections					

Condition Category Incomplete

Condition Score 0

Consequence Score 4.90

Risk Score 0

Likelihood Score 0

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Velocity Switch 55-11102	System	Cooling
Asset Type	INSTRUMENT	Location	Cooling
Asset ID	VSH55-11102	Inspection Date	4/4/2019
Comments	The cooling tower and associated equipment was not in operation (not necessary this time of year), and covered to prevent fouling from pine needles from adjacent trees.	Flag	Not Evaluated

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks					
Acceptable Smell or Heat					
Acceptable Wire Labeling					
All Components					
Calibration					
Connections Ok					
Display Ok					
Indicator					
Installation/ Accessibility					
Operating at Inspection					
Tubing / Connections					

Condition Category Incomplete

Condition Score 0

Consequence Score 4.90

Risk Score 0

Likelihood Score 0

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Cooling Tower Pump #1	System	Cooling
Asset Type	PUMP-CENT	Location	Cooling
Asset ID	PMP55-10501	Inspection Date	4/4/2019
Comments	The cooling tower and associated equipment was not in operation (not necessary this time of year), and covered to prevent fouling from pine needles from adjacent trees.	Flag	Not Evaluated

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks					
Absence of Pump Cavitation					
Acceptable Noise					
Acceptable Smell or Heat					
Acceptable Vibration					
Accessibility					
All Components					
All Safety Features Present					
Bearings					
Belt/Direct Drive/Couplings					
Check Valve					
Controls					
Corrosion - Metal					
Corrosion - Visible Coating Condition					
Drive Shaft					
Gallons per kW					
Gauges Operational					
Infrared					
Installation					
Isolation Valves Operational					
Lubrication OK at Inspection					
Mounting					
Obsolescence					
Oil Seal					
Packing Gland/Mechanical Seal					
Pipe Alignment					
Temperature - Bearing					
Vibration Analysis (0.10 in/sec)					

Condition Category	Incomplete	Consequence Score	5.65
Condition Score	0	Likelihood Score	0
Risk Score	0		

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Cooling Tower Pump #2	System	Cooling
Asset Type	PUMP-CENT	Location	Cooling
Asset ID	PMP55-10502	Inspection Date	4/4/2019
Comments	The cooling tower and associated equipment was not in operation (not necessary this time of year), and covered to prevent fouling from pine needles from adjacent trees.	Flag	Not Evaluated

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks					
Absence of Pump Cavitation					
Acceptable Noise					
Acceptable Smell or Heat					
Acceptable Vibration					
Accessibility					
All Components					
All Safety Features Present					
Bearings					
Belt/Direct Drive/Couplings					
Check Valve					
Controls					
Corrosion - Metal					
Corrosion - Visible Coating Condition					
Drive Shaft					
Gallons per kW					
Gauges Operational					
Infrared					
Installation					
Isolation Valves Operational					
Lubrication OK at Inspection					
Mounting					
Obsolescence					
Oil Seal					
Packing Gland/Mechanical Seal					
Pipe Alignment					
Temperature - Bearing					
Vibration Analysis (0.10 in/sec)					

Condition Category	Incomplete	Consequence Score	5.65
Condition Score	0	Likelihood Score	0
Risk Score	0		

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Cooling Structure	System	Cooling
Asset Type	STRUCTURE	Location	Cooling
Asset ID	55BLD-01	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Access Doors			X	Non Existent	
Architectural - Ceilings			X	Non Existent	
Architectural - Floors		2 Good			
Architectural - Roof			X	Non Existent	
Architectural - Windows - Physical Integrity/Appearance			X	Non Existent	
Corrosion - Cathodic Protection			X	Non Existent	
Corrosion - Concrete		1 Like New Condition			
Corrosion - Mechanical/Piping Metal Condition		2 Minor Corrosion			
Corrosion - Metal		2 Minor Corrosion			
Corrosion - Pipes		1 Like new condition			
Corrosion - Soil Resistivity			X	Not Evaluated	
Corrosion - Visible Coating Condition			X	Non Existent	
Corrosion - Visible Concrete Condition		1 Like new			
Duct Work			X	Non Existent	
External Wall		1 Very Good			
Fire Extinguisher Present/Certification Current		1 yes			
Handrails		1 Very Good			
Installation		1 Excellent			
Internal Wall			X	Non Existent	
Lighting		2 Good			
Pipe System		1 Excellent			
Safety (General Review)		1 Very Good			
Stairs		1 Very Good			
Structural - Above Grade - Structure Irregularities/Code		1 No Irregularities			
Structural - Aboveground Pipe		1 Constructed Of Ductile Materials And Flexible Restrained Joints			
Structural - Building and System Piping		2 Flexibility and bracing provided			
Structural - Columns		1 Very Good			
Structural - Condition of Foundations		1 No movement			
Structural - Connections in Lateral Force Resisting Systems		1 Direct Positive Connection Between Horizontal Transfer Elements (Diaphragm Or Bracing) And V			
Structural - Equipment Anchorage - Epoxy-Cast-In-Place or Wedge Anchors		1 Anchors/Bolts All Present And Fully Embedded And/Or Threaded			
Structural - Load Path/Redundancy		1 Complete Load Path To Foundation - 3 Or More Vertical Resisting Elements In Each Direction			
Structural - Piping Connections to Above Ground Facilities		2 Connections present, full flexibility			

Question	Overriding?	Answer	NA	Flag	Answer Comment
Structural - Seismic		1 FEMA 154 score>3			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.24 Consequence Score 5.50

Risk Score 13.20 Likelihood Score 2.40

Photo(s)

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Flow Valve 55-10501	System	Cooling
Asset Type	VALVE-BUTTERFLY	Location	Cooling
Asset ID	FV55-10501	Inspection Date	4/4/2019
Comments	The cooling tower and associated equipment was not in operation (not necessary this time of year), and covered to prevent fouling from pine needles from adjacent trees.	Flag	Not Evaluated

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks					
All Components					
Functional					
Support					
Valve Isolates (Holds)					

Condition Category	Incomplete		
Condition Score	0	Consequence Score	2.80
Risk Score	0	Likelihood Score	0

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Flow Valve 55-10502	System	Cooling
Asset Type	VALVE-BUTTERFLY	Location	Cooling
Asset ID	FV55-10502	Inspection Date	4/4/2019
Comments	The cooling tower and associated equipment was not in operation (not necessary this time of year), and covered to prevent fouling from pine needles from adjacent trees.	Flag	Not Evaluated

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks					
All Components					
Functional					
Support					
Valve Isolates (Holds)					

Condition Category	Incomplete		
Condition Score	0	Consequence Score	2.80
Risk Score	0	Likelihood Score	0

Photo(s)



Asset Description	Corral Creek Lift Station	System	Corral Creek LS
Asset Type	SITE	Location	Corral Creek Liftstation
Asset ID	CORC-LS-06	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Civil - Drainage		2 5% needs maintenance			
Civil- Fences and Security		2 5% needs maintenance			
Civil- Flood Protection		2 5% needs maintenance			
Civil- Roads		1 Normal maintenance			
Civil- Vegetation and Landscaping		2 5% needs maintenance			
Site Access		1 Very Good			
Site Lighting Adequate		5 No			

Condition Category Good. Condition Grade 2. Minor wear.

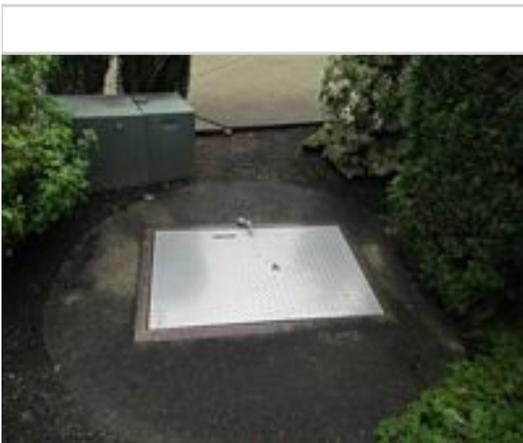
Condition Score 2.14

Consequence Score 4.00

Risk Score 12.00

Likelihood Score 3.00

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Corral Creek Lift Pump #1	System	Corral Creek LS
Asset Type	SUB PUMP	Location	Corral Creek Liftstation
Asset ID	CORCRK-LS-1	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
All Safety Features Present		1 yes			
Insulation Resistance	Yes	1 Greater than 10 Meg Ohm			Infinity
Operating at Inspection		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.00	Consequence Score	4.00
Risk Score	7.60	Likelihood Score	1.90

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Corral Creek Lift Pump #2	System	Corral Creek LS
Asset Type	SUB PUMP	Location	Corral Creek Liftstation
Asset ID	CORCRK-LS-2	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
All Safety Features Present		1 yes			
Insulation Resistance	Yes	1 Greater than 10 Meg Ohm			150 Meg ohms
Operating at Inspection		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 4.00

Risk Score 7.60 Likelihood Score 1.90

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description **UV Online Transmission Monitor** System **Disinfection**
Asset Type **PLC** Location
Asset ID **UV-M-70-4** Inspection Date **4/5/2019**
Comments Flag **Not Evaluated**

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Wire Labeling					
Battery Backup OK					
Installation/ Accessibility					
Operating at Inspection					

Condition Category

Condition Score 0 Consequence Score 0
Risk Score 0 Likelihood Score 0



Wilsonville Asset Condition Assessment Report

Asset Description	UV Main Control Panel	System	Disinfection
Asset Type	CONTROL PANEL	Location	U.V. Channel
Asset ID	LCP70-12	Inspection Date	4/5/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Acceptable Smell or Heat		1 yes			
All Safety Features Present		1 yes			
Control Switches		2 Good			
Good House Keeping		1 yes			
Good Wire Labeling		1 yes			
Infrared		2 Normal			
Installation		1 Excellent			
Obsolescence		1 Current and supported			
Operating at Inspection		1 yes			
Panel Labeling		1 yes			
Structural (Panel)		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.17 Consequence Score 5.95

Risk Score 10.12 Likelihood Score 1.70

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	UV Power Distribution Panel	System	Disinfection
Asset Type	CONTROL PANEL	Location	U.V. Channel
Asset ID	PDC70-12	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Acceptable Smell or Heat		1 yes			
All Safety Features Present		1 yes			
Control Switches		2 Good			
Good House Keeping		1 yes			
Good Wire Labeling		1 yes			
Infrared		2 Normal			
Installation		2 Normal			
Obsolescence		1 Current and supported			
Operating at Inspection		1 yes			
Panel Labeling		1 yes			
Structural (Panel)		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.25 Consequence Score 5.95

Risk Score 10.12 Likelihood Score 1.70



Wilsonville Asset Condition Assessment Report

Asset Description	UV Channel #2 Flow Meter	System	Disinfection
Asset Type	FLOW METER	Location	U.V. Channel
Asset ID	FIT70-20000	Inspection Date	4/5/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.12 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Asset Description **Turbidity Analyzer 70-20700**

System **Disinfection**

Asset Type **INSTRUMENT**

Location **U.V. Channel**

Asset ID **AE70-20700**

Inspection Date **4/2/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		2 Occasionally Found Out of Calibration			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.29

Consequence Score 4.90

Risk Score 12.74

Likelihood Score 2.60

Photo(s)



Asset Description **Turbidity Indicator 70-20700**

System **Disinfection**

Asset Type **INSTRUMENT**

Location **U.V. Channel**

Asset ID **AIT70-20700**

Inspection Date **4/2/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		2 Occasionally Found Out of Calibration			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.29

Consequence Score 4.90

Risk Score 12.74

Likelihood Score 2.60

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description **UV CHannel #1 LET 70-10500**

System **Disinfection**

Asset Type **INSTRUMENT**

Location **U.V. Channel**

Asset ID **LET70-10500**

Inspection Date **4/2/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.24

Consequence Score 4.90

Risk Score 12.74

Likelihood Score 2.60



Wilsonville Asset Condition Assessment Report

Asset Description **UV Channel #1 LI 70-10500**

System **Disinfection**

Asset Type **INSTRUMENT**

Location **U.V. Channel**

Asset ID **LI70-10500**

Inspection Date **4/2/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.24

Consequence Score 4.90

Risk Score 12.74

Likelihood Score 2.60



Wilsonville Asset Condition Assessment Report

Asset Description **Effluent Turbidity Sample Pump**

System **Disinfection**

Asset Type **PUMP-CENT**

Location **U.V. Channel**

Asset ID **PMP70-21500**

Inspection Date **4/2/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Absence of Pump Cavitation		1 Yes			
Acceptable Noise		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
Accessibility		3 Restricted Access			
All Components		1 yes			
All Safety Features Present		1 yes			
Bearings		2 Minor Wear			
Belt/Direct Drive/Couplings			X	Non Existent	Common pump / motor shaft
Check Valve		1 Opens, Closes, Seats, No Defects			
Controls		1 Excellent			
Corrosion - Metal		2 Minor Corrosion			
Corrosion - Visible Coating Condition		2 Minor damage			
Drive Shaft			X	Non Existent	
Gallons per kW		1 At BEP			
Gauges Operational			X	Non Existent	
Infrared		2 Normal			
Installation		2 Normal			
Isolation Valves Operational		1 yes			
Lubrication OK at Inspection		1 yes			
Mounting		1 Excellent			
Obsolescence		1 Current, Supported			
Oil Seal		1 Excellent			
Packing Gland/Mechanical Seal		2 Normal			
Pipe Alignment			X	Not Evaluated	Tubing
Temperature - Bearing		1 Normal			
Vibration Analysis (0.10 in/sec)		1 Smooth, < 0.10 in/sec			0.07" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.33

Consequence Score 5.65

Risk Score 14.69

Likelihood Score 2.60



Wilsonville Asset Condition Assessment Report

Asset Description **UV Disinfection Structure**

System **Disinfection**

Asset Type **STRUCTURE**

Location **U.V. Channel**

Asset ID **70BLD-01**

Inspection Date **4/4/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Access Doors			X	Non Existent	
Architectural - Ceilings			X	Non Existent	
Architectural - Floors		2 Good			
Architectural - Roof		1 Acceptable			
Architectural - Windows - Physical Integrity/Appearance			X	Non Existent	
Corrosion - Cathodic Protection			X	Non Existent	
Corrosion - Concrete		2 Staining			
Corrosion - Mechanical/Piping Metal Condition		2 Minor Corrosion			
Corrosion - Metal		2 Minor Corrosion			
Corrosion - Pipes		2 Staining/chipping			
Corrosion - Soil Resistivity					
Corrosion - Visible Coating Condition			X	Not Evaluated	
Corrosion - Visible Concrete Condition		1 Like new			
Duct Work			X	Non Existent	
External Wall			X	Non Existent	
Fire Extinguisher Present/Certification Current		1 yes			
Handrails		1 Very Good			
Installation		1 Excellent			
Internal Wall			X	Non Existent	
Lighting		3 Average			
Pipe System		1 Excellent			
Safety (General Review)		1 Very Good			
Stairs		1 Very Good			
Structural - Above Grade - Structure Irregularities/Code		1 No Irregularities			
Structural - Aboveground Pipe			X	Non Existent	
Structural - Building and System Piping		2 Flexibility and bracing provided			
Structural - Columns		2 Good			
Structural - Condition of Foundations		1 No movement			
Structural - Connections in Lateral Force Resisting Systems		1 Direct Positive Connection Between Horizontal Transfer Elements (Diaphragm Or Bracing) And V			
Structural - Equipment Anchorage - Epoxy-Cast-In-Place or Wedge Anchors		1 Anchors/Bolts All Present And Fully Embedded And/Or Threaded			
Structural - Load Path/Redundancy		1 Complete Load Path To Foundation - 3 Or More Vertical Resisting Elements In Each Direction			
Structural - Piping Connections to Above Ground Facilities			X	Non Existent	
Structural - Seismic		1 FEMA 154 score>3			

Condition Category Incomplete

Condition Score 0

Risk Score 0

Consequence Score 5.50

Likelihood Score 0

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description **UV Channel #2**
 Asset Type **STRUCTURE**
 Asset ID **UVD70-20000**

System **Disinfection**
 Location **U.V. Channel**
 Inspection Date **4/2/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Access Doors			X	Non Existent	
Architectural - Ceilings			X	Non Existent	
Architectural - Floors		2 Good			
Architectural - Roof		1 Acceptable			
Architectural - Windows - Physical Integrity/Appearance			X	Non Existent	
Corrosion - Cathodic Protection		1 Yes			
Corrosion - Concrete		2 Staining			
Corrosion - Mechanical/Piping Metal Condition		2 Minor Corrosion			
Corrosion - Metal		2 Minor Corrosion			
Corrosion - Pipes		2 Staining/chipping			
Corrosion - Soil Resistivity			X	Not Evaluated	
Corrosion - Visible Coating Condition		2 Minor damage			
Corrosion - Visible Concrete Condition		1 Like new			
Duct Work			X	Non Existent	
External Wall			X	Non Existent	
Fire Extinguisher Present/Certification Current		1 yes			
Handrails		1 Very Good			
Installation		1 Excellent			
Internal Wall			X	Non Existent	
Lighting		2 Good			
Pipe System		1 Excellent			
Safety (General Review)		1 Very Good			
Stairs		1 Very Good			
Structural - Above Grade - Structure Irregularities/Code		1 No Irregularities			
Structural - Aboveground Pipe		1 Constructed Of Ductile Materials And Flexible Restrained Joints			
Structural - Building and System Piping		2 Flexibility and bracing provided			
Structural - Columns		1 Very Good			
Structural - Condition of Foundations		1 No movement			
Structural - Connections in Lateral Force Resisting Systems		1 Direct Positive Connection Between Horizontal Transfer Elements (Diaphragm Or Bracing) And V			
Structural - Equipment Anchorage - Epoxy-Cast-In-Place or Wedge Anchors		1 Anchors/Bolts All Present And Fully Embedded And/Or Threaded			
Structural - Load Path/Redundancy		1 Complete Load Path To Foundation - 3 Or More Vertical Resisting Elements In Each Direction			
Structural - Piping Connections to Above Ground Facilities		2 Connections present, full flexibility			

Question	Overriding?	Answer	NA	Flag	Answer Comment
Structural - Seismic		1 FEMA 154 score>3			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.33 Consequence Score 5.50

Risk Score 9.35 Likelihood Score 1.70

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description **UV Module #3 Ozonia** System **Disinfection**
 Asset Type **UV SYSTEM** Location **U.V. Channel**
 Asset ID **UVM70-20003** Inspection Date **4/2/2019**
 Comments Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
All Sensors Communicating with the Alarm Panel		1 Yes			
Chemical Feed System			X	Non Existent	
Controls		1 Excellent			
Corrosion		1 Negligible			
Display Ok		1 yes			
Obsolescence		1 Current, Supported			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 5.05

Risk Score 9.60 Likelihood Score 1.90



Wilsonville Asset Condition Assessment Report

Asset Description	UV Bank 1A	System	Disinfection
Asset Type	UV UNIT	Location	U.V. Channel
Asset ID	UV-M-70-1A	Inspection Date	4/3/2019
Comments	This system used as a back up for the Ozonia system.	Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Accessibility		1 Open, Easy Access			
Controls		3 Minor Problems			HMI display not showing status of one of the banks
Corrosion - Structural Metal Condition?		1 Like new			Stainless steel
Mounting		1 Excellent			
Structural Integrity		2 Minor wear			

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 1.60 Consequence Score 5.05

Risk Score 15.15 Likelihood Score 3.00

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	UV Bank 1B	System	Disinfection
Asset Type	UV UNIT	Location	U.V. Channel
Asset ID	UV-M-70-1B	Inspection Date	4/3/2019
Comments	This system used as back up for Ozonia system		Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Accessibility		1 Open, Easy Access			
Controls		3 Minor Problems			HMI display not showing status of one of the banks
Corrosion - Structural Metal Condition?		1 Like new			Stainless steel
Mounting		1 Excellent			
Structural Integrity		2 Minor wear			

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 1.60

Consequence Score 5.05

Risk Score 15.15

Likelihood Score 3.00

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description **UV Channel Inf Gate #1**

System **Disinfection**

Asset Type **VALVE-SLIDE**

Location **U.V. Channel**

Asset ID **GTE70-10001**

Inspection Date **4/2/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Oil/Grease		1 yes			
Actuator			X	Non Existent	
All Components		1 yes			
Coating Condition			X	Non Existent	Stainless steel
Corrosion - Concrete		2 Staining			
Corrosion - Mechanical Metals		1 Like New			
Corrosion - Metal		1 Like New			
Exercise Program		1 Adequate schedule and met			
Functional		2 Fully Opens/Closes with Some Assistance			
Lubrication OK at Inspection		1 yes			
Manual Operator		2 Operates with extra Force			
Metal Condition		1 Vitrually No Corrosion			
Mounting		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.23

Consequence Score 2.80

Risk Score 6.72

Likelihood Score 2.40



Wilsonville Asset Condition Assessment Report

Asset Description **UV Channel Weir Gate #1**

System **Disinfection**

Asset Type **VALVE-SLIDE**

Location **U.V. Channel**

Asset ID **GTE70-10002**

Inspection Date **4/2/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Oil/Grease		1 yes			
Actuator			X	Non Existent	
All Components		1 yes			
Coating Condition			X	Non Existent	Stainless steel
Corrosion - Concrete		1 Like New Condition			
Corrosion - Mechanical Metals		1 Like New			
Corrosion - Metal		1 Like New			
Exercise Program		1 Adequate schedule and met			
Functional		2 Fully Opens/Closes with Some Assistance			
Lubrication OK at Inspection		1 yes			
Manual Operator		2 Operates with extra Force			
Metal Condition		1 Vitrually No Corrosion			
Mounting		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.15

Consequence Score 2.80

Risk Score 6.72

Likelihood Score 2.40



Wilsonville Asset Condition Assessment Report

Asset Description	Effluent Flow Meter	System	Effluent
Asset Type	FLOW METER	Location	Effluent Channe
Asset ID	UV-FE/FIT-70-3	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		1 Like new			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 0

Risk Score 0 Likelihood Score 0



Wilsonville Asset Condition Assessment Report

Asset Description	Effluent Composite Sampler #1	System	Effluent
Asset Type	SAMPLER	Location	Effluent Channe
Asset ID	UV-70-S-1-1	Inspection Date	4/1/2019
Comments	Sampler head removed from sampler refrigerator	Flag	Non Existent

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		5 no			
Acceptable Smell or Heat			X		
All Components			X		
Display/Indicator Ok			X		
Installation/ Accessibility			X		
Operating at Inspection			X		
Tubing / Connections			X		

Condition Category Very poor. Grade 5. Requires complete rehabilitation or replacement. Failed.

Condition Score 5.00 Consequence Score 3.10

Risk Score 21.24 Likelihood Score 6.85

Asset Description **Effluent Composite Sampler #2**

System **Effluent**

Asset Type **SAMPLER**

Location **Effluent Channe**

Asset ID **UV-70-S-1-2**

Inspection Date **4/1/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
All Components		1 yes			
Display/Indicator Ok		1 yes			
Installation/ Accessibility		2 Minor Defects			
Operating at Inspection		1 yes			
Tubing / Connections		3 Moderate Wear			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.43

Consequence Score 3.10

Risk Score 5.89

Likelihood Score 1.90

Photo(s)



Asset Description	UV Control Panel	System	Effluent
Asset Type	CONTROL PANEL	Location	Effluent Channel
Asset ID	UV-LCP-70-1	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Acceptable Smell or Heat		1 yes			
All Safety Features Present		1 yes			
Control Switches		2 Good			
Good House Keeping		1 yes			
Good Wire Labeling		1 yes			
Infrared		2 Normal			
Installation		2 Normal			
Obsolescence		3 Limited Parts Available			
Operating at Inspection		1 yes			
Panel Labeling		1 yes			
Structural (Panel)		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.42 Consequence Score 6.25

Risk Score 11.88 Likelihood Score 1.90

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	SLC-500-03 #7, Trojan UV Allen	System	Effluent
Asset Type	PLC	Location	Effluent Channel
Asset ID	UV-PLC-70-1	Inspection Date	4/3/2019
Comments	This system is backup for the Ozonia UV system	Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Wire Labeling		1 yes			
Battery Backup OK		1 yes			
Installation/ Accessibility		2 Minor Defects			
Operating at Inspection		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.25 Consequence Score 2.65

Risk Score 6.89 Likelihood Score 2.60

Photo(s)



Asset Description **UV Reaction Chamber**

System **Effluent**

Asset Type **TANK**

Location **Effluent Channel**

Asset ID **UV-M-70-1**

Inspection Date **4/1/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Adequate Overflow		1 yes			
External Condition		2 Minor			
External Door/Hatch			X	Non Existent	
Level Monitoring Pipework			X	Non Existent	
Local Level Gauge		1 Excellent			
Safety (General Review)		1 Very Good			
Security		1 Adequate			
Vent			X	Non Existent	

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.17

Consequence Score 2.65

Risk Score 5.04

Likelihood Score 1.90

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Trojan UV 4000 UV System	System	Effluent
Asset Type	UV UNIT	Location	Effluent Channel
Asset ID	UV-M-70	Inspection Date	4/2/2019
Comments	This UV unit is used for back up only to the Ozonia system. The HMI has errors not showing the status of module 3 lamps energized.	Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Accessibility		1 Open, Easy Access			
Controls		3 Minor Problems			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Mounting		1 Excellent			
Structural Integrity		1 Excellent			

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 1.60 Consequence Score 5.05

Risk Score 15.15 Likelihood Score 3.00

Asset Description **W3 Pump #1 VFD**

System **Effluent**

Asset Type **VFD**

Location **Sec Process**

Asset ID **VFD90-00101**

Inspection Date **4/1/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
All Safety Features Present		1 yes			
Connections Ok		1 yes			
Corrosion - Mechanical Metals		1 Like New			
Display/Indicator Ok		1 yes			
General Appearance		1 Excellent			
Good Wire Labeling		1 yes			
Obsolescence		1 Current and supported			
Operates Properly		1 yes			
Operating at Inspection		1 yes			
Ventilation Fan		2 Slight Deficiency			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.10

Consequence Score 4.30

Risk Score 7.31

Likelihood Score 1.70

Photo(s)



Asset Description **W3 Pump #2 VFD**

System **Effluent**

Asset Type **VFD**

Location **Sec Process**

Asset ID **VFD90-00102**

Inspection Date **4/1/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
All Safety Features Present		1 yes			
Connections Ok		1 yes			
Corrosion - Mechanical Metals		1 Like New			
Display/Indicator Ok		1 yes			
General Appearance		1 Excellent			
Good Wire Labeling		1 yes			
Obsolescence		1 Current and supported			
Operates Properly		1 yes			
Operating at Inspection		1 yes			
Ventilation Fan		2 Slight Deficiency			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.10

Consequence Score 4.30

Risk Score 7.31

Likelihood Score 1.70

Photo(s)





Asset Description **W3 Pump #3 VFD**

System **Effluent**

Asset Type **VFD**

Location **Sec Process**

Asset ID **VFD90-00103**

Inspection Date **4/1/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
All Safety Features Present		1 yes			
Connections Ok		1 yes			
Corrosion - Mechanical Metals		1 Like New			
Display/Indicator Ok		1 yes			
General Appearance		1 Excellent			
Good Wire Labeling		1 yes			
Obsolescence		1 Current and supported			
Operates Properly		1 yes			
Operating at Inspection		1 yes			
Ventilation Fan		2 Slight Deficiency			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.10

Consequence Score 4.30

Risk Score 7.31

Likelihood Score 1.70

Photo(s)



Asset Description **Flow Meter 70-20500**

System **Effluent**

Asset Type **FLOW METER**

Location **U.V. Channel**

Asset ID **FE70-20500**

Inspection Date **4/1/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.12

Consequence Score 2.65

Risk Score 6.36

Likelihood Score 2.40

Photo(s)







Wilsonville Asset Condition Assessment Report

Asset Description	W1 Water Flow Element	System	Effluent
Asset Type	FLOW METER	Location	U.V. Channel
Asset ID	FE90-10000	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.12 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Asset Description	Disk Filter #1	System	Filtration
Asset Type	FILTER	Location	Filter
Asset ID	DF60-10001	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
All Components		1 yes			
All Safety Features Present		1 yes			
Corrosion - Structural Concrete		1 Like new condition			Stainless steel
Handrails		1 Very Good			
Media Condition (Media study)		2 Good			
Operating at Inspection		1 yes			
Surface washer		1 Good			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.14 Consequence Score 4.75

Risk Score 8.08 Likelihood Score 1.70

Photo(s)



Asset Description	Disk Filter #2	System	Filtration
Asset Type	FILTER	Location	Filter
Asset ID	DF60-10002	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
All Components		1 yes			
All Safety Features Present		1 yes			
Corrosion - Structural Concrete		1 Like new condition			
Handrails		1 Very Good			
Media Condition (Media study)		2 Good			
Operating at Inspection		1 yes			
Surface washer		1 Good			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.14 Consequence Score 4.75

Risk Score 8.08 Likelihood Score 1.70

Photo(s)



Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Disk Filter LIT 60-10101	System	Filtration
Asset Type	INSTRUMENT	Location	Filter
Asset ID	LIT60-10101	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.24	Consequence Score	4.90
Risk Score	12.74	Likelihood Score	2.60



Wilsonville Asset Condition Assessment Report

Asset Description	Disk Filter LIT 60-10102	System	Filtration
Asset Type	INSTRUMENT	Location	Filter
Asset ID	LIT60-10102	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.24	Consequence Score	4.90
Risk Score	12.74	Likelihood Score	2.60

Asset Description	Disk Filter Drive Motor #1	System	Filtration
Asset Type	MOTOR	Location	Filter
Asset ID	FLT60-10001	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Smell or Heat		1 yes			
All Components		1 yes			
All Safety Guards Present		1 yes			
Bearings		2 Minor Wear			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Drive Shaft Alignment		1 Excellent			
Insulation Resistance	Yes	1 Greater than 10 Meg Ohm			550 Meg ohms
Oil Level within Range			X	Non Existent	Greased bearings
Operating at Inspection		1 yes			
Structural Integrity		1 Excellent			
Vibration Analysis	Yes	2 2 -Good .039 - .15 inches/sec			0.06" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.27 Consequence Score 5.05

Risk Score 9.60 Likelihood Score 1.90

Photo(s)



Asset Description	Disk Filter Drive Motor #2	System	Filtration
Asset Type	MOTOR	Location	Filter
Asset ID	FLT60-10002	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Smell or Heat		1 yes			
All Components		1 yes			
All Safety Guards Present		1 yes			
Bearings		2 Minor Wear			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Drive Shaft Alignment		1 Excellent			
Insulation Resistance	Yes	1 Greater than 10 Meg Ohm			420 Meg ohms
Oil Level within Range			X	Non Existent	Greased bearings
Operating at Inspection		1 yes			
Structural Integrity		1 Excellent			
Vibration Analysis	Yes	2 2 -Good .039 - .15 inches/sec			0.05" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.27 Consequence Score 5.05

Risk Score 9.60 Likelihood Score 1.90

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Disk Filter Backwash Pump #1	System	Filtration
Asset Type	PUMP-CENT	Location	Filter
Asset ID	PMP60-11001	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Absence of Pump Cavitation		1 Yes			
Acceptable Noise		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
Accessibility		2 Semi Restricted Access			
All Components		1 yes			
All Safety Features Present		1 yes			
Bearings		2 Minor Wear			
Belt/Direct Drive/Couplings			X	Non Existent	Common motor / pump shaft
Check Valve			X	Non Existent	
Controls		1 Excellent			
Corrosion - Metal		2 Minor Corrosion			
Corrosion - Visible Coating Condition		2 Minor damage			
Drive Shaft			X	Non Existent	
Gallons per kW		1 At BEP			
Gauges Operational		1 Yes			
Infrared		2 Normal			
Installation		1 Excellent			
Isolation Valves Operational		1 yes			
Lubrication OK at Inspection		1 yes			
Mounting		1 Excellent			
Obsolescence		1 Current, Supported			
Oil Seal		1 Excellent			
Packing Gland/Mechanical Seal		2 Normal			
Pipe Alignment		1 Straight			
Temperature - Bearing		1 Normal			
Vibration Analysis (0.10 in/sec)		1 Smooth, < 0.10 in/sec			0.09" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.24 Consequence Score 5.65

Risk Score 10.74 Likelihood Score 1.90

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Disk Filter Backwash Pump #2	System	Filtration
Asset Type	PUMP-CENT	Location	Filter
Asset ID	PMP60-11002	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Absence of Pump Cavitation		1 Yes			
Acceptable Noise		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
Accessibility		2 Semi Restricted Access			
All Components		1 yes			
All Safety Features Present		1 yes			
Bearings		2 Minor Wear			
Belt/Direct Drive/Couplings			X	Non Existent	Common motor / pump shaft
Check Valve			X	Non Existent	
Controls		1 Excellent			
Corrosion - Metal		2 Minor Corrosion			
Corrosion - Visible Coating Condition		2 Minor damage			
Drive Shaft			X	Non Existent	
Gallons per kW		1 At BEP			
Gauges Operational		1 Yes			
Infrared		2 Normal			
Installation		1 Excellent			
Isolation Valves Operational		1 yes			
Lubrication OK at Inspection		1 yes			
Mounting		1 Excellent			
Obsolescence		1 Current, Supported			
Oil Seal		1 Excellent			
Packing Gland/Mechanical Seal		2 Normal			
Pipe Alignment		1 Straight			
Temperature - Bearing		1 Normal			
Vibration Analysis (0.10 in/sec)		2 Good, 0.10 - 0.20 in/sec			0.10" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.28 Consequence Score 5.65

Risk Score 10.74 Likelihood Score 1.90

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Disk Filter Structure	System	Filtration
Asset Type	STRUCTURE	Location	Filter
Asset ID	60BLD-01	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Access Doors			X	Non Existent	
Architectural - Ceilings			X	Non Existent	
Architectural - Floors		1 Very Good			
Architectural - Roof			X	Non Existent	
Architectural - Windows - Physical Integrity/Appearance			X	Non Existent	
Corrosion - Cathodic Protection		1 Yes			
Corrosion - Concrete		1 Like New Condition			
Corrosion - Mechanical/Piping Metal Condition		1 Like New			
Corrosion - Metal		1 Like New			
Corrosion - Pipes		1 Like new condition			
Corrosion - Soil Resistivity			X	Not Evaluated	
Corrosion - Visible Coating Condition			X	Non Existent	
Corrosion - Visible Concrete Condition		1 Like new			
Duct Work			X	Non Existent	
External Wall		1 Very Good			
Fire Extinguisher Present/Certification Current		1 yes			
Handrails		1 Very Good			
Installation		1 Excellent			
Internal Wall			X	Non Existent	
Lighting			X	Non Existent	
Pipe System		1 Excellent			
Safety (General Review)		1 Very Good			
Stairs		1 Very Good			
Structural - Above Grade - Structure Irregularities/Code		1 No Irregularities			
Structural - Aboveground Pipe		1 Constructed Of Ductile Materials And Flexible Restrained Joints			
Structural - Building and System Piping		2 Flexibility and bracing provided			
Structural - Columns			X	Non Existent	
Structural - Condition of Foundations		1 No movement			
Structural - Connections in Lateral Force Resisting Systems		1 Direct Positive Connection Between Horizontal Transfer Elements (Diaphragm Or Bracing) And V			
Structural - Equipment Anchorage - Epoxy-Cast-In-Place or Wedge Anchors		1 Anchors/Bolts All Present And Fully Embedded And/Or Threaded			
Structural - Load Path/Redundancy		1 Complete Load Path To Foundation - 3 Or More Vertical Resisting Elements In Each Direction			
Structural - Piping Connections to Above Ground Facilities		2 Connections present, full flexibility			

Question	Overriding?	Answer	NA	Flag	Answer Comment
Structural - Seismic		1 FEMA 154 score>3			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.08 Consequence Score 5.50

Risk Score 13.20 Likelihood Score 2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description **Filtrate Pump #1**

System **Filtration**

Asset Type **PUMP CENT**

Location **Process Gallery**

Asset ID **PGB-P-45-2-2**

Inspection Date **4/4/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Absence of Pump Cavitations		1 yes			
Acceptable Noise		1 yes			
All Safety Guards Present		1 yes			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Mounting		1 Excellent			
Vibration Analysis		2 -Good .039 - .15 inches/sec			0.08" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.29

Consequence Score 6.10

Risk Score 15.86

Likelihood Score 2.60



Wilsonville Asset Condition Assessment Report

Asset Description	Influent pH Probe	System	Influent
Asset Type	INSTRUMENT	Location	Influent Channel
Asset ID	HW-pH-1	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		2 Occasionally Found Out of Calibration			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.29 Consequence Score 4.60

Risk Score 8.74 Likelihood Score 1.90



Wilsonville Asset Condition Assessment Report

Asset Description	Memoiral Park Control Panel	System	Memorial Park LS
Asset Type	CONTROL PANEL	Location	Memorial Park Liftstation
Asset ID	MEMP-LCP-03	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Acceptable Smell or Heat		1 yes			
All Safety Features Present		1 yes			
Control Switches		2 Good			
Good House Keeping		1 yes			
Good Wire Labeling		1 yes			
Infrared		2 Normal			
Installation		2 Normal			
Obsolescence		1 Current and supported			
Operating at Inspection		1 yes			
Panel Labeling		1 yes			
Structural (Panel)		2 Minor Wear			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.33 Consequence Score 5.95

Risk Score 11.30 Likelihood Score 1.90

Photo(s)



Asset Description	Memorial Park Auxillary Engine	System	Memorial Park LS
Asset Type	GENERATOR	Location	Memorial Park Liftstation
Asset ID	MEMP-LS-03-AUX	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
Air Filter		1 Excellent			
All Components		1 yes			
All Safety Guards Present		1 yes			
Automatic Transfer Switch			X	Non Existent	Auxillary engine
Battery/ Charging System		2 Minor			
Control Gauges (Hour Meters Volts & Amps)		2 Good			
Control Switches		2 Good			
Cooling System		1 Proper Coolant Additives No Corrosion			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Exhaust System		1 Excellent			
Heater Jacket		1 Excellent			
Hoses and Belts		3 Moderate			
Monitoring Panel		1 Excellent			
Oil OK at Inspection		1 yes			
Oil Pressure		1 Good			
Running at Inspection		1 yes			
Starting System		1 Proper Operation			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.30 Consequence Score 5.95

Risk Score 11.30 Likelihood Score 1.90

Photo(s)



Asset Description **Memorial Park Lift Pump #1**

System **Memorial Park LS**

Asset Type **PUMP CENT**

Location **Memorial Park Liftstation**

Asset ID **MEMP-LS-03-P-1**

Inspection Date **4/3/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Absence of Pump Cavitations		1 yes			
Acceptable Noise		1 yes			
All Safety Guards Present		1 yes			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Mounting		1 Excellent			
Vibration Analysis		3 3 -Fair .15 - .31 inches/sec			0.17" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.43

Consequence Score 5.95

Risk Score 11.30

Likelihood Score 1.90

Photo(s)



Asset Description **Memorial Park Lift Pump #2**

System **Memorial Park LS**

Asset Type **PUMP CENT**

Location **Memorial Park Liftstation**

Asset ID **MEMP-LS-03-P-2**

Inspection Date **4/3/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Absence of Pump Cavitations		1 yes			
Acceptable Noise		1 yes			
All Safety Guards Present		1 yes			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Mounting		1 Excellent			
Vibration Analysis		5 5 -Very Rough >.59 inches/sec			0.77" / second

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 1.71

Consequence Score 5.95

Risk Score 17.85

Likelihood Score 3.00

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Memorial Park Lift Station	System	Memorial Park LS
Asset Type	SITE	Location	Memorial Park Liftstation
Asset ID	MEMP-LS-03	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Civil - Drainage		2 5% needs maintenance			
Civil- Fences and Security		1 Normal maintenance			
Civil- Flood Protection		5 >50% requires replacement			Located in area of potential flooding
Civil- Roads		1 Normal maintenance			
Civil- Vegetation and Landscaping		2 5% needs maintenance			
Site Access		1 Very Good			
Site Lighting Adequate		5 No			

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 2.43

Consequence Score 5.95

Risk Score 17.85

Likelihood Score 3.00

Photo(s)



Asset Description	Morey's Lndng Auxillary Engine	System	Moreys LS
Asset Type	GENERATOR	Location	Moreys Landing Liftstation
Asset ID	MORL-LS-08-AUX	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
Air Filter		1 Excellent			
All Components		1 yes			
All Safety Guards Present		1 yes			
Automatic Transfer Switch			X	Non Existent	Auxillary engine
Battery/ Charging System		2 Minor			
Control Gauges (Hour Meters Volts & Amps)		2 Good			
Control Switches		2 Good			
Cooling System			X	Non Existent	Air cooled engine
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Exhaust System		1 Excellent			
Heater Jacket			X	Non Existent	Air cooled engine
Hoses and Belts		1 Excellent			
Monitoring Panel		1 Excellent			
Oil OK at Inspection		1 yes			
Oil Pressure		1 Good			
Running at Inspection		1 yes			
Starting System		1 Proper Operation			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.22 Consequence Score 5.05

Risk Score 9.60 Likelihood Score 1.90

Photo(s)



Photo(s)

Asset Description	Morey's Landing Lift Pump #1	System	Moreys LS
Asset Type	PUMP CENT	Location	Moreys Landing Liftstation
Asset ID	MORL-LS-08-P1	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Absence of Pump Cavitations		1 yes			
Acceptable Noise		1 yes			
All Safety Guards Present		1 yes			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Mounting		1 Excellent			
Vibration Analysis		3 -Fair .15 - .31 inches/sec			0.17" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.43 Consequence Score 5.05

Risk Score 9.60 Likelihood Score 1.90

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Morey's Landing Lift Pump #2	System	Moreys LS
Asset Type	PUMP CENT	Location	Moreys Landing Liftstation
Asset ID	MORL-LS-08-P2	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Absence of Pump Cavitations		1 yes			
Acceptable Noise		1 yes			
All Safety Guards Present		1 yes			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Mounting		1 Excellent			
Vibration Analysis		3 -Fair .15 - .31 inches/sec			0.18" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.43 Consequence Score 5.05

Risk Score 9.60 Likelihood Score 1.90

Photo(s)



Asset Description **Morey's Landing Lift Station**

System **Moreys LS**

Asset Type **SITE**

Location **Moreys Landing Liftstation**

Asset ID **MORL-LS-08**

Inspection Date **4/3/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Civil - Drainage		1 Normal maintenance			
Civil- Fences and Security		1 Normal maintenance			
Civil- Flood Protection		1 Normal maintenance			
Civil- Roads		1 Normal maintenance			
Civil- Vegetation and Landscaping		2 5% needs maintenance			
Site Access		1 Very Good			
Site Lighting Adequate		5 No			

Condition Category Good. Condition Grade 2. Minor wear.

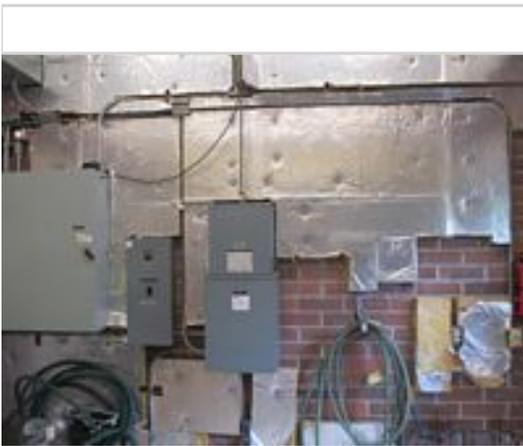
Condition Score 1.71

Consequence Score 5.05

Risk Score 15.15

Likelihood Score 3.00

Photo(s)



Asset Description **Odor Control Fan #1**

System **Odor Control**

Asset Type **FAN**

Location **D&D**

Asset ID **FAN91-10501**

Inspection Date **4/3/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Guards Present		1 yes			
Belt		2 Minor Wear			
Controls		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Duct Work		1 Excellent			
Fan and Fan Motor		1 Excellent			
Installation/ Accessibility		1 Excellent			
Structural Integrity		1 Excellent			
Support		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.19

Consequence Score 5.05

Risk Score 8.58

Likelihood Score 1.70

Photo(s)



Asset Description	Odor Control Fan #2	System	Odor Control
Asset Type	FAN	Location	D&D
Asset ID	FAN91-10502	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Guards Present		1 yes			
Belt		2 Minor Wear			
Controls		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Duct Work		1 Excellent			
Fan and Fan Motor		1 Excellent			
Installation/ Accessibility		1 Excellent			
Structural Integrity		1 Excellent			
Support		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.19

Consequence Score 5.05

Risk Score 8.58

Likelihood Score 1.70

Photo(s)



Asset Description	Inline Stack Fan #1	System	Odor Control
Asset Type	FAN	Location	D&D
Asset ID	FAN91-20501	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			Measured 0.08" / second
All Components		1 yes			
All Safety Guards Present		1 yes			
Belt		2 Minor Wear			
Controls		1 Excellent			
Corrosion - Structural Metal Condition?		1 Like new			
Duct Work		1 Excellent			
Fan and Fan Motor		1 Excellent			
Installation/ Accessibility		1 Excellent			
Structural Integrity		2 Minor wear			
Support		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.12 Consequence Score 5.05

Risk Score 8.58 Likelihood Score 1.70

Photo(s)



Photo(s)

Asset Description **Inline Stack Fan #2**

System **Odor Control**

Asset Type **FAN**

Location **D&D**

Asset ID **FAN91-20502**

Inspection Date **4/3/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			Measured 0.08" / second
All Components		1 yes			
All Safety Guards Present		1 yes			
Belt		2 Minor Wear			
Controls		1 Excellent			
Corrosion - Structural Metal Condition?		1 Like new			
Duct Work		1 Excellent			
Fan and Fan Motor		1 Excellent			
Installation/ Accessibility		1 Excellent			
Structural Integrity		1 Excellent			
Support		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.06

Consequence Score 5.05

Risk Score 8.58

Likelihood Score 1.70

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Grit Classifier 31500	System	Preliminary
Asset Type	CLASSIFIER	Location	Headworks
Asset ID	GCCL10-31500	Inspection Date	4/1/2019
Comments		Flag	

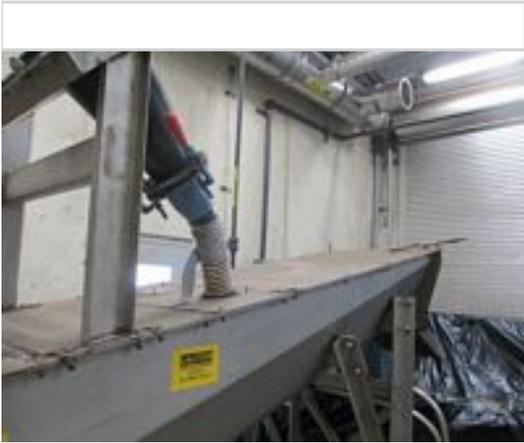
Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Vibration		1 yes			
Adequate Overflow		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
Belt/Chain			X	Non Existent	Direct drive
Corrosion - Metal		2 Minor Corrosion			
Drive Assembly		1 Excellent			
Gauges			X	Non Existent	
Installation/Accessibility		2 Installed properly, minor access obstructions			
Valves		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.20 Consequence Score 3.25

Risk Score 7.80 Likelihood Score 2.40

Photo(s)



Asset Description	Grit Cyclone 31100	System	Preliminary
Asset Type	CLASSIFIER-CYCLONE	Location	Headworks
Asset ID	GYC10-31100	Inspection Date	4/1/2019
Comments		Flag	

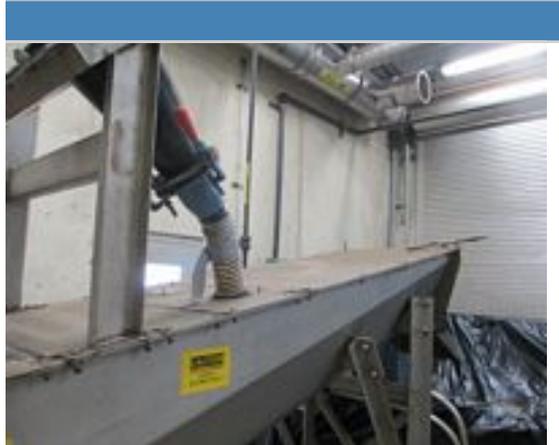
Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Drainage		1 yes			
Acceptable Noise		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
Auger Wear - Structural Metal Condition		2 Minor Corrosion			
Corrosion - Metal		2 Minor Corrosion			
Installation/Accessibility		2 Installed properly, minor access obstructions			
Pipe Alignment		1 Straight			
Piping/Connections		1 No Leaks, Straight, Supported			
Support		1 Excellent			
Trough Wear - Structural Metal Condition		2 Minor Deterioration			
Valves		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.29 Consequence Score 3.25

Risk Score 7.80 Likelihood Score 2.40

Photo(s)



Asset Description	Flow Element 10-10101	System	Preliminary
Asset Type	FLOW METER	Location	Headworks
Asset ID	FE10-10101	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.12 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)



Asset Description	Flow Element 10-10102	System	Preliminary
Asset Type	FLOW METER	Location	Headworks
Asset ID	FE10-10102	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.12 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)



Asset Description	Flow Indicator 10-10101	System	Preliminary
Asset Type	FLOW METER	Location	Headworks
Asset ID	FIT10-10101	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.12 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Flow Indicator 10-10102	System	Preliminary
Asset Type	FLOW METER	Location	Headworks
Asset ID	FIT10-10102	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

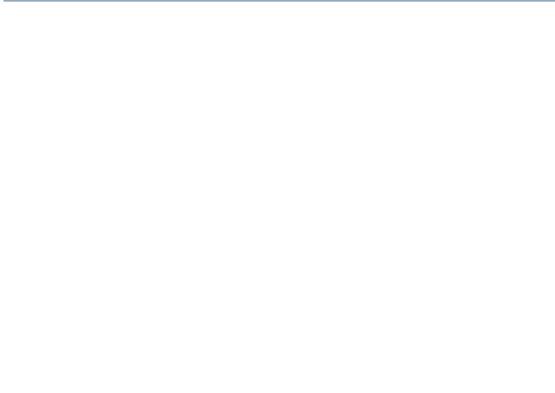
Condition Score 1.12 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)



Photo(s)



Asset Description	Level Element 10-12100	System	Preliminary
Asset Type	INSTRUMENT	Location	Headworks
Asset ID	LET10-12100	Inspection Date	4/1/2019
Comments	No level indication on display	Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Connections Ok		1 yes			
Display Ok		5 no			No level indication on display
Indicator		5 Failure			No level indication on display
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 1.65

Consequence Score 4.90

Risk Score 18.13

Likelihood Score 3.70

Photo(s)



No level indication on display (right)

Asset Description	Level Element 10-12200	System	Preliminary
Asset Type	INSTRUMENT	Location	Headworks
Asset ID	LET10-12200	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.24	Consequence Score	4.90
Risk Score	12.74	Likelihood Score	2.60

Photo(s)



Asset Description	Level Indicator 10-12100	System	Preliminary
Asset Type	INSTRUMENT	Location	Headworks
Asset ID	LI10-12100	Inspection Date	4/1/2019
Comments	No level indication on display	Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Connections Ok		1 yes			
Display Ok		5 no			No level indication on display
Indicator		5 Failure			No level indication on display
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 1.65

Consequence Score 4.90

Risk Score 18.13

Likelihood Score 3.70

Photo(s)



No level indication on display (right)

Asset Description	Level Indicator 10-12200	System	Preliminary
Asset Type	INSTRUMENT	Location	Headworks
Asset ID	LI10-12200	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.24	Consequence Score	4.90
Risk Score	12.74	Likelihood Score	2.60

Photo(s)



Asset Description	Level Switch 10-13400	System	Preliminary
Asset Type	INSTRUMENT	Location	Headworks
Asset ID	LSH10-13400	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Connections Ok		1 yes			
Display Ok			X	Non Existent	Level switch
Indicator			X	Non Existent	Level switch
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.20	Consequence Score	4.90
Risk Score	12.74	Likelihood Score	2.60

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	MCC 10A	System	Preliminary
Asset Type	MCC	Location	Headworks
Asset ID	MCC10-10A	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Connections Ok		1 yes			
Correct Components		1 yes			
Corrosion - Structural Metal Condition?		1 Like new			
Good House Keeping		1 yes			
Infrared		2 Normal			
Installation/ Accessibility		1 Excellent			
Internal Condition		1 Negligible			
Structural Integrity		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.25 Consequence Score 4.60

Risk Score 10.12 Likelihood Score 2.20

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	MCC 10B	System	Preliminary
Asset Type	MCC	Location	Headworks
Asset ID	MCC10-10B	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Connections Ok		1 yes			
Correct Components		1 yes			
Corrosion - Structural Metal Condition?		1 Like new			
Good House Keeping		1 yes			
Infrared		2 Normal			
Installation/ Accessibility		1 Excellent			
Internal Condition		1 Negligible			
Structural Integrity		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.25 Consequence Score 4.60

Risk Score 10.12 Likelihood Score 2.20

Photo(s)



Asset Description	Grit Basin Mixer	System	Preliminary
Asset Type	MIXER	Location	Headworks
Asset ID	MXR10-30100	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Guards Present		1 yes			
Corrosion - Structural Metals		2 Slight staining/small chips			
Installation/ Accessibility		1 Excellent			
Obsolescence		1 Current and supported			
Operating at Inspection		1 yes			
Support		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.11 Consequence Score 5.65

Risk Score 10.74 Likelihood Score 1.90

Photo(s)







Wilsonville Asset Condition Assessment Report

Asset Description	Grit Pump 30500	System	Preliminary
Asset Type	PUMP-CENT	Location	Headworks
Asset ID	PMP10-30500	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Absence of Pump Cavitation		1 Yes			
Acceptable Noise		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
Accessibility		1 Open, Easy Access			
All Components		1 yes			
All Safety Features Present		1 yes			
Bearings		2 Minor Wear			
Belt/Direct Drive/Couplings		2 Minor Wear			
Check Valve		1 Opens, Closes, Seats, No Defects			
Controls		1 Excellent			
Corrosion - Metal		2 Minor Corrosion			
Corrosion - Visible Coating Condition		2 Minor damage			
Drive Shaft			X	Non Existent	Belt driven
Gallons per kW		1 At BEP			
Gauges Operational		1 Yes			
Infrared		2 Normal			
Installation		1 Excellent			
Isolation Valves Operational		1 yes			
Lubrication OK at Inspection		1 yes			
Mounting		1 Excellent			
Obsolescence		1 Current, Supported			
Oil Seal		1 Excellent			
Packing Gland/Mechanical Seal		2 Normal			
Pipe Alignment		1 Straight			
Temperature - Bearing		1 Normal			
Vibration Analysis (0.10 in/sec)		1 Smooth, < 0.10 in/sec			0.06" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.22 Consequence Score 5.65

Risk Score 14.69 Likelihood Score 2.60

Photo(s)



Asset Description	Vactor Sump Pump	System	Preliminary
Asset Type	PUMP-SUB	Location	Headworks
Asset ID	PMP10-10500	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Cavitation		1 yes			
Absence of Leaks		1 yes			
Acceptable Noise		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
Amperage Draw		3 At Nameplate			
Chain/Cables/Rails		2 Minor Wear			
Check Valve Operates Properly		1 Excellent			
Connections Ok		1 yes			
Corrosion - Metal		2 Minor Corrosion			
Discharge Piping Condition		1 Corrosion Free, No Known Issues			
Festoon and Power Cable Condition		2 Minor Wear/deterioration			
Installation		2 Normal			
Insulation Resistance (10 Meg Ohm)	Yes	3 1.5 - 10.0 Meg Ohm			2.2 Meg Ohms
Obsolescence		1 Current, Supported			
Oil OK at Inspection			X	Not Evaluated	
Performance History		1 Yes			
Pump Rails			X	Non Existent	
Valves		1 Excellent			
Volt and Amp Balance		1 V < +/- 1% ; A < +/- 5% FLA			

Condition Category Poor. Condition Grade 4. Unable to meet level of service life. Failure imminent.

Condition Score 3.00 Consequence Score 5.65

Risk Score 33.34 Likelihood Score 5.90

Photo(s)



Asset Description	Composite Sampler #1	System	Preliminary
Asset Type	SAMPLER	Location	Headworks
Asset ID	SAM10-11000	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
All Components		1 yes			
Display/Indicator Ok		1 yes			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.14	Consequence Score	3.10
Risk Score	8.06	Likelihood Score	2.60

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Influent Screen #2	System	Preliminary
Asset Type	SCREEN	Location	Headworks
Asset ID	SCR10-13002	Inspection Date	4/1/2019
Comments	Bar screen rake had several teeth in the rake assembly bent. Would not allow rake to mesh with bar screen.	Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Flow Pattern		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
Controls		1 Excellent			
Corrosion		2 Minor			
Cracking		2 Minor			Bar screen rake had several teeth in the rake assembly bent. Would not allow rake to mesh with bar screen.
Drive Motor		1 Excellent			
Gearbox		1 Excellent			
Operated at Inspection		1 yes			
Vibrator			X	Non Existent	

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.20 Consequence Score 4.15

Risk Score 7.88 Likelihood Score 1.90

Photo(s)



Bar screen rake had several teeth in the rake assembly bent. Would not allow rake to mesh with bar screen.



Bar screen rake had several teeth in the rake assembly bent. Would not allow rake to mesh with bar screen.



Wilsonville Asset Condition Assessment Report

Asset Description	Influent Screen #3	System	Preliminary
Asset Type	SCREEN	Location	Headworks
Asset ID	SCR10-13003	Inspection Date	4/1/2019
Comments	Bar screen rake had several teeth in the rake assembly bent. Would not allow rake to mesh with bar screen.	Flag	

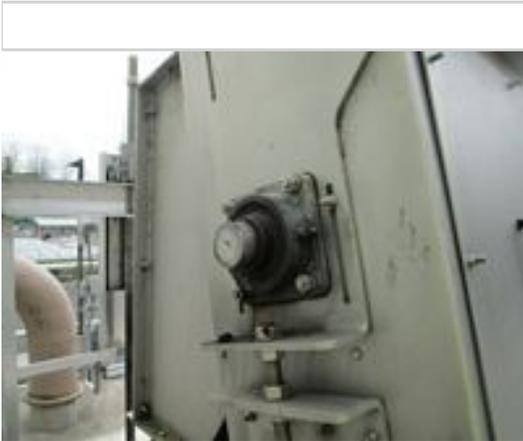
Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Flow Pattern		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
Controls		1 Excellent			
Corrosion		2 Minor			
Cracking		2 Minor			Bar screen rake had several teeth in the rake assembly bent. Would not allow rake to mesh with bar screen.
Drive Motor		1 Excellent			
Gearbox		1 Excellent			
Operated at Inspection		1 yes			
Vibrator			X	Non Existent	

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.20 Consequence Score 4.15

Risk Score 7.88 Likelihood Score 1.90

Photo(s)



Deterioration of rubber between screen and screening trough

Bar screen rake had several teeth in the rake assembly bent. Would not allow rake to mesh with bar screen.



Wilsonville Asset Condition Assessment Report

Asset Description	Headworks Structure	System	Preliminary
Asset Type	STRUCTURE	Location	Headworks
Asset ID	10BLD-01	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Access Doors		2 2			
Architectural - Ceilings			X	Non Existent	
Architectural - Floors		2 Good			
Architectural - Roof		1 Acceptable			
Architectural - Windows - Physical Integrity/Appearance		2 Good			
Corrosion - Cathodic Protection			X	Non Existent	
Corrosion - Concrete		2 Staining			
Corrosion - Mechanical/Piping Metal Condition		2 Minor Corrosion			
Corrosion - Metal		2 Minor Corrosion			
Corrosion - Pipes		1 Like new condition			
Corrosion - Soil Resistivity			X	Not Evaluated	
Corrosion - Visible Coating Condition		2 Minor damage			
Corrosion - Visible Concrete Condition		1 Like new			
Duct Work		1 Excellent			
External Wall		2 Good			
Fire Extinguisher Present/Certification Current		1 yes			
Handrails		1 Very Good			
Installation		1 Excellent			
Internal Wall		2 Good			
Lighting		1 Very Good			
Pipe System		1 Excellent			
Safety (General Review)		1 Very Good			
Stairs		1 Very Good			
Structural - Above Grade - Structure Irregularities/Code		1 No Irregularities			
Structural - Aboveground Pipe		1 Constructed Of Ductile Materials And Flexible Restrained Joints			
Structural - Building and System Piping		2 Flexibility and bracing provided			
Structural - Columns		1 Very Good			
Structural - Condition of Foundations		1 No movement			
Structural - Connections in Lateral Force Resisting Systems		1 Direct Positive Connection Between Horizontal Transfer Elements (Diaphragm Or Bracing) And V			
Structural - Equipment Anchorage - Epoxy-Cast-In-Place or Wedge Anchors		1 Anchors/Bolts All Present And Fully Embedded And/Or Threaded			
Structural - Load Path/Redundancy		1 Complete Load Path To Foundation - 3 Or More Vertical Resisting Elements In Each Direction			
Structural - Piping Connections to Above Ground Facilities		2 Connections present, full flexibility			

Question	Overriding?	Answer	NA	Flag	Answer Comment
Structural - Seismic		1 FEMA 154 score>3			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.36 Consequence Score 5.50

Risk Score 13.20 Likelihood Score 2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Flow Valve 10-12101	System	Preliminary
Asset Type	VALVE-BUTTERFLY	Location	Headworks
Asset ID	FV10-12101	Inspection Date	4/2/2019
Comments		Flag	Non Existent

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks					
All Components					
Functional					
Support					
Valve Isolates (Holds)					

Condition Category

Condition Score	0	Consequence Score	0
Risk Score	0	Likelihood Score	0



Wilsonville Asset Condition Assessment Report

Asset Description	Flow Valve 10-13500	System	Preliminary
Asset Type	VALVE-BUTTERFLY	Location	Headworks
Asset ID	FV10-13500	Inspection Date	4/2/2019
Comments		Flag	Non Existent

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks					
All Components					
Functional					
Support					
Valve Isolates (Holds)					

Condition Category

Condition Score	0	Consequence Score	0
Risk Score	0	Likelihood Score	0

Asset Description	Flow Valve 10-20101	System	Preliminary
Asset Type	VALVE-BUTTERFLY	Location	Headworks
Asset ID	FV10-20101	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Support		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40

Photo(s)



Asset Description	Flow Valve 10-20102	System	Preliminary
Asset Type	VALVE-BUTTERFLY	Location	Headworks
Asset ID	FV10-20102	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Support		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40

Photo(s)



Photo(s)



Wilsonville Asset Condition Assessment Report

Asset Description	Flow Valve 10-20302	System	Preliminary
Asset Type	VALVE-BUTTERFLY	Location	Headworks
Asset ID	FV10-20302	Inspection Date	4/2/2019
Comments		Flag	Non Existent

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks					
All Components					
Functional					
Support					
Valve Isolates (Holds)					

Condition Category

Condition Score	0	Consequence Score	0
Risk Score	0	Likelihood Score	0



Wilsonville Asset Condition Assessment Report

Asset Description **Flow Valve 10-30200** System **Preliminary**
Asset Type **VALVE-BUTTERFLY** Location **Headworks**
Asset ID **FV10-30200** Inspection Date **4/2/2019**
Comments Flag **Non Existent**

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks					
All Components					
Functional					
Support					
Valve Isolates (Holds)					

Condition Category

Condition Score 0 Consequence Score 0
Risk Score 0 Likelihood Score 0



Wilsonville Asset Condition Assessment Report

Asset Description **Flow Valve 10-30600** System **Preliminary**
Asset Type **VALVE-BUTTERFLY** Location **Headworks**
Asset ID **FV10-30600** Inspection Date **4/2/2019**
Comments Flag **Non Existent**

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks					
All Components					
Functional					
Support					
Valve Isolates (Holds)					

Condition Category

Condition Score 0 Consequence Score 0
Risk Score 0 Likelihood Score 0



Wilsonville Asset Condition Assessment Report

Asset Description	Flow Valve 10-19301	System	Preliminary
Asset Type	VALVE-KNIFE	Location	Headworks
Asset ID	GV10-19301	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Corrosion - Metal		1 Like New			
Manual Operator		2 Operates with extra Force			
Packing Gland		2 Normal			
Support		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.33 Consequence Score 2.80

Risk Score 4.76 Likelihood Score 1.70

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Flow Valve 10-19302	System	Preliminary
Asset Type	VALVE-KNIFE	Location	Headworks
Asset ID	GV10-19302	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Corrosion - Metal		1 Like New			
Manual Operator		2 Operates with extra Force			
Packing Gland		2 Normal			
Support		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.33 Consequence Score 2.80

Risk Score 4.76 Likelihood Score 1.70

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Influent Channel Gate #1	System	Preliminary
Asset Type	VALVE-SLIDE	Location	Headworks
Asset ID	GTE10-12500	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Oil/Grease		1 yes			
Actuator			X	Non Existent	
All Components		1 yes			
Coating Condition			X	Non Existent	Stainless steel
Corrosion - Concrete		2 Staining			
Corrosion - Mechanical Metals		1 Like New			Stainless steel
Corrosion - Metal		1 Like New			
Exercise Program		1 Adequate schedule and met			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Lubrication OK at Inspection		1 yes			
Manual Operator		1 Operates Smoothly			
Metal Condition		1 Vitrually No Corrosion			
Mounting		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.08 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40

Photo(s)



Asset Description	Influent Channel Gate #2	System	Preliminary
Asset Type	VALVE-SLIDE	Location	Headworks
Asset ID	GTE10-12501	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Oil/Grease		1 yes			
Actuator			X	Non Existent	
All Components		1 yes			
Coating Condition			X	Non Existent	Stainless steel
Corrosion - Concrete		2 Staining			
Corrosion - Mechanical Metals		1 Like New			
Corrosion - Metal		1 Like New			
Exercise Program		1 Adequate schedule and met			
Functional		2 Fully Opens/Closes with Some Assistance			
Lubrication OK at Inspection		1 yes			
Manual Operator		2 Operates with extra Force			
Metal Condition		1 Vitrually No Corrosion			
Mounting		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.23 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Influent Channel Gate 12502	System	Preliminary
Asset Type	VALVE-SLIDE	Location	Headworks
Asset ID	GTE10-12502	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Oil/Grease		1 yes			
Actuator			X	Non Existent	
All Components		1 yes			
Coating Condition			X	Non Existent	Stainless steel
Corrosion - Concrete		2 Staining			
Corrosion - Mechanical Metals		1 Like New			
Corrosion - Metal		1 Like New			
Exercise Program		1 Adequate schedule and met			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Lubrication OK at Inspection		1 yes			
Manual Operator		1 Operates Smoothly			
Metal Condition		1 Vitrually No Corrosion			
Mounting		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.08 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Screen Channel Inf Gate #1	System	Preliminary
Asset Type	VALVE-SLIDE	Location	Headworks
Asset ID	GTE10-12601	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Oil/Grease		1 yes			
Actuator			X	Non Existent	
All Components		1 yes			
Coating Condition			X	Non Existent	Stainless steel
Corrosion - Concrete		2 Staining			
Corrosion - Mechanical Metals		1 Like New			
Corrosion - Metal		1 Like New			
Exercise Program		1 Adequate schedule and met			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Lubrication OK at Inspection		1 yes			
Manual Operator		1 Operates Smoothly			
Metal Condition		1 Vitrually No Corrosion			
Mounting		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.08 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40

Photo(s)



Asset Description	Screen Channel Inf Gate #2	System	Preliminary
Asset Type	VALVE-SLIDE	Location	Headworks
Asset ID	GTE10-12602	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Oil/Grease		1 yes			
Actuator			X	Non Existent	
All Components		1 yes			
Coating Condition			X	Non Existent	Stainless steel
Corrosion - Concrete		2 Staining			
Corrosion - Mechanical Metals		1 Like New			
Corrosion - Metal		1 Like New			
Exercise Program		1 Adequate schedule and met			
Functional		2 Fully Opens/Closes with Some Assistance			
Lubrication OK at Inspection		1 yes			
Manual Operator		2 Operates with extra Force			
Metal Condition		1 Vitrually No Corrosion			
Mounting		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.23 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Screen Channel Inf Gate #3	System	Preliminary
Asset Type	VALVE-SLIDE	Location	Headworks
Asset ID	GTE10-12603	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Oil/Grease		1 yes			
Actuator			X	Non Existent	
All Components		1 yes			
Coating Condition			X	Non Existent	Stainless steel
Corrosion - Concrete		2 Staining			
Corrosion - Mechanical Metals		1 Like New			
Corrosion - Metal		1 Like New			
Exercise Program		1 Adequate schedule and met			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Lubrication OK at Inspection		1 yes			
Manual Operator		1 Operates Smoothly			
Metal Condition		1 Vitrually No Corrosion			
Mounting		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.08 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Screen Channel Eff Gate #1	System	Preliminary
Asset Type	VALVE-SLIDE	Location	Headworks
Asset ID	GTE10-12701	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Oil/Grease		1 yes			
Actuator			X	Non Existent	
All Components		1 yes			
Coating Condition			X	Non Existent	Stainless steel
Corrosion - Concrete		2 Staining			
Corrosion - Mechanical Metals		1 Like New			
Corrosion - Metal		1 Like New			
Exercise Program		1 Adequate schedule and met			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Lubrication OK at Inspection		1 yes			
Manual Operator		1 Operates Smoothly			
Metal Condition		1 Vitrually No Corrosion			
Mounting		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.08 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Screen Channel Eff Gate #2	System	Preliminary
Asset Type	VALVE-SLIDE	Location	Headworks
Asset ID	GTE10-12702	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Oil/Grease		1 yes			
Actuator			X	Non Existent	
All Components		1 yes			
Coating Condition			X	Non Existent	
Corrosion - Concrete		2 Staining			
Corrosion - Mechanical Metals		1 Like New			
Corrosion - Metal		1 Like New			
Exercise Program		1 Adequate schedule and met			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Lubrication OK at Inspection		1 yes			
Manual Operator		1 Operates Smoothly			
Metal Condition		1 Vitrually No Corrosion			
Mounting		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.08 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Screen Channel Eff Gate #3	System	Preliminary
Asset Type	VALVE-SLIDE	Location	Headworks
Asset ID	GTE10-12703	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Oil/Grease		1 yes			
Actuator			X	Non Existent	
All Components		1 yes			
Coating Condition			X	Non Existent	Stainless steel
Corrosion - Concrete		2 Staining			
Corrosion - Mechanical Metals		1 Like New			
Corrosion - Metal		1 Like New			
Exercise Program		1 Adequate schedule and met			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Lubrication OK at Inspection		1 yes			
Manual Operator		1 Operates Smoothly			
Metal Condition		1 Vitrually No Corrosion			
Mounting		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.08 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40

Photo(s)



Asset Description	Grit Basin Influent Gate	System	Preliminary
Asset Type	VALVE-SLIDE	Location	Headworks
Asset ID	GTE10-32101	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Oil/Grease		1 yes			
Actuator			X	Non Existent	
All Components		1 yes			
Coating Condition			X	Non Existent	Stainless steel
Corrosion - Concrete		2 Staining			
Corrosion - Mechanical Metals		1 Like New			
Corrosion - Metal		1 Like New			
Exercise Program		1 Adequate schedule and met			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Lubrication OK at Inspection		1 yes			
Manual Operator		2 Operates with extra Force			
Metal Condition		1 Vitrually No Corrosion			
Mounting		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.15 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Grit Basin Effluent Gate	System	Preliminary
Asset Type	VALVE-SLIDE	Location	Headworks
Asset ID	GTE10-32102	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Oil/Grease		1 yes			
Actuator			X	Non Existent	
All Components		1 yes			
Coating Condition			X	Non Existent	Stainless steel
Corrosion - Concrete		2 Staining			
Corrosion - Mechanical Metals		1 Like New			
Corrosion - Metal		1 Like New			
Exercise Program		1 Adequate schedule and met			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Lubrication OK at Inspection		1 yes			
Manual Operator		1 Operates Smoothly			
Metal Condition		1 Vitrually No Corrosion			
Mounting		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.08 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40

Photo(s)



Asset Description	Grit Basin Bypass Gate	System	Preliminary
Asset Type	VALVE-SLIDE	Location	Headworks
Asset ID	GTE10-32103	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Oil/Grease		1 yes			
Actuator			X	Non Existent	
All Components		1 yes			
Coating Condition			X	Non Existent	Stainless steel
Corrosion - Concrete		2 Staining			
Corrosion - Mechanical Metals		1 Like New			
Corrosion - Metal		1 Like New			
Exercise Program		1 Adequate schedule and met			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Lubrication OK at Inspection		1 yes			
Manual Operator		1 Operates Smoothly			
Metal Condition		1 Vitrually No Corrosion			
Mounting		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

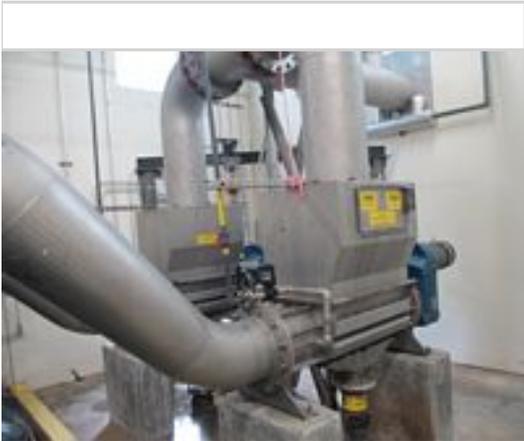
Condition Score 1.08 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40

Photo(s)



Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Screenings Washer Compactor #2	System	Preliminary
Asset Type	WASHER	Location	Headworks
Asset ID	SWC10-20502	Inspection Date	4/1/2019
Comments		Flag	

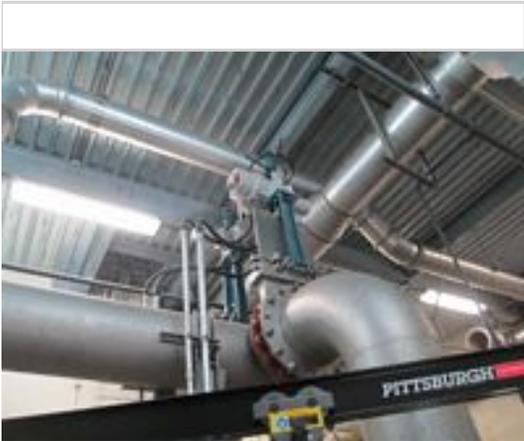
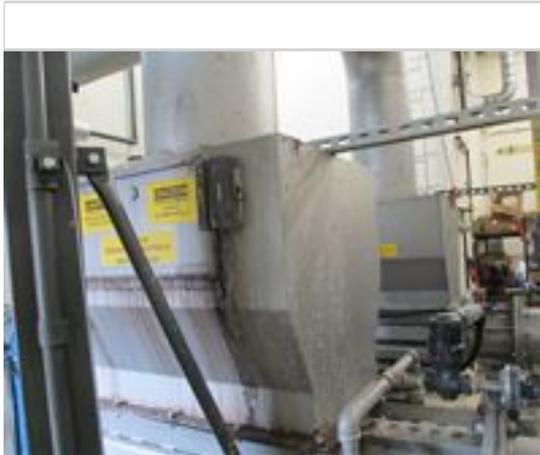
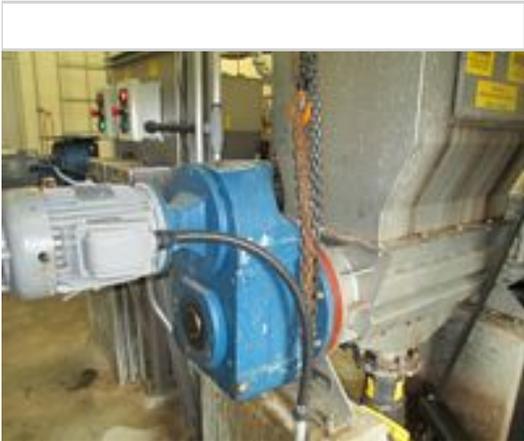
Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Corrosion - Mechanical Metals		2 Slight staining/small chips/holes in coating			
Drive Motor		1 Excellent			
General Appearance		3 Maintenance Required			
Hoses and Belts		1 Excellent			

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 1.60 Consequence Score 3.10

Risk Score 9.30 Likelihood Score 3.00

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	UV Module Winch Motor	System	Pretreatment
Asset Type	HOIST	Location	Headworks
Asset ID	UV-M-70-5	Inspection Date	4/2/2019
Comments		Flag	Non Existent

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Vibration					
All Components					
All Safety Guards Present					
Certification Current					
Chain/ Cable/ Hooks					
Control Pendant					
Corrosion					
Drive Motor					
Lubrication OK at Inspection					
Operating at Inspection					
Rollers/Tracks					
Safety Signs posted					
Structural Integrity					

Condition Category

Condition Score	0	Consequence Score	0
Risk Score	0	Likelihood Score	0

Asset Description	Headworks-UVAS Signal Transmit	System	Pretreatment
Asset Type	INSTRUMENT	Location	Headworks
Asset ID	HW-39-1	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		2 Occasionally Found Out of Calibration			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			Minor scratching on display cover
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.29 Consequence Score 4.90

Risk Score 12.74 Likelihood Score 2.60

Photo(s)



Asset Description	Rivergreen Liftstation	System	River Green LS
Asset Type	SITE	Location	River Green Liftstation
Asset ID	RIVG-LS-05	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Civil - Drainage		2 5% needs maintenance			
Civil- Fences and Security		2 5% needs maintenance			
Civil- Flood Protection		2 5% needs maintenance			
Civil- Roads		1 Normal maintenance			
Civil- Vegetation and Landscaping		2 5% needs maintenance			
Site Access		2 Good			
Site Lighting Adequate		5 No			

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 2.29

Consequence Score 5.05

Risk Score 15.15

Likelihood Score 3.00

Photo(s)







Wilsonville Asset Condition Assessment Report

Asset Description	Rivergreen Lift Pump #1	System	River Green LS
Asset Type	SUB PUMP	Location	River Green Liftstation
Asset ID	RIVG-LS-1	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
All Safety Features Present		1 yes			
Insulation Resistance	Yes	3 1.5 - 10 Meg Ohm			2.2 Meg ohms
Operating at Inspection		1 yes			

Condition Category Poor. Condition Grade 4. Unable to meet level of service life. Failure imminent.

Condition Score 3.00 Consequence Score 5.05

Risk Score 26.26 Likelihood Score 5.20

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Rivergreen Lift Pump #2	System	River Green LS
Asset Type	SUB PUMP	Location	River Green Liftstation
Asset ID	RIVG-LS-2	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
All Safety Features Present		1 yes			
Insulation Resistance	Yes	1 Greater than 10 Meg Ohm			Infinity
Operating at Inspection		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.00	Consequence Score	5.05
Risk Score	9.60	Likelihood Score	1.90

Photo(s)





Asset Description	River Village Lift Station	System	River Green LS
Asset Type	SITE	Location	River Village Liftstation
Asset ID	RIVV-LS-04	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Civil - Drainage		2 5% needs maintenance			
Civil- Fences and Security		2 5% needs maintenance			
Civil- Flood Protection		2 5% needs maintenance			
Civil- Roads		2 5% needs maintenance			
Civil- Vegetation and Landscaping		3 10 to 20% needs maintenance			
Site Access		3 Average			
Site Lighting Adequate		5 No			

Condition Category Poor. Condition Grade 4. Unable to meet level of service life. Failure imminent.

Condition Score 2.71 Consequence Score 4.00

Risk Score 22.40 Likelihood Score 5.60

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	River Village Lift Pump #1	System	River Green LS
Asset Type	SUB PUMP	Location	River Village Liftstation
Asset ID	RV-LS-1	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
All Safety Features Present		1 yes			
Insulation Resistance	Yes	1 Greater than 10 Meg Ohm			250 Meg ohms
Operating at Inspection		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 4.00

Risk Score 9.20 Likelihood Score 2.30

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	River Village Lift Pump #2	System	River Green LS
Asset Type	SUB PUMP	Location	River Village Liftstation
Asset ID	RV-LS-2	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
All Safety Features Present		1 yes			
Insulation Resistance	Yes	1 Greater than 10 Meg Ohm			17 Meg ohms
Operating at Inspection		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.00	Consequence Score	4.00
Risk Score	9.20	Likelihood Score	2.30

Photo(s)



Asset Description	Secondary Clarifier #1	System	Secondary Clarification
Asset Type	CLARIFIER	Location	Secondary Clarifier #1
Asset ID	SC-50-1-1	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		5 no			Drive motor noisy
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Guards Present		1 yes			
Corrosion - Structural Concrete		2 Staining			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Oil Seal		3 Moderate Wear			
Running at Inspection		1 yes			
Structural Integrity		2 Minor wear			

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 1.83

Consequence Score 4.00

Risk Score 10.80

Likelihood Score 2.70

Photo(s)



Photo(s)



Asset Description	Secondary Clarifier #2	System	Secondary Clarification
Asset Type	CLARIFIER	Location	Secondary Clarifier #2
Asset ID	SC-50-1-2	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Guards Present		1 yes			
Corrosion - Structural Concrete		2 Staining			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Oil Seal		3 Moderate Wear			
Running at Inspection		1 yes			
Structural Integrity		2 Minor wear			

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 1.50

Consequence Score 4.00

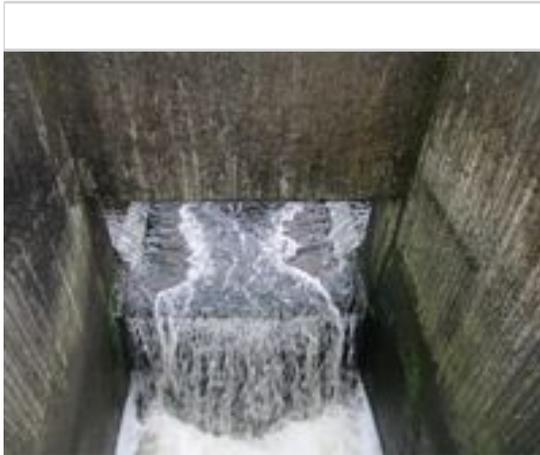
Risk Score 10.80

Likelihood Score 2.70

Photo(s)



Photo(s)



Asset Description	Aeration Basin Ex Fan 30501	System	Secondary Treatment
Asset Type	FAN	Location	Aeration Basin
Asset ID	FAN91-30501	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		5 no			Measured 0.77" / second
All Components		1 yes			
All Safety Guards Present		1 yes			
Belt		2 Minor Wear			
Controls		1 Excellent			
Corrosion - Structural Metal Condition?		1 Like new			
Duct Work		1 Excellent			
Fan and Fan Motor		3 Maintenance Required			
Installation/ Accessibility		1 Excellent			
Structural Integrity		1 Excellent			
Support		1 Excellent			

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 1.69

Consequence Score 5.05

Risk Score 14.14

Likelihood Score 2.80

Photo(s)



Asset Description	Aeration Basin Em Bypass Fan	System	Secondary Treatment
Asset Type	FAN	Location	Aeration Basin
Asset ID	FAN91-30502	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			Measured 0.07" / second
All Components		1 yes			
All Safety Guards Present		1 yes			
Belt		2 Minor Wear			
Controls		1 Excellent			
Corrosion - Structural Metal Condition?		1 Like new			
Duct Work		1 Excellent			
Fan and Fan Motor		1 Excellent			
Installation/ Accessibility		1 Excellent			
Structural Integrity		1 Excellent			
Support		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.06 Consequence Score 5.05

Risk Score 8.58 Likelihood Score 1.70

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description **AB Blower #2 Airflow Sensor** System **Secondary Treatment**
 Asset Type **INSTRUMENT** Location **Aeration Basin**
 Asset ID **AB-AE-40-2-DWYER** Inspection Date **4/3/2019**
 Comments Flag **Non Existent**

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks					
Acceptable Smell or Heat					
Acceptable Wire Labeling					
All Components					
Calibration					
Connections Ok					
Display Ok					
Indicator					
Installation/ Accessibility					
Operating at Inspection					
Tubing / Connections					

Condition Category

Condition Score 0 Consequence Score 0
 Risk Score 0 Likelihood Score 0



Wilsonville Asset Condition Assessment Report

Asset Description **AB Blower #3 Airflow Sensor** System **Secondary Treatment**
 Asset Type **INSTRUMENT** Location **Aeration Basin**
 Asset ID **AB-AE-40-3-DWYER** Inspection Date **4/3/2019**
 Comments Flag **Non Existent**

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks					
Acceptable Smell or Heat					
Acceptable Wire Labeling					
All Components					
Calibration					
Connections Ok					
Display Ok					
Indicator					
Installation/ Accessibility					
Operating at Inspection					
Tubing / Connections					

Condition Category

Condition Score 0 Consequence Score 0
 Risk Score 0 Likelihood Score 0

Asset Description	D.O. Analyzer 40-12501	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Aeration Basin
Asset ID	AE40-12501	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		2 Occasionally Found Out of Calibration			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.29 Consequence Score 4.90

Risk Score 12.74 Likelihood Score 2.60

Photo(s)



Photo(s)

Asset Description	D.O. Analyzer 40-12502	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Aeration Basin
Asset ID	AE40-12502	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		2 Occasionally Found Out of Calibration			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.29 Consequence Score 4.90

Risk Score 12.74 Likelihood Score 2.60

Photo(s)



Photo(s)



Wilsonville Asset Condition Assessment Report

Asset Description **D.O. Analyzer 40-30502** System **Secondary Treatment**
 Asset Type **INSTRUMENT** Location **Aeration Basin**
 Asset ID **AE40-30502** Inspection Date **4/2/2019**
 Comments Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		2 Occasionally Found Out of Calibration			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.29 Consequence Score 4.90

Risk Score 12.74 Likelihood Score 2.60

Photo(s)



Photo(s)



Asset Description	D.O. Analyzer 40-30503	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Aeration Basin
Asset ID	AE40-30503	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		2 Occasionally Found Out of Calibration			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.29 Consequence Score 4.90

Risk Score 12.74 Likelihood Score 2.60

Photo(s)



Asset Description	D.O. Analyzer 40-30601	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Aeration Basin
Asset ID	AE40-30601	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		2 Occasionally Found Out of Calibration			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.29 Consequence Score 4.90

Risk Score 12.74 Likelihood Score 2.60

Photo(s)



Photo(s)

Asset Description	D.O. Analyzer 40-30602	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Aeration Basin
Asset ID	AE40-30602	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		2 Occasionally Found Out of Calibration			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.29 Consequence Score 4.90

Risk Score 12.74 Likelihood Score 2.60

Photo(s)



Asset Description	D.O. Analyzer 40-30501	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Aeration Basin
Asset ID	AIT40-30501	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		2 Occasionally Found Out of Calibration			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.29 Consequence Score 4.90

Risk Score 12.74 Likelihood Score 2.60

Photo(s)



Photo(s)

Asset Description	D.O. Analyzer 40-30502	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Aeration Basin
Asset ID	AIT40-30502	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		2 Occasionally Found Out of Calibration			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.29 Consequence Score 4.90

Risk Score 12.74 Likelihood Score 2.60

Photo(s)



Asset Description	D.O. Analyzer 40-30503	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Aeration Basin
Asset ID	AIT40-30503	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		2 Occasionally Found Out of Calibration			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.29 Consequence Score 4.90

Risk Score 12.74 Likelihood Score 2.60

Photo(s)



Asset Description	D.O. Analyzer 40-30601	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Aeration Basin
Asset ID	AIT40-30601	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		2 Occasionally Found Out of Calibration			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.29 Consequence Score 4.90

Risk Score 12.74 Likelihood Score 2.60

Photo(s)



Asset Description	D.O. Analyzer 40-30602	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Aeration Basin
Asset ID	AIT40-30602	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		2 Occasionally Found Out of Calibration			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.29 Consequence Score 4.90

Risk Score 12.74 Likelihood Score 2.60

Photo(s)



Asset Description	D.O. Analyzer 40-30603	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Aeration Basin
Asset ID	AIT40-30603	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		2 Occasionally Found Out of Calibration			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.29 Consequence Score 4.90

Risk Score 12.74 Likelihood Score 2.60

Photo(s)



Asset Description	Level Element 40-12701	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Aeration Basin
Asset ID	LET40-12701	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.24 Consequence Score 4.90

Risk Score 12.74 Likelihood Score 2.60

Photo(s)



Asset Description	Level Element 40-12702	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Aeration Basin
Asset ID	LET40-12702	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.24	Consequence Score	4.90
Risk Score	12.74	Likelihood Score	2.60

Photo(s)



Asset Description	Level Indicator 40-12701	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Aeration Basin
Asset ID	LI40-12701	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.24	Consequence Score	4.90
Risk Score	12.74	Likelihood Score	2.60

Photo(s)



Asset Description	Level Indicator 40-12702	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Aeration Basin
Asset ID	LI40-12702	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.24	Consequence Score	4.90
Risk Score	12.74	Likelihood Score	2.60

Photo(s)



Asset Description	Anaerobic Mixer #1	System	Secondary Treatment
Asset Type	MIXER	Location	Aeration Basin
Asset ID	MXR40-20001	Inspection Date	4/2/2019
Comments	Mixer 1 has failed, and will be replaced with different technology with the next plant upgrade	Flag	

Question	Overriding?	Answer		NA	Flag	Answer Comment
Acceptable Smell or Heat		5	no			
Acceptable Vibration				X		
All Components				X		
All Safety Guards Present				X		
Corrosion - Structural Metals				X		
Installation/ Accessibility				X		
Obsolescence				X		
Operating at Inspection				X		
Support				X		

Condition Category Very poor. Grade 5. Requires complete rehabilitation or replacement. Failed.

Condition Score 5.00 Consequence Score 5.65

Risk Score 38.70 Likelihood Score 6.85

Photo(s)



Asset Description	Anaerobic Mixer #2	System	Secondary Treatment
Asset Type	MIXER	Location	Aeration Basin
Asset ID	MXR40-20002	Inspection Date	4/2/2019
Comments	Mixer 2 has failed, and will be replaced with different technology with the next plant upgrade		Flag

Question	Overriding?	Answer		NA	Flag	Answer Comment
Acceptable Smell or Heat		5	no			
Acceptable Vibration				X		
All Components				X		
All Safety Guards Present				X		
Corrosion - Structural Metals				X		
Installation/ Accessibility				X		
Obsolescence				X		
Operating at Inspection				X		
Support				X		

Condition Category Very poor. Grade 5. Requires complete rehabilitation or replacement. Failed.

Condition Score 5.00 Consequence Score 5.65

Risk Score 38.70 Likelihood Score 6.85

Photo(s)



Asset Description	Anaerobic Mixer #3	System	Secondary Treatment
Asset Type	MIXER	Location	Aeration Basin
Asset ID	MXR40-20003	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Guards Present		1 yes			
Corrosion - Structural Metals		2 Slight staining/small chips			
Installation/ Accessibility		1 Excellent			
Obsolescence		1 Current and supported			
Operating at Inspection		1 yes			
Support		2 Minor			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.22 Consequence Score 5.65

Risk Score 10.74 Likelihood Score 1.90

Photo(s)



Asset Description	Anaerobic Mixer #4	System	Secondary Treatment
Asset Type	MIXER	Location	Aeration Basin
Asset ID	MXR40-20004	Inspection Date	4/2/2019
Comments	Mixer 4 has failed, and will be replaced with different technology with the next plant upgrade		Flag

Question	Overriding?	Answer		NA	Flag	Answer Comment
Acceptable Smell or Heat		5	no			
Acceptable Vibration				X		
All Components				X		
All Safety Guards Present				X		
Corrosion - Structural Metals				X		
Installation/ Accessibility				X		
Obsolescence				X		
Operating at Inspection				X		
Support				X		

Condition Category Very poor. Grade 5. Requires complete rehabilitation or replacement. Failed.

Condition Score 5.00 Consequence Score 5.65

Risk Score 38.70 Likelihood Score 6.85

Photo(s)



Asset Description	Anaerobic Mixer #5	System	Secondary Treatment
Asset Type	MIXER	Location	Aeration Basin
Asset ID	MXR40-20005	Inspection Date	4/2/2019
Comments	Mixer 5 has failed, and will be replaced with different technology with the next plant upgrade		Flag

Question	Overriding?	Answer		NA	Flag	Answer Comment
Acceptable Smell or Heat		5	no			
Acceptable Vibration				X		
All Components				X		
All Safety Guards Present				X		
Corrosion - Structural Metals				X		
Installation/ Accessibility				X		
Obsolescence				X		
Operating at Inspection				X		
Support				X		

Condition Category Very poor. Grade 5. Requires complete rehabilitation or replacement. Failed.

Condition Score 5.00 Consequence Score 5.65

Risk Score 38.70 Likelihood Score 6.85

Photo(s)



Asset Description	Anaerobic Mixer #6	System	Secondary Treatment
Asset Type	MIXER	Location	Aeration Basin
Asset ID	MXR40-20006	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Guards Present		1 yes			
Corrosion - Structural Metals		2 Slight staining/small chips			
Installation/ Accessibility		1 Excellent			
Obsolescence		1 Current and supported			
Operating at Inspection		1 yes			
Support		2 Minor			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.22 Consequence Score 5.65

Risk Score 10.74 Likelihood Score 1.90

Photo(s)



Asset Description	Aeration Basin Effluent Weir	System	Secondary Treatment
Asset Type	VALVE-SLIDE	Location	Aeration Basin
Asset ID	GTE40-21003	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Oil/Grease		1 yes			
Actuator			X	Non Existent	
All Components		1 yes			
Coating Condition			X	Non Existent	
Corrosion - Concrete		2 Staining			
Corrosion - Mechanical Metals		1 Like New			
Corrosion - Metal		2 Minor Corrosion			
Exercise Program		1 Adequate schedule and met			
Functional		2 Fully Opens/Closes with Some Assistance			
Lubrication OK at Inspection		1 yes			
Manual Operator		2 Operates with extra Force			
Metal Condition		1 Vitrually No Corrosion			
Mounting		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.31 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40

Photo(s)



Photo(s)

Asset Description	Slide Gate AB-G-40-1	System	Secondary Treatment
Asset Type	VALVE SLIDE	Location	Aeration Basin Effluent Channe
Asset ID	AB-G-40-1	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Actuator			X	Non Existent	
Corrosion - Structural Concrete		2 Staining			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Lubrication OK at Inspection		1 yes			
Mounting		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.33 Consequence Score 5.65

Risk Score 10.74 Likelihood Score 1.90

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Slide Gate AB-G-40-2	System	Secondary Treatment
Asset Type	VALVE SLIDE	Location	Aeration Basin Effluent Channe
Asset ID	AB-G-40-2	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Actuator			X	Non Existent	
Corrosion - Structural Concrete		2 Staining			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Lubrication OK at Inspection		1 yes			
Mounting		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.33 Consequence Score 5.65

Risk Score 10.74 Likelihood Score 1.90

Photo(s)



Asset Description	Level Element 53-11000	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Flow Control
Asset ID	LET53-11000	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.24	Consequence Score	4.90
Risk Score	12.74	Likelihood Score	2.60

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Secondary Effluent Pump #1	System	Secondary Treatment
Asset Type	PUMP-VERT TURBINE	Location	Flow Control
Asset ID	PMP53-10001	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Cavitation		1 yes			
Absence of Leaks		1 yes			
All Safety Features Present		1 yes			
Coating Condition		2 Minor Defects			
Corrosion - Metal		2 Minor Corrosion			
Gallons per kW		1 At BEP			
Motor Coupling		1 Excellent			
Packing Gland		2 Normal			
Vibration Analysis (0.10 in/sec)		1 Smooth, < 0.10 in/sec			0.05" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.33 Consequence Score 5.05

Risk Score 9.60 Likelihood Score 1.90

Photo(s)



Photo(s)

Asset Description	Secondary Effluent Pump #2	System	Secondary Treatment
Asset Type	PUMP-VERT TURBINE	Location	Flow Control
Asset ID	PMP53-10002	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Cavitation		1 yes			
Absence of Leaks		1 yes			
All Safety Features Present		1 yes			
Coating Condition		2 Minor Defects			
Corrosion - Metal		2 Minor Corrosion			
Gallons per kW		1 At BEP			
Motor Coupling		1 Excellent			
Packing Gland		2 Normal			
Vibration Analysis (0.10 in/sec)		1 Smooth, < 0.10 in/sec			0.05" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.33 Consequence Score 5.05

Risk Score 9.60 Likelihood Score 1.90

Photo(s)



Asset Description	Secondary Effluent Pump #3	System	Secondary Treatment
Asset Type	PUMP-VERT TURBINE	Location	Flow Control
Asset ID	PMP53-10003	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Cavitation		1 yes			
Absence of Leaks		1 yes			
All Safety Features Present		1 yes			
Coating Condition		2 Minor Defects			
Corrosion - Metal		2 Minor Corrosion			
Gallons per kW		1 At BEP			
Motor Coupling		1 Excellent			
Packing Gland		2 Normal			
Vibration Analysis (0.10 in/sec)		1 Smooth, < 0.10 in/sec			0.06" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.33 Consequence Score 5.05

Risk Score 9.60 Likelihood Score 1.90

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Flow Control Structure	System	Secondary Treatment
Asset Type	STRUCTURE	Location	Flow Control
Asset ID	53BLD-01	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Access Doors			X	Non Existent	
Architectural - Ceilings			X	Non Existent	
Architectural - Floors		2 Good			
Architectural - Roof			X	Non Existent	
Architectural - Windows - Physical Integrity/Appearance			X	Non Existent	
Corrosion - Cathodic Protection			X	Non Existent	
Corrosion - Concrete		2 Staining			
Corrosion - Mechanical/Piping Metal Condition		2 Minor Corrosion			
Corrosion - Metal		2 Minor Corrosion			
Corrosion - Pipes		2 Staining/chipping			
Corrosion - Soil Resistivity			X	Not Evaluated	
Corrosion - Visible Coating Condition		2 Minor damage			
Corrosion - Visible Concrete Condition		1 Like new			
Duct Work			X	Non Existent	
External Wall			X	Non Existent	
Fire Extinguisher Present/Certification Current		1 yes			
Handrails			X	Non Existent	
Installation		1 Excellent			
Internal Wall			X	Non Existent	
Lighting			X	Non Existent	
Pipe System		1 Excellent			
Safety (General Review)		1 Very Good			
Stairs			X	Non Existent	
Structural - Above Grade - Structure Irregularities/Code		1 No Irregularities			
Structural - Aboveground Pipe		1 Constructed Of Ductile Materials And Flexible Restrained Joints			
Structural - Building and System Piping		2 Flexibility and bracing provided			
Structural - Columns			X	Non Existent	
Structural - Condition of Foundations		1 No movement			
Structural - Connections in Lateral Force Resisting Systems		1 Direct Positive Connection Between Horizontal Transfer Elements (Diaphragm Or Bracing) And V			
Structural - Equipment Anchorage - Epoxy-Cast-In-Place or Wedge Anchors		1 Anchors/Bolts All Present And Fully Embedded And/Or Threaded			
Structural - Load Path/Redundancy		1 Complete Load Path To Foundation - 3 Or More Vertical Resisting Elements In Each Direction			
Structural - Piping Connections to Above Ground Facilities		2 Connections present, full flexibility			

Question	Overriding?	Answer	NA	Flag	Answer Comment
Structural - Seismic		1 FEMA 154 score>3			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.38

Consequence Score 5.50

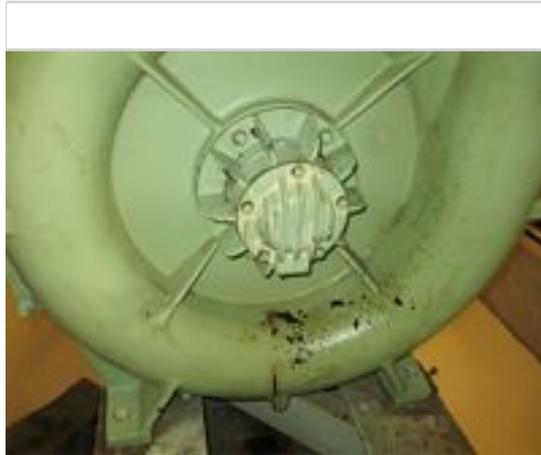
Risk Score 13.20

Likelihood Score 2.40

Photo(s)



Photo(s)



Photo(s)



Photo(s)



Asset Description	Aeration Blower #1 Controls	System	Secondary Treatment
Asset Type	CONTROL PANEL	Location	Process Gallery
Asset ID	PG-LCP-40-5-1	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Acceptable Smell or Heat		1 yes			
All Safety Features Present		1 yes			
Control Switches		2 Good			
Good House Keeping		1 yes			
Good Wire Labeling		1 yes			
Infrared		2 Normal			
Installation		1 Excellent			
Obsolescence		1 Current and supported			
Operating at Inspection		5 no			
Panel Labeling		1 yes			
Structural (Panel)		1 Excellent			

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 1.50

Consequence Score 5.65

Risk Score 16.95

Likelihood Score 3.00

Photo(s)



Photo(s)



Wilsonville Asset Condition Assessment Report

Asset Description **Aeration Blower #2 Controls** System **Secondary Treatment**
 Asset Type **CONTROL PANEL** Location **Process Gallery**
 Asset ID **PG-LCP-40-5-2** Inspection Date **4/3/2019**
 Comments Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Acceptable Smell or Heat		1 yes			
All Safety Features Present		1 yes			
Control Switches		2 Good			
Good House Keeping		1 yes			
Good Wire Labeling		1 yes			
Infrared		2 Normal			
Installation		1 Excellent			
Obsolescence		1 Current and supported			
Operating at Inspection		5 no			
Panel Labeling		1 yes			
Structural (Panel)		1 Excellent			

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 1.50

Consequence Score 5.65

Risk Score 16.95

Likelihood Score 3.00

Photo(s)



Asset Description	Aeration Blower #3 Controls	System	Secondary Treatment
Asset Type	CONTROL PANEL	Location	Process Gallery
Asset ID	PG-LCP-40-5-3	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Acceptable Smell or Heat		1 yes			
All Safety Features Present		1 yes			
Control Switches		2 Good			
Good House Keeping		1 yes			
Good Wire Labeling		1 yes			
Infrared		2 Normal			
Installation		1 Excellent			
Obsolescence		1 Current and supported			
Operating at Inspection		5 no			
Panel Labeling		1 yes			
Structural (Panel)		1 Excellent			

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 1.50

Consequence Score 5.65

Risk Score 16.95

Likelihood Score 3.00

Photo(s)



Photo(s)

Asset Description	Gallery Control Panel	System	Secondary Treatment
Asset Type	CONTROL PANEL	Location	Process Gallery
Asset ID	PG-LCP-80-4	Inspection Date	4/5/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Acceptable Smell or Heat		1 yes			
All Safety Features Present		1 yes			
Control Switches		2 Good			
Good House Keeping		1 yes			
Good Wire Labeling		1 yes			
Infrared		2 Normal			
Installation		1 Excellent			
Obsolescence		3 Limited Parts Available			
Operating at Inspection		1 yes			
Panel Labeling		1 yes			
Structural (Panel)		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.33 Consequence Score 5.65

Risk Score 10.74 Likelihood Score 1.90

Photo(s)



Asset Description	Aeration Basin Blower Motor #1	System	Secondary Treatment
Asset Type	MOTOR	Location	Process Gallery
Asset ID	PGB-M-40-5-1-M	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Smell or Heat		1 yes			
All Components		1 yes			
All Safety Guards Present		1 yes			
Bearings		2 Minor Wear			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Drive Shaft Alignment		1 Excellent			
Insulation Resistance	Yes		X	Not Evaluated	
Oil Level within Range			X	Non Existent	Greased bearings
Operating at Inspection		1 yes			
Structural Integrity		1 Excellent			
Vibration Analysis	Yes	2 -Good .039 - .15 inches/sec			0.13" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.30 Consequence Score 5.65

Risk Score 10.74 Likelihood Score 1.90

Photo(s)



Asset Description	Aeration Basin Blower Motor #2	System	Secondary Treatment
Asset Type	MOTOR	Location	Process Gallery
Asset ID	PGB-M-40-5-2-M	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Smell or Heat		1 yes			
All Components		1 yes			
All Safety Guards Present		1 yes			
Bearings		2 Minor Wear			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Drive Shaft Alignment		1 Excellent			
Insulation Resistance	Yes		X	Not Evaluated	
Oil Level within Range			X	Non Existent	Greased bearings
Operating at Inspection		1 yes			
Structural Integrity		1 Excellent			
Vibration Analysis	Yes	2 2 -Good .039 - .15 inches/sec	X	Not Evaluated	0.14" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.22 Consequence Score 5.65

Risk Score 10.74 Likelihood Score 1.90

Photo(s)



Asset Description	Aeration Basin Blower Motor #3	System	Secondary Treatment
Asset Type	MOTOR	Location	Process Gallery
Asset ID	PGB-M-40-5-3-M	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Smell or Heat		1 yes			
All Components		1 yes			
All Safety Guards Present		1 yes			
Bearings		2 Minor Wear			
Corrosion - Structural Metal Condition?		1 Like new			
Drive Shaft Alignment		1 Excellent			
Insulation Resistance	Yes		X	Not Evaluated	
Oil Level within Range			X	Non Existent	Greased bearings
Operating at Inspection		1 yes			
Structural Integrity		1 Excellent			
Vibration Analysis	Yes	2 -Good .039 - .15 inches/sec			0.11" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.20 Consequence Score 5.65

Risk Score 10.74 Likelihood Score 1.90

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	RAS Pump #1	System	Secondary Treatment
Asset Type	PUMP-CENT	Location	Process Gallery
Asset ID	PMP50-03001	Inspection Date	4/3/2019
Comments		Flag	

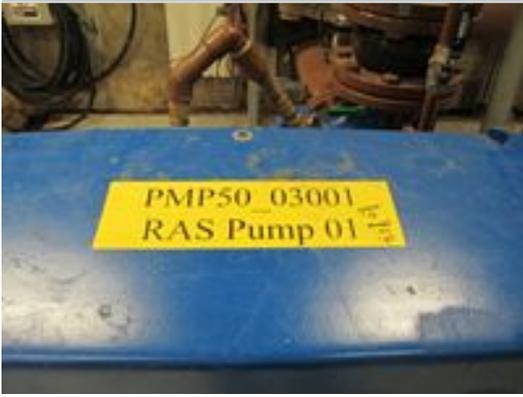
Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Absence of Pump Cavitation		1 Yes			
Acceptable Noise		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
Accessibility		1 Open, Easy Access			
All Components		1 yes			
All Safety Features Present		1 yes			
Bearings		1 Excellent			
Belt/Direct Drive/Couplings		2 Minor Wear			
Check Valve		1 Opens, Closes, Seats, No Defects			
Controls		1 Excellent			
Corrosion - Metal		1 Like New			
Corrosion - Visible Coating Condition		1 Like new			
Drive Shaft			X	Non Existent	Belt driven
Gallons per kW		1 At BEP			
Gauges Operational		1 Yes			
Infrared		2 Normal			
Installation		1 Excellent			
Isolation Valves Operational		1 yes			
Lubrication OK at Inspection		1 yes			
Mounting		1 Excellent			
Obsolescence		1 Current, Supported			
Oil Seal		1 Excellent			
Packing Gland/Mechanical Seal		1 Excellent			
Pipe Alignment		1 Straight			
Temperature - Bearing		1 Normal			
Vibration Analysis (0.10 in/sec)		1 Smooth, < 0.10 in/sec			0.09" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.07 Consequence Score 5.65

Risk Score 10.74 Likelihood Score 1.90

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	RAS Pump #2	System	Secondary Treatment
Asset Type	PUMP-CENT	Location	Process Gallery
Asset ID	PMP50-03002	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Absence of Pump Cavitation		1 Yes			
Acceptable Noise		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
Accessibility		1 Open, Easy Access			
All Components		1 yes			
All Safety Features Present		1 yes			
Bearings		2 Minor Wear			
Belt/Direct Drive/Couplings		2 Minor Wear			
Check Valve		1 Opens, Closes, Seats, No Defects			
Controls		1 Excellent			
Corrosion - Metal		1 Like New			
Corrosion - Visible Coating Condition		1 Like new			
Drive Shaft			X	Non Existent	Belt driven
Gallons per kW		1 At BEP			
Gauges Operational		1 Yes			
Infrared		2 Normal			
Installation		1 Excellent			
Isolation Valves Operational		1 yes			
Lubrication OK at Inspection		1 yes			
Mounting		1 Excellent			
Obsolescence		1 Current, Supported			
Oil Seal		1 Excellent			
Packing Gland/Mechanical Seal		2 Normal			
Pipe Alignment		1 Straight			
Temperature - Bearing		1 Normal			
Vibration Analysis (0.10 in/sec)		1 Smooth, < 0.10 in/sec			0.07" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.15 Consequence Score 5.65

Risk Score 10.74 Likelihood Score 1.90

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	RAS Pump #3	System	Secondary Treatment
Asset Type	PUMP-CENT	Location	Process Gallery
Asset ID	PMP50-03003	Inspection Date	4/3/2019
Comments		Flag	

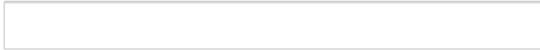
Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Absence of Pump Cavitation		1 Yes			
Acceptable Noise		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
Accessibility		1 Open, Easy Access			
All Components		1 yes			
All Safety Features Present		1 yes			
Bearings		2 Minor Wear			
Belt/Direct Drive/Couplings		2 Minor Wear			
Check Valve		1 Opens, Closes, Seats, No Defects			
Controls		1 Excellent			
Corrosion - Metal		1 Like New			
Corrosion - Visible Coating Condition		1 Like new			
Drive Shaft			X	Non Existent	Belt driven
Gallons per kW		1 At BEP			
Gauges Operational		1 Yes			
Infrared		2 Normal			
Installation		1 Excellent			
Isolation Valves Operational		1 yes			
Lubrication OK at Inspection		1 yes			
Mounting		1 Excellent			
Obsolescence		1 Current, Supported			
Oil Seal		1 Excellent			
Packing Gland/Mechanical Seal		2 Normal			
Pipe Alignment		1 Straight			
Temperature - Bearing		1 Normal			
Vibration Analysis (0.10 in/sec)		1 Smooth, < 0.10 in/sec			0.09" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.15 Consequence Score 5.65

Risk Score 10.74 Likelihood Score 1.90

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	RAS Pump #4	System	Secondary Treatment
Asset Type	PUMP-CENT	Location	Process Gallery
Asset ID	PMP50-03004	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Absence of Pump Cavitation		1 Yes			
Acceptable Noise		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
Accessibility		1 Open, Easy Access			
All Components		1 yes			
All Safety Features Present		1 yes			
Bearings		2 Minor Wear			
Belt/Direct Drive/Couplings		2 Minor Wear			
Check Valve		1 Opens, Closes, Seats, No Defects			
Controls		1 Excellent			
Corrosion - Metal		1 Like New			
Corrosion - Visible Coating Condition		1 Like new			
Drive Shaft			X	Non Existent	Belt driven
Gallons per kW		1 At BEP			
Gauges Operational		1 Yes			
Infrared		2 Normal			
Installation		1 Excellent			
Isolation Valves Operational		1 yes			
Lubrication OK at Inspection		1 yes			
Mounting		1 Excellent			
Obsolescence		1 Current, Supported			
Oil Seal		1 Excellent			
Packing Gland/Mechanical Seal		2 Normal			
Pipe Alignment		1 Straight			
Temperature - Bearing		1 Normal			
Vibration Analysis (0.10 in/sec)		1 Smooth, < 0.10 in/sec			0.05" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.15 Consequence Score 5.65

Risk Score 10.74 Likelihood Score 1.90

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Process Gallery	System	Secondary Treatment
Asset Type	STRUCTURE	Location	Process Gallery
Asset ID	Bldg-PG	Inspection Date	4/5/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Access Doors		2 2			
Architectural - Ceilings			X	Non Existent	
Architectural - Floors		2 Good			
Architectural - Roof		2 Somewhat Acceptable			
Architectural - Windows - Physical Integrity/Appearance		2 Good			
Corrosion - Cathodic Protection			X	Not Evaluated	
Corrosion - Concrete		2 Staining			
Corrosion - Mechanical/Piping Metal Condition		2 Minor Corrosion			
Corrosion - Metal		2 Minor Corrosion			
Corrosion - Pipes		2 Staining/chipping			
Corrosion - Soil Resistivity			X	Not Evaluated	
Corrosion - Visible Coating Condition		2 Minor damage			
Corrosion - Visible Concrete Condition		1 Like new			
Duct Work		1 Excellent			
External Wall		1 Very Good			
Fire Extinguisher Present/Certification Current		1 yes			
Handrails		1 Very Good			
Installation		1 Excellent			
Internal Wall		2 Good			
Lighting		2 Good			
Pipe System		1 Excellent			
Safety (General Review)		1 Very Good			
Stairs		1 Very Good			
Structural - Above Grade - Structure Irregularities/Code		1 No Irregularities			
Structural - Aboveground Pipe			X	Non Existent	
Structural - Building and System Piping		2 Flexibility and bracing provided			
Structural - Columns		1 Very Good			
Structural - Condition of Foundations		1 No movement			
Structural - Connections in Lateral Force Resisting Systems		1 Direct Positive Connection Between Horizontal Transfer Elements (Diaphragm Or Bracing) And V			
Structural - Equipment Anchorage - Epoxy-Cast-In-Place or Wedge Anchors		1 Anchors/Bolts All Present And Fully Embedded And/Or Threaded			
Structural - Load Path/Redundancy		1 Complete Load Path To Foundation - 3 Or More Vertical Resisting Elements In Each Direction			
Structural - Piping Connections to Above Ground Facilities			X	Non Existent	
Structural - Seismic		1 FEMA 154 score>3			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.41

Consequence Score 5.50

Risk Score 13.20

Likelihood Score 2.40

Photo(s)



Asset Description	Process Gallery UPS	System	Secondary Treatment
Asset Type	UPS	Location	Process Gallery
Asset ID	Battery-UPS	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Acceptable Noise		1 yes			
Acceptable Smell or Heat		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
Ambient Environment		1 No Environmental Impact			
Control Switches		2 Good			
Good Housekeeping		1 Yes			
Monitoring Panel		1 Excellent			
Obsolescence		1 Current, Supported			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.10	Consequence Score	4.00
Risk Score	9.60	Likelihood Score	2.40

Photo(s)



Asset Description	Sec Clarifier #3 Control Panel	System	Secondary Treatment
Asset Type	CONTROL PANEL	Location	Sand Filter Rec
Asset ID	LCP50-10103	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Acceptable Smell or Heat		1 yes			
All Safety Features Present		1 yes			
Control Switches		2 Good			
Good House Keeping		1 yes			
Good Wire Labeling		1 yes			
Infrared		2 Normal			
Installation		1 Excellent			
Obsolescence		1 Current and supported			
Operating at Inspection		1 yes			
Panel Labeling		1 yes			
Structural (Panel)		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.17 Consequence Score 5.95

Risk Score 10.12 Likelihood Score 1.70

Photo(s)



Photo(s)

Asset Description	Aeration Blower #4	System	Secondary Treatment
Asset Type	BLOWER	Location	Sec Process
Asset ID	BLW40-50004	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Vibration		1 yes			
Alignment			X	Non Existent	Common motor / blower shaft
All Components		1 yes			
All Safety Features Present		1 yes			
Bearings			X	Non Existent	Air foil bearings
Belt			X	Non Existent	Common motor / blower shaft
Coating		1 Excellent			
Controls		1 Excellent			
Corrosion - Structural Metal Condition?		1 Like new			
Lubrication OK at Inspection			X	Non Existent	Air foil bearings
Mounting		1 Excellent			
Obsolescence		1 Current and supported			
Oil Analysis			X	Non Existent	Air foil bearings
Vibration Analysis			X	Not Evaluated	Cannot open enclosure while in operation

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 5.65

Risk Score 9.60 Likelihood Score 1.70

Photo(s)



Asset Description	Aeration Blower #5	System	Secondary Treatment
Asset Type	BLOWER	Location	Sec Process
Asset ID	BLW40-50005	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Vibration		1 yes			
Alignment			X	Non Existent	Common motor / blower shaft
All Components		1 yes			
All Safety Features Present		1 yes			
Bearings			X	Non Existent	Air foil bearings
Belt			X	Non Existent	Common motor / blower shaft
Coating		1 Excellent			
Controls		1 Excellent			
Corrosion - Structural Metal Condition?		1 Like new			
Lubrication OK at Inspection			X	Non Existent	Air foil bearings
Mounting		1 Excellent			
Obsolescence		1 Current and supported			
Oil Analysis			X	Non Existent	Air foil bearings
Vibration Analysis			X	Not Evaluated	Cannot open enclosure while in operation

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 5.65

Risk Score 9.60 Likelihood Score 1.70

Photo(s)



Asset Description	Aeration Blower #6	System	Secondary Treatment
Asset Type	BLOWER	Location	Sec Process
Asset ID	BLW40-50006	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Vibration		1 yes			
Alignment			X	Non Existent	Common motor / blower shaft
All Components		1 yes			
All Safety Features Present		1 yes			
Bearings			X	Non Existent	Air foil bearings
Belt			X	Non Existent	Common motor / blower shaft
Coating		1 Excellent			
Controls		1 Excellent			
Corrosion - Structural Metal Condition?		1 Like new			
Lubrication OK at Inspection			X	Non Existent	Air foil bearings
Mounting		1 Excellent			
Obsolescence		1 Current and supported			
Oil Analysis			X	Non Existent	Air foil bearings
Vibration Analysis			X	Not Evaluated	Cannot open enclosure while in operation

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 5.65

Risk Score 9.60 Likelihood Score 1.70

Photo(s)



Asset Description	Blower #4 Control Panel	System	Secondary Treatment
Asset Type	CONTROL PANEL	Location	Sec Process
Asset ID	LCP40-50004	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Acceptable Smell or Heat		1 yes			
All Safety Features Present		1 yes			
Control Switches		1 Excellent			
Good House Keeping		1 yes			
Good Wire Labeling		1 yes			
Infrared		2 Normal			
Installation		1 Excellent			
Obsolescence		1 Current and supported			
Operating at Inspection		1 yes			
Panel Labeling		1 yes			
Structural (Panel)		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.08 Consequence Score 5.95

Risk Score 11.30 Likelihood Score 1.90

Photo(s)



Asset Description	Blower #5 Control Panel	System	Secondary Treatment
Asset Type	CONTROL PANEL	Location	Sec Process
Asset ID	LCP40-50005	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Acceptable Smell or Heat		1 yes			
All Safety Features Present		1 yes			
Control Switches		1 Excellent			
Good House Keeping		1 yes			
Good Wire Labeling		1 yes			
Infrared		2 Normal			
Installation		1 Excellent			
Obsolescence		1 Current and supported			
Operating at Inspection		5 no			
Panel Labeling		1 yes			
Structural (Panel)		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.42 Consequence Score 5.95

Risk Score 10.12 Likelihood Score 1.70

Photo(s)



Photo(s)



Wilsonville Asset Condition Assessment Report

Asset Description	Blower #6 Control Panel	System	Secondary Treatment
Asset Type	CONTROL PANEL	Location	Sec Process
Asset ID	LCP40-50006	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Acceptable Smell or Heat		1 yes			
All Safety Features Present		1 yes			
Control Switches		1 Excellent			
Good House Keeping		1 yes			
Good Wire Labeling		1 yes			
Infrared		2 Normal			
Installation		1 Excellent			
Obsolescence		1 Current and supported			
Operating at Inspection		5 no			
Panel Labeling		1 yes			
Structural (Panel)		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.42 Consequence Score 5.95

Risk Score 10.12 Likelihood Score 1.70

Photo(s)



Photo(s)



Wilsonville Asset Condition Assessment Report

Asset Description	Flow Element 40-12001	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FE40-12001	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.12 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)



Photo(s)



Asset Description	Flow Element 40-12002	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FE40-12002	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.12 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)



Asset Description	Flow Element 40-30001	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FE40-30001	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.12 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)



Asset Description	Flow Element 40-30002	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FE40-30002	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.12 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Flow Element 40-30003	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FE40-30003	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.12 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Flow Element 40-30101	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FE40-30101	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.12 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)



Photo(s)



Asset Description	Flow Element 40-30102	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FE40-30102	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.12 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)



Asset Description	Flow Element 40-30103	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FE40-30103	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.12 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)



Asset Description	Flow Element 50-00301	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FE50-00301	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		1 Like new			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Flow Element 50-00302	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FE50-00302	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		1 Like new			
Grounding					
Installation/ Accessibility		1 Excellent			

Condition Category Incomplete

Condition Score 0

Consequence Score 2.65

Risk Score 0

Likelihood Score 0

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Flow Element 50-00303	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FE50-00303	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		1 Like new			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Flow Element 50-00304	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FE50-00304	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		1 Like new			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 0

Risk Score 0 Likelihood Score 0

Photo(s)



Asset Description	Flow Element 50-41000	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FE50-41000	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		1 Like new			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Flow Transmitter 40-12001	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FIT40-12001	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

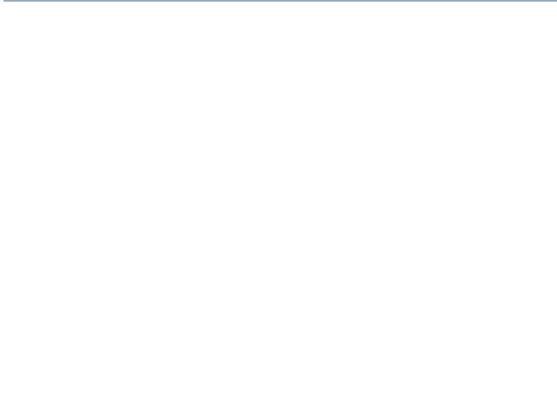
Condition Score 1.12 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)



Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Flow Transmitter 40-12002	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FIT40-12002	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

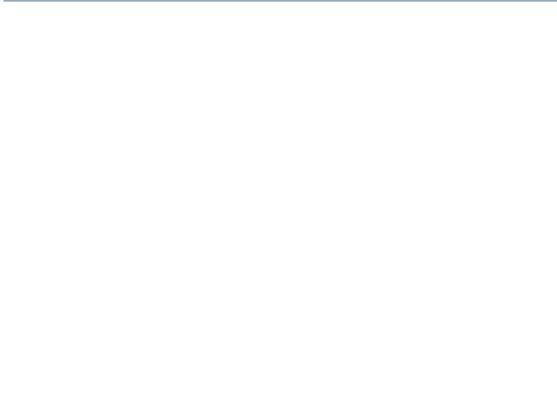
Condition Score 1.12 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)



Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Flow Element 40-30001	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FIT40-30001	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.12 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)



Photo(s)



Asset Description	Flow Element 40-30002	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FIT40-30002	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.12 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Flow Transmitter 40-30003	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FIT40-30003	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.12 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)



Asset Description	Flow Element 40-30101	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FIT40-30101	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.12 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Flow Element 40-30102	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FIT40-30102	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.12 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)



Photo(s)

Asset Description	Flow Transmitter 40-30103	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FIT40-30103	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.12 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)



Asset Description	Flow Element 40-41000	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FIT40-41000	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		1 Like new			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Flow Element 50-00301	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FIT50-00301	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		1 Like new			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

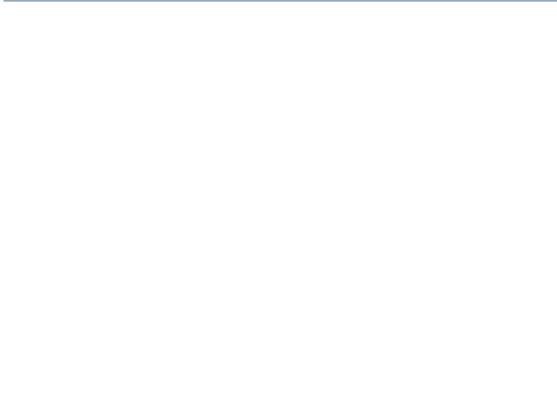
Condition Score 1.00 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)



Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Flow Element 50-00302	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FIT50-00302	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		1 Like new			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)



Asset Description	Flow Element 50-00303	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FIT50-00303	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		1 Like new			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Flow Element 50-00304	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FIT50-00304	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		1 Like new			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

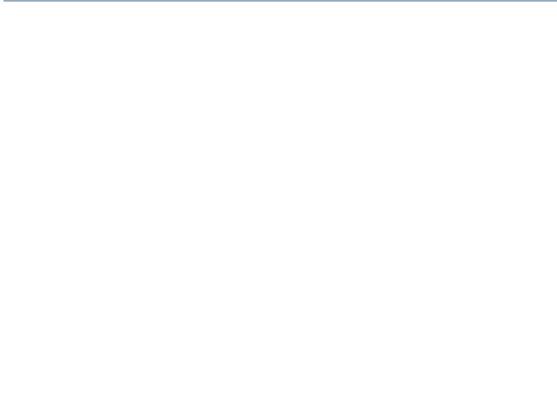
Condition Score 1.00 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)



Photo(s)



Asset Description	Flow Element 50-41000	System	Secondary Treatment
Asset Type	FLOW METER	Location	Sec Process
Asset ID	FIT50-41000	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		1 Like new			
Grounding		1 yes			
Installation/ Accessibility		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	D.O. Analyzer 40-30501	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Sec Process
Asset ID	AE40-30501	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		2 Occasionally Found Out of Calibration			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.29 Consequence Score 4.90

Risk Score 12.74 Likelihood Score 2.60

Photo(s)



Photo(s)



Asset Description	AIT 40-12501	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Sec Process
Asset ID	AIT40-12501	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		2 Occasionally Found Out of Calibration			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.12 Consequence Score 4.90

Risk Score 12.74 Likelihood Score 2.60

Photo(s)



Photo(s)

Asset Description	AIT 40-12502	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Sec Process
Asset ID	AIT40-12502	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		2 Occasionally Found Out of Calibration			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.29 Consequence Score 4.90

Risk Score 12.74 Likelihood Score 2.60

Photo(s)



Photo(s)



Wilsonville Asset Condition Assessment Report

Asset Description	Hi Pressure Switch 40-41000	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Sec Process
Asset ID	HS40-41000	Inspection Date	4/3/2019
Comments		Flag	Non Existent

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks					
Acceptable Smell or Heat					
Acceptable Wire Labeling					
All Components					
Calibration					
Connections Ok					
Display Ok					
Indicator					
Installation/ Accessibility					
Operating at Inspection					
Tubing / Connections					

Condition Category

Condition Score	0	Consequence Score	0
Risk Score	0	Likelihood Score	0

Asset Description	Level Element 40-12701	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Sec Process
Asset ID	LE40-12701	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.24	Consequence Score	4.90
Risk Score	12.74	Likelihood Score	2.60

Photo(s)



Asset Description	Level Element 40-12702	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Sec Process
Asset ID	LE40-12702	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.24 Consequence Score 4.90

Risk Score 12.74 Likelihood Score 2.60

Photo(s)



Asset Description	Level Transmitter 40-12701	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Sec Process
Asset ID	LIT40-12701	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.24	Consequence Score	4.90
Risk Score	12.74	Likelihood Score	2.60

Photo(s)



Asset Description	Level Transmitter 40-12702	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Sec Process
Asset ID	LIT40-12702	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.24	Consequence Score	4.90
Risk Score	12.74	Likelihood Score	2.60

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Pressure Transmitter 40-50501	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Sec Process
Asset ID	PIT40-50501	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.24	Consequence Score	4.90
Risk Score	12.74	Likelihood Score	2.60



Wilsonville Asset Condition Assessment Report

Asset Description	Pressure Transmitter 40-50502	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Sec Process
Asset ID	PIT40-50502	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.24	Consequence Score	4.90
Risk Score	12.74	Likelihood Score	2.60



Wilsonville Asset Condition Assessment Report

Asset Description	MCC Panel 40-01A	System	Secondary Treatment
Asset Type	MCC	Location	Sec Process
Asset ID	MCC40-01A	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Connections Ok		1 yes			
Correct Components		1 yes			
Corrosion - Structural Metal Condition?		1 Like new			
Good House Keeping		1 yes			
Infrared		2 Normal			
Installation/ Accessibility		1 Excellent			
Internal Condition		1 Negligible			
Structural Integrity		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.25 Consequence Score 4.60

Risk Score 10.12 Likelihood Score 2.20



Wilsonville Asset Condition Assessment Report

Asset Description	MCC Panel 40-01B	System	Secondary Treatment
Asset Type	MCC	Location	Sec Process
Asset ID	MCC40-01B	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Connections Ok		1 yes			
Correct Components		1 yes			
Corrosion - Structural Metal Condition?		1 Like new			
Good House Keeping		1 yes			
Infrared		2 Normal			
Installation/ Accessibility		1 Excellent			
Internal Condition		1 Negligible			
Structural Integrity		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.25 Consequence Score 4.60

Risk Score 10.12 Likelihood Score 2.20



Wilsonville Asset Condition Assessment Report

Asset Description	MCC Panel 40-02A	System	Secondary Treatment
Asset Type	MCC	Location	Sec Process
Asset ID	MCC40-02A	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Connections Ok		1 yes			
Correct Components		1 yes			
Corrosion - Structural Metal Condition?		1 Like new			
Good House Keeping		1 yes			
Infrared		2 Normal			
Installation/ Accessibility		1 Excellent			
Internal Condition		1 Negligible			
Structural Integrity		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.25 Consequence Score 4.60

Risk Score 10.12 Likelihood Score 2.20



Wilsonville Asset Condition Assessment Report

Asset Description	MCC Panel 40-02B	System	Secondary Treatment
Asset Type	MCC	Location	Sec Process
Asset ID	MCC40-02B	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Connections Ok		1 yes			
Correct Components		1 yes			
Corrosion - Structural Metal Condition?		1 Like new			
Good House Keeping		1 yes			
Infrared		2 Normal			
Installation/ Accessibility		1 Excellent			
Internal Condition		1 Negligible			
Structural Integrity		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.25 Consequence Score 4.60

Risk Score 10.12 Likelihood Score 2.20

Asset Description	Switchboard SWBD40-01A	System	Secondary Treatment
Asset Type	SWITCHGEAR	Location	Sec Process
Asset ID	SWBD40-01A	Inspection Date	4/2/2019
Comments	Unable to access interior due to bolted panel, arc flash ratings exceeds corporate policy for internal inspection.		Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Acceptable Noise		1 yes			
Acceptable Smell or Heat		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
Arc Flash Boundary Available and Posted		1 Yes			
Control Gauges (Hour Meters Volts & Amps)		2 Good			
Control Lamps		2 Good			
Control Switches		2 Good			
Corrosion - Metal		1 Like New			
Gauges and Meters		1 Currently Supported			
High Pot Bus			X	Not Evaluated	
High Pot Cable			X	Not Evaluated	
Infrared			X	Not Evaluated	Unable to access interior due to bolted panel, arc flash ratings exceeds corporate policy for internal inspection.
Installation/Accessibility/Serviceability		1 Excellent			
Obsolescence		1 Current, Supported			
Safety Devices		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.21 Consequence Score 4.60

Risk Score 11.04 Likelihood Score 2.40

Photo(s)



Asset Description	Switchboard SWBD40-02A	System	Secondary Treatment
Asset Type	SWITCHGEAR	Location	Sec Process
Asset ID	SWBD40-02A	Inspection Date	4/2/2019
Comments	Unable to access interior due to bolted panel, arc flash ratings exceeds corporate policy for internal inspection.		Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Acceptable Noise		1 yes			
Acceptable Smell or Heat		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
Arc Flash Boundary Available and Posted		1 Yes			
Control Gauges (Hour Meters Volts & Amps)		2 Good			
Control Lamps		2 Good			
Control Switches		2 Good			
Corrosion - Metal		1 Like New			
Gauges and Meters		1 Currently Supported			
High Pot Bus			X	Not Evaluated	
High Pot Cable			X	Not Evaluated	
Infrared			X	Not Evaluated	Unable to access interior due to bolted panel, arc flash ratings exceeds corporate policy for internal inspection.
Installation/Accessibility/Serviceability		1 Excellent			
Obsolescence		1 Current, Supported			
Safety Devices		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.21 Consequence Score 4.60

Risk Score 11.04 Likelihood Score 2.40

Photo(s)



Asset Description	Flow Control Valve 40-30101	System	Secondary Treatment
Asset Type	VALVE-BUTTERFLY	Location	Sec Process
Asset ID	FCV-30101	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Support		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40

Photo(s)



Photo(s)

Asset Description	Flow Control Valve 40-12001	System	Secondary Treatment
Asset Type	VALVE-BUTTERFLY	Location	Sec Process
Asset ID	FCV40-12001	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Support		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Flow Control Valve 40-12002	System	Secondary Treatment
Asset Type	VALVE-BUTTERFLY	Location	Sec Process
Asset ID	FCV40-12002	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Support		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Flow Control Valve 40-30001	System	Secondary Treatment
Asset Type	VALVE-BUTTERFLY	Location	Sec Process
Asset ID	FCV40-30001	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Support		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40

Photo(s)



Asset Description	Flow Control Valve 40-30002	System	Secondary Treatment
Asset Type	VALVE-BUTTERFLY	Location	Sec Process
Asset ID	FCV40-30002	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Support		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Flow Control Valve 40-30003	System	Secondary Treatment
Asset Type	VALVE-BUTTERFLY	Location	Sec Process
Asset ID	FCV40-30003	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Support		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40

Photo(s)



Photo(s)



Asset Description	Flow Control Valve 40-30101	System	Secondary Treatment
Asset Type	VALVE-BUTTERFLY	Location	Sec Process
Asset ID	FCV40-30101	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Support		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Flow Control Valve 40-30102	System	Secondary Treatment
Asset Type	VALVE-BUTTERFLY	Location	Sec Process
Asset ID	FCV40-30102	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Support		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40

Photo(s)



Photo(s)



Wilsonville Asset Condition Assessment Report

Asset Description	Flow Control Valve 40-30103	System	Secondary Treatment
Asset Type	VALVE-BUTTERFLY	Location	Sec Process
Asset ID	FCV40-30103	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Support		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40

Photo(s)



Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Flow Control Valve 50-41000	System	Secondary Treatment
Asset Type	VALVE-BUTTERFLY	Location	Sec Process
Asset ID	FCV50-41000	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Support		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

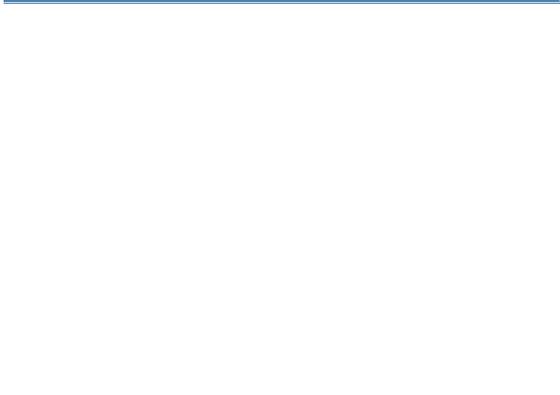
Condition Score 1.00 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40

Photo(s)



Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	East Basin Drain Pump VFD	System	Secondary Treatment
Asset Type	VFD	Location	Sec Process
Asset ID	VFD45-02002	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
All Safety Features Present		1 yes			
Connections Ok		1 yes			
Corrosion - Mechanical Metals		1 Like New			
Display/Indicator Ok		1 yes			
General Appearance		1 Excellent			
Good Wire Labeling		1 yes			
Obsolescence		1 Current and supported			
Operates Properly		1 yes			
Operating at Inspection		1 yes			
Ventilation Fan		2 Slight Deficiency			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.10	Consequence Score	4.30
Risk Score	7.31	Likelihood Score	1.70



Wilsonville Asset Condition Assessment Report

Asset Description	RAS Pump #1 VFD	System	Secondary Treatment
Asset Type	VFD	Location	Sec Process
Asset ID	VFD50-03001	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
All Safety Features Present		1 yes			
Connections Ok		1 yes			
Corrosion - Mechanical Metals		1 Like New			
Display/Indicator Ok		1 yes			
General Appearance		1 Excellent			
Good Wire Labeling		1 yes			
Obsolescence		1 Current and supported			
Operates Properly		1 yes			
Operating at Inspection		1 yes			
Ventilation Fan		2 Slight Deficiency			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.10	Consequence Score	4.30
Risk Score	7.31	Likelihood Score	1.70



Wilsonville Asset Condition Assessment Report

Asset Description	RAS Pump #3 VFD	System	Secondary Treatment
Asset Type	VFD	Location	Sec Process
Asset ID	VFD50-03003	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
All Safety Features Present		1 yes			
Connections Ok		1 yes			
Corrosion - Mechanical Metals		1 Like New			
Display/Indicator Ok		1 yes			
General Appearance		1 Excellent			
Good Wire Labeling		1 yes			
Obsolescence		1 Current and supported			
Operates Properly		1 yes			
Operating at Inspection		1 yes			
Ventilation Fan		2 Slight Deficiency			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.10	Consequence Score	4.30
Risk Score	7.31	Likelihood Score	1.70



Wilsonville Asset Condition Assessment Report

Asset Description	Secondary Effluent Pump #2 VFD	System	Secondary Treatment
Asset Type	VFD	Location	Sec Process
Asset ID	VFD53-10002	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
All Safety Features Present		1 yes			
Connections Ok		1 yes			
Corrosion - Mechanical Metals		1 Like New			
Display/Indicator Ok		1 yes			
General Appearance		1 Excellent			
Good Wire Labeling		1 yes			
Obsolescence		1 Current and supported			
Operates Properly		1 yes			
Operating at Inspection		1 yes			
Ventilation Fan		2 Slight Deficiency			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.10	Consequence Score	4.30
Risk Score	7.31	Likelihood Score	1.70



Wilsonville Asset Condition Assessment Report

Asset Description	Centrifuge Feed Pump #1 VFD	System	Secondary Treatment
Asset Type	VFD	Location	Sec Process
Asset ID	VFD82-20001	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
All Safety Features Present		1 yes			
Connections Ok		1 yes			
Corrosion - Mechanical Metals		1 Like New			
Display/Indicator Ok		1 yes			
General Appearance		1 Excellent			
Good Wire Labeling		1 yes			
Obsolescence		1 Current and supported			
Operates Properly		1 yes			
Operating at Inspection		1 yes			
Ventilation Fan		2 Slight Deficiency			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.10	Consequence Score	4.30
Risk Score	7.31	Likelihood Score	1.70



Wilsonville Asset Condition Assessment Report

Asset Description	Centrifuge Feed Pump #2 VFD	System	Secondary Treatment
Asset Type	VFD	Location	Sec Process
Asset ID	VFD82-20002	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
All Safety Features Present		1 yes			
Connections Ok		1 yes			
Corrosion - Mechanical Metals		1 Like New			
Display/Indicator Ok		1 yes			
General Appearance		1 Excellent			
Good Wire Labeling		1 yes			
Obsolescence		1 Current and supported			
Operates Properly		1 yes			
Operating at Inspection		1 yes			
Ventilation Fan		2 Slight Deficiency			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.10	Consequence Score	4.30
Risk Score	7.31	Likelihood Score	1.70



Wilsonville Asset Condition Assessment Report

Asset Description	Secondary Clarifier #3	System	Secondary Treatment
Asset Type	CLARIFIER	Location	Secondary Clarifier
Asset ID	CLR50-00103	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Guards Present		1 yes			
Corrosion - Structural Concrete		2 Staining			
Corrosion - Structural Metal Condition?		1 Like new			
Oil Seal		1 Excellent			
Running at Inspection		1 yes			
Structural Integrity		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.17	Consequence Score	4.00
Risk Score	4.80	Likelihood Score	1.20

Photo(s)



Asset Description	Secondary Clarifier, #1 Mechan	System	Secondary Treatment
Asset Type	GEARBOX	Location	Secondary Clarifier
Asset ID	SC-M-50-1-1	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Noise		1 yes			
Air Relief Valve		1 Excellent			
All Safety Features Present		1 yes			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Mounting		1 Excellent			
Obsolescence		1 Current and supported			
Oil Analysis			X	Not Evaluated	
Vibration Analysis		2 2 -Good .039 - .15 inches/sec			0.08" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.25 Consequence Score 4.60

Risk Score 8.74 Likelihood Score 1.90

Photo(s)



Asset Description	Secondary Clarifier, #2 Mechan	System	Secondary Treatment
Asset Type	GEARBOX	Location	Secondary Clarifier
Asset ID	SC-M-50-1-2	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Noise		1 yes			
Air Relief Valve		1 Excellent			
All Safety Features Present		1 yes			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Mounting		1 Excellent			
Obsolescence		1 Current and supported			
Oil Analysis			X	Not Evaluated	
Vibration Analysis		2 2 -Good .039 - .15 inches/sec			0.05" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.25 Consequence Score 4.60

Risk Score 8.74 Likelihood Score 1.90

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Level Element 50-20200	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Secondary Clarifier
Asset ID	LET50-20200	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.06	Consequence Score	4.90
Risk Score	12.74	Likelihood Score	2.60



Wilsonville Asset Condition Assessment Report

Asset Description	Level Indicator 50-20200	System	Secondary Treatment
Asset Type	INSTRUMENT	Location	Secondary Clarifier
Asset ID	LI50-20200	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.06	Consequence Score	4.90
Risk Score	12.74	Likelihood Score	2.60



Wilsonville Asset Condition Assessment Report

Asset Description	Sec Clarifier #3 Spray Pump	System	Secondary Treatment
Asset Type	PUMP-SUB	Location	Secondary Clarifier
Asset ID	PMP50-01003	Inspection Date	4/3/2019
Comments	Small submersible pump	Flag	Not Evaluated

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Cavitation					
Absence of Leaks					
Acceptable Noise					
Acceptable Vibration					
All Components					
All Safety Features Present					
Amperage Draw					
Chain/Cables/Rails					
Check Valve Operates Properly					
Connections Ok					
Corrosion - Metal					
Discharge Piping Condition					
Festoon and Power Cable Condition					
Installation					
Insulation Resistance (10 Meg Ohm)	Yes				
Obsolescence					
Oil OK at Inspection					
Performance History					
Pump Rails					
Valves					
Volt and Amp Balance					

Condition Category	Incomplete	Consequence Score	3.70
Condition Score	0	Likelihood Score	0
Risk Score	0		



Wilsonville Asset Condition Assessment Report

Asset Description	Secondary Process Facility	System	Secondary Treatment
Asset Type	STRUCTURE	Location	Secondary Clarifier
Asset ID	40BLD-01	Inspection Date	4/5/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Access Doors		2 2			
Architectural - Ceilings			X	Non Existent	
Architectural - Floors		2 Good			
Architectural - Roof			X	Non Existent	
Architectural - Windows - Physical Integrity/Appearance			X	Non Existent	
Corrosion - Cathodic Protection			X	Non Existent	
Corrosion - Concrete		2 Staining			
Corrosion - Mechanical/Piping Metal Condition		2 Minor Corrosion			
Corrosion - Metal		2 Minor Corrosion			
Corrosion - Pipes		2 Staining/chipping			
Corrosion - Soil Resistivity			X	Not Evaluated	
Corrosion - Visible Coating Condition		2 Minor damage			
Corrosion - Visible Concrete Condition		1 Like new			
Duct Work		1 Excellent	X		
External Wall		2 Good			
Fire Extinguisher Present/Certification Current		1 yes			
Handrails		1 Very Good			
Installation		1 Excellent			
Internal Wall			X	Non Existent	
Lighting		2 Good			
Pipe System		1 Excellent			
Safety (General Review)		1 Very Good			
Stairs		1 Very Good			
Structural - Above Grade - Structure Irregularities/Code		1 No Irregularities			
Structural - Aboveground Pipe		1 Constructed Of Ductile Materials And Flexible Restrained Joints			
Structural - Building and System Piping		2 Flexibility and bracing provided			
Structural - Columns			X	Non Existent	
Structural - Condition of Foundations		1 No movement			
Structural - Connections in Lateral Force Resisting Systems		1 Direct Positive Connection Between Horizontal Transfer Elements (Diaphragm Or Bracing) And V			
Structural - Equipment Anchorage - Epoxy-Cast-In-Place or Wedge Anchors		1 Anchors/Bolts All Present And Fully Embedded And/Or Threaded			
Structural - Load Path/Redundancy		1 Complete Load Path To Foundation - 3 Or More Vertical Resisting Elements In Each Direction			
Structural - Piping Connections to Above Ground Facilities		2 Connections present, full flexibility			

Question	Overriding?	Answer	NA	Flag	Answer Comment
Structural - Seismic		1 FEMA 154 score>3			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.42 Consequence Score 5.50

Risk Score 13.20 Likelihood Score 2.40

Photo(s)



Asset Description	Sec Clarifier #1 Weir Washer	System	Secondary Treatment
Asset Type	WASHER	Location	Secondary Clarifier
Asset ID	SC-50-1-3	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Corrosion - Mechanical Metals		2 Slight staining/small chips/holes in coating			
Drive Motor			X	Non Existent	
General Appearance		1 Excellent			
Hoses and Belts		3 Moderate			

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 1.75

Consequence Score 2.50

Risk Score 9.25

Likelihood Score 3.70

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Sec Clarifier #2 Weir Washer	System	Secondary Treatment
Asset Type	WASHER	Location	Secondary Clarifier
Asset ID	SC-50-1-4	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Corrosion - Mechanical Metals		2 Slight staining/small chips/holes in coating			
Drive Motor			X	Non Existent	
General Appearance		1 Excellent			
Hoses and Belts		3 Moderate			

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 1.75

Consequence Score 2.50

Risk Score 9.25

Likelihood Score 3.70

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Sludge Storage Basin-Biofilter	System	Solids Handling
Asset Type	TANK-CONCRETE	Location	Bio Solids Storage
Asset ID	82BLD-01	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Access Ladder			X	Non Existent	
All Safety Features Present		1 yes			
Coating Condition			X	Non Existent	
Corrosion - Concrete		2 Staining			
Pipe Penetrations		1 Excellent			
Piping/Connections		2 No Leaks, Minor Deviation			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.40	Consequence Score	5.50
Risk Score	13.20	Likelihood Score	2.40

Asset Description **Biosolids Storage Blower #1**

System **Solids Handling**

Asset Type **BLOWER**

Location **Bio Storage Tank**

Asset ID **BS-M-82-1-1**

Inspection Date **4/3/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Vibration		1 yes			
Alignment		1 Straight			
All Components		1 yes			
All Safety Features Present		1 yes			
Bearings		2 Minor Wear			
Belt		3 Moderate Wear			
Coating		2 Minor			
Controls		1 Excellent			
Corrosion - Structural Metal Condition?		1 Like new			
Lubrication OK at Inspection		1 yes			
Mounting		1 Excellent			
Obsolescence		1 Current and supported			
Oil Analysis			X	Not Evaluated	
Vibration Analysis		3 -Fair .15 - .31 inches/sec			0.23" / second

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 1.53

Consequence Score 4.90

Risk Score 18.13

Likelihood Score 3.70

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Biosolids Storage Tank 1(east)	System	Solids Handling
Asset Type	TANK-CONCRETE	Location	Bio Storage Tank
Asset ID	BS-T-1	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Access Ladder			X	Non Existent	
All Safety Features Present		1 yes			
Coating Condition			X	Non Existent	
Corrosion - Concrete		2 Staining			
Pipe Penetrations		1 Excellent			
Piping/Connections		2 No Leaks, Minor Deviation			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.40	Consequence Score	5.50
Risk Score	13.20	Likelihood Score	2.40



Wilsonville Asset Condition Assessment Report

Asset Description	Biosolids Storage Tank 2 (Ctr)	System	Solids Handling
Asset Type	TANK-CONCRETE	Location	Bio Storage Tank
Asset ID	BS-T-2	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Access Ladder			X	Non Existent	
All Safety Features Present		1 yes			
Coating Condition			X	Non Existent	
Corrosion - Concrete		2 Staining			
Pipe Penetrations		1 Excellent			
Piping/Connections		2 No Leaks, Minor Deviation			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.40 Consequence Score 5.50

Risk Score 9.35 Likelihood Score 1.70



Wilsonville Asset Condition Assessment Report

Asset Description	Biosolids Storage 3 (Wst)	System	Solids Handling
Asset Type	TANK-CONCRETE	Location	Bio Storage Tank
Asset ID	BS-T-3	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Access Ladder			X	Non Existent	
All Safety Features Present		1 yes			
Coating Condition			X	Non Existent	
Corrosion - Concrete		2 Staining			
Pipe Penetrations		1 Excellent			
Piping/Connections		2 No Leaks, Minor Deviation			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.40 Consequence Score 5.50

Risk Score 9.35 Likelihood Score 1.70



Wilsonville Asset Condition Assessment Report

Asset Description	Biosolids Storage 4 (NCCC)	System	Solids Handling
Asset Type	TANK-CONCRETE	Location	Bio Storage Tank
Asset ID	BS-T-4	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Access Ladder			X	Non Existent	
All Safety Features Present		1 yes			
Coating Condition			X	Non Existent	
Corrosion - Concrete		2 Staining			
Pipe Penetrations		1 Excellent			
Piping/Connections		2 No Leaks, Minor Deviation			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.40 Consequence Score 5.50

Risk Score 9.35 Likelihood Score 1.70



Wilsonville Asset Condition Assessment Report

Asset Description	Biosolids Storage 5 (SCCC)	System	Solids Handling
Asset Type	TANK-CONCRETE	Location	Bio Storage Tank
Asset ID	BS-T-5	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Access Ladder			X	Non Existent	
All Safety Features Present		1 yes			
Coating Condition			X	Non Existent	
Corrosion - Concrete		2 Staining			
Pipe Penetrations		1 Excellent			
Piping/Connections		2 No Leaks, Minor Deviation			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.40 Consequence Score 5.50

Risk Score 9.35 Likelihood Score 1.70

Asset Description	Flow Control Valve 91-21001	System	Solids Handling
Asset Type	VALVE-BUTTERFLY	Location	Bio Storage Tank
Asset ID	FV91-21001	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Support		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40



Asset Description	Flow Control Valve 91-21002	System	Solids Handling
Asset Type	VALVE-BUTTERFLY	Location	Bio Storage Tank
Asset ID	FV91-21002	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Support		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40



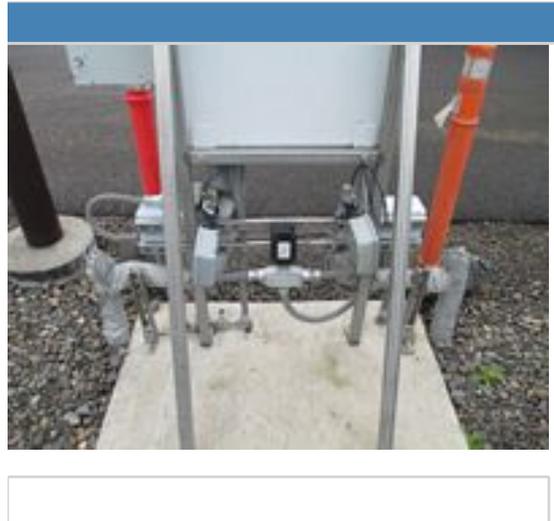
Asset Description	Flow Control Valve 91-21501	System	Solids Handling
Asset Type	VALVE-BUTTERFLY	Location	Bio Storage Tank
Asset ID	FV91-21501	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Support		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40



Asset Description **Flow Control Valve 91-21502**

System **Solids Handling**

Asset Type **VALVE-BUTTERFLY**

Location **Bio Storage Tank**

Asset ID **FV91-21502**

Inspection Date **4/4/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Support		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00

Consequence Score 2.80

Risk Score 6.72

Likelihood Score 2.40

Photo(s)



Asset Description **Biosolids Storage Blower #2**

System **Solids Handling**

Asset Type **BLOWER**

Location **Bio Storage Tank**

Asset ID **BS-M-82-1-2**

Inspection Date **4/3/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Vibration		1 yes			
Alignment		1 Straight			
All Components		1 yes			
All Safety Features Present		1 yes			
Bearings		2 Minor Wear			
Belt		2 Minor Wear			
Coating		2 Minor			
Controls		1 Excellent			
Corrosion - Structural Metal Condition?		1 Like new			
Lubrication OK at Inspection		1 yes			
Mounting		1 Excellent			
Obsolescence		1 Current and supported			
Oil Analysis			X	Not Evaluated	
Vibration Analysis		3 3 -Fair .15 - .31 inches/sec			0.22" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.47

Consequence Score 4.90

Risk Score 12.74

Likelihood Score 2.60

Photo(s)



Asset Description **Bio Storage Tank Lvl Monitor 2**

System **Solids Handling**

Asset Type **INSTRUMENT**

Location **Bio Storage Tank 2 (Center)**

Asset ID **BS-LE-82-1-2**

Inspection Date **4/4/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.24

Consequence Score 4.90

Risk Score 12.74

Likelihood Score 2.60

Photo(s)



Asset Description	Bio Storage Tank Lvl Monitor 3	System	Solids Handling
Asset Type	INSTRUMENT	Location	Bio Storage Tank 3 (West)
Asset ID	BS-LE-82-1-3	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.24	Consequence Score	4.90
Risk Score	12.74	Likelihood Score	2.60

Photo(s)



Asset Description **Bio Storage Tank Lvl Monitor 4**

System **Solids Handling**

Asset Type **INSTRUMENT**

Location **Bio Storage Tank 4 (North)**

Asset ID **BS-LE-82-1-4**

Inspection Date **4/4/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

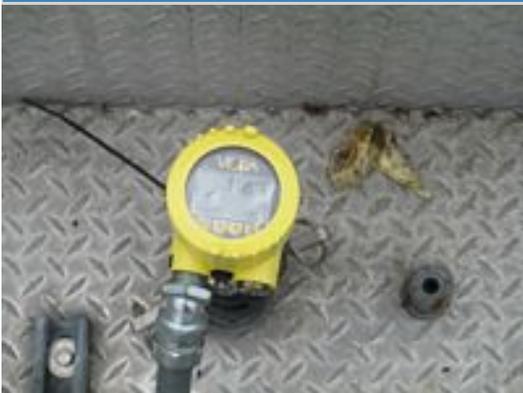
Condition Score 1.24

Consequence Score 4.90

Risk Score 12.74

Likelihood Score 2.60

Photo(s)



Asset Description	Bio Storage Tank Lvl Monitor 5	System	Solids Handling
Asset Type	INSTRUMENT	Location	Bio Storage Tank 5 (South)
Asset ID	BS-LE-82-1-5	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.24	Consequence Score	4.90
Risk Score	12.74	Likelihood Score	2.60

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description **Biosolids Storage Air Diffuser** System **Solids Handling**
Asset Type **DIFFUSER** Location **Biosolids Storage Tanks**
Asset ID **BS-M-82-5** Inspection Date **4/4/2019**
Comments Flag **Can not Access**

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks					
Acceptable Bubble Pattern					
All Components					
Corrosion - Mechanical/Piping Metal Condition?					
Flowing at Inspection					

Condition Category

Condition Score 0 Consequence Score 0
Risk Score 0 Likelihood Score 0



Wilsonville Asset Condition Assessment Report

Asset Description **Dryer Cake Bin** System **Solids Handling**
 Asset Type **BIN** Location **D&D**
 Asset ID **TNK78-20100** Inspection Date **4/3/2019**
 Comments Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Drainage		1 yes			
Acceptable Smell or Heat		1 yes			
Actuator			X	Non Existent	
Anchor Wear		1 Like New			
Coating Condition			X	Non Existent	Stainless steel
Controls			X	Non Existent	
Corrosion - Metal		2 Minor Corrosion			
Cylinder Shaft Wear			X	Non Existent	
Good Housekeeping		1 Yes			
Knife Gate			X	Non Existent	

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.17 Consequence Score 4.00

Risk Score 8.80 Likelihood Score 2.20

Photo(s)



Asset Description **Non Condensable Gas Exhauster**

System **Solids Handling**

Asset Type **BLOWER**

Location **D&D**

Asset ID **CF-051**

Inspection Date **4/3/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Vibration		1 yes			
Alignment		1 Straight			
All Components		1 yes			
All Safety Features Present		1 yes			
Bearings		2 Minor Wear			
Belt		2 Minor Wear			
Coating		2 Minor			
Controls		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Lubrication OK at Inspection		1 yes			
Mounting		1 Excellent			
Obsolescence		1 Current and supported			
Oil Analysis			X	Non Existent	Greased bearings
Vibration Analysis		2 2 -Good .039 - .15 inches/sec			0.12" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.40

Consequence Score 1.60

Risk Score 3.04

Likelihood Score 1.90

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Dewatering and Drying Building	System	Solids Handling
Asset Type	BUILDING	Location	D&D
Asset ID	78BLD-01	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Conduit and Supports		2 Good			
Corrosion - Concrete		2 Staining			
Corrosion - Metal		2 Minor Corrosion			
External Doors		1 Very Good			
External Ladders/Stairs/Handrails		1 Very Good			
External Paint		2 Good			
External Wall		2 Good			
Fire Extinguisher Present/Certification Current		1 yes			
Foundation		1 Very Good			
Good Housekeeping		1 Yes			
Illumination - Exit Signs		1 Very Good			
Insulation			X	Non Existent	
Internal Doors		1 Very Good			
Internal Ladders/Stairs/Handrails		1 Adequate			
Internal Paint		2 Good			
Internal Wall		2 Good			
Lighting		1 Very Good			
Plumbing System		1 Very Good			
Roof Drainage		1 Very Good			
Roof Membrane System		2 Good			
Security		1 Adequate			
Skylights			X	Non Existent	

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.40 Consequence Score 3.55

Risk Score 7.81 Likelihood Score 2.20

Photo(s)



Asset Description	Centrifuge #1	System	Solids Handling
Asset Type	CENTRIFUGE	Location	D&D
Asset ID	CEN78-30101	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Drainage		1 yes			
Acceptable Vibration		1 yes			
All Safety Guards Present		1 yes			
Controls		1 Excellent			
Corrosion - Mechanical Metals		2 Slight staining/small chips/holes in coating			
Drive Motor		1 Excellent			
General Appearance		1 Excellent			
Hydraulic System		2 Minor Deficiencies			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

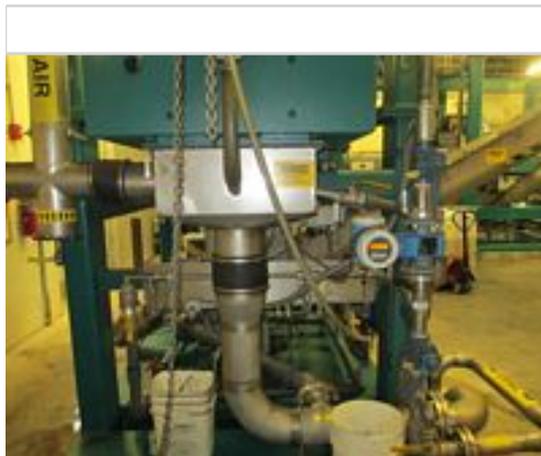
Condition Score 1.22

Consequence Score 4.90

Risk Score 8.33

Likelihood Score 1.70

Photo(s)



Asset Description	Centrifuge #2	System	Solids Handling
Asset Type	CENTRIFUGE	Location	D&D
Asset ID	CEN78-30102	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Drainage		1 yes			
Acceptable Vibration		1 yes			
All Safety Guards Present		1 yes			
Controls		1 Excellent			
Corrosion - Mechanical Metals		2 Slight staining/small chips/holes in coating			
Drive Motor		1 Excellent			
General Appearance		1 Excellent			
Hydraulic System		2 Minor Deficiencies			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.22	Consequence Score	4.90
Risk Score	8.33	Likelihood Score	1.70

Photo(s)



Photo(s)



Asset Description	Centrifuge #1 Control Panel	System	Solids Handling
Asset Type	CONTROL PANEL	Location	D&D
Asset ID	LCP78-11	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Acceptable Smell or Heat		1 yes			
All Safety Features Present		1 yes			
Control Switches		2 Good			
Good House Keeping		1 yes			
Good Wire Labeling		1 yes			
Infrared		2 Normal			
Installation		1 Excellent			
Obsolescence		1 Current and supported			
Operating at Inspection		1 yes			
Panel Labeling		1 yes			
Structural (Panel)		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.17 Consequence Score 5.95

Risk Score 10.12 Likelihood Score 1.70

Photo(s)



Photo(s)

Asset Description	Centrifuge #2 Control Panel	System	Solids Handling
Asset Type	CONTROL PANEL	Location	D&D
Asset ID	LCP78-12	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Acceptable Smell or Heat		1 yes			
All Safety Features Present		1 yes			
Control Switches		2 Good			
Good House Keeping		1 yes			
Good Wire Labeling		1 yes			
Infrared		2 Normal			
Installation		1 Excellent			
Obsolescence		1 Current and supported			
Operating at Inspection		1 yes			
Panel Labeling		1 yes			
Structural (Panel)		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.17 Consequence Score 5.95

Risk Score 10.12 Likelihood Score 1.70

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Bio Solids Dryer Control Panel	System	Solids Handling
Asset Type	CONTROL PANEL	Location	D&D
Asset ID	LCP78-13	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Acceptable Smell or Heat		1 yes			
All Safety Features Present		1 yes			
Control Switches		2 Good			
Good House Keeping		1 yes			
Good Wire Labeling		1 yes			
Infrared		2 Normal			
Installation		1 Excellent			
Obsolescence		1 Current and supported			
Operating at Inspection		1 yes			
Panel Labeling		1 yes			
Structural (Panel)		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.17 Consequence Score 5.95

Risk Score 10.12 Likelihood Score 1.70

Photo(s)



Asset Description	Thermal Heater Control Panel	System	Solids Handling
Asset Type	CONTROL PANEL	Location	D&D
Asset ID	LCP78-20400	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Acceptable Smell or Heat		1 yes			
All Safety Features Present		1 yes			
Control Switches		2 Good			
Good House Keeping		1 yes			
Good Wire Labeling		1 yes			
Infrared		2 Normal			
Installation		1 Excellent			
Obsolescence		1 Current and supported			
Operating at Inspection		1 yes			
Panel Labeling		1 yes			
Structural (Panel)		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.17 Consequence Score 5.95

Risk Score 10.12 Likelihood Score 1.70

Photo(s)





Wilsonville Asset Condition Assessment Report

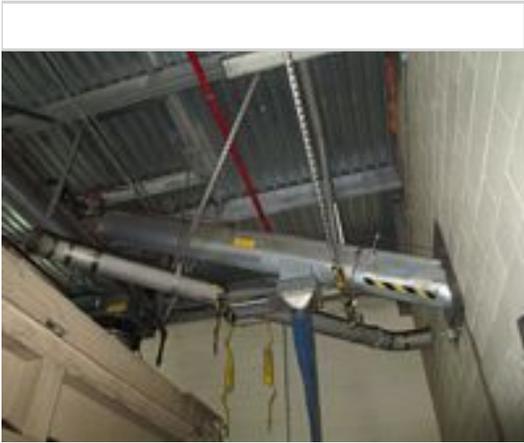
Asset Description	Dry Product Transfer Conveyor	System	Solids Handling
Asset Type	CONVEYOR	Location	D&D
Asset ID	CNV78-10000	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Hydraulic Pressure			X	Non Existent	Motor driven conveyor
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
Auger Wear - Structural Metal Condition		3 Pitting And Some Metal Loss			
Bearings		2 Minor Wear			
Belt/Chain			X	Non Existent	Direct driven
Controls		1 Excellent			
Corrosion - Metal		2 Minor Corrosion			
Drive Assembly		1 Excellent			
Motor Coupling		2 Minor Wear But No Misalignment			
Obsolescence		1 Current, Supported			
Rollers and Tracking System			X	Non Existent	Screw type conveyor
Support		1 Excellent			
Trough Wear - Structural Metal Condition		3 Moderate Deterioration			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.44	Consequence Score	4.60
Risk Score	7.82	Likelihood Score	1.70

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description **Load Out Distribution Conveyor**

System **Solids Handling**

Asset Type **CONVEYOR**

Location **D&D**

Asset ID **CNV78-10100**

Inspection Date **4/3/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Hydraulic Pressure			X	Non Existent	Motor driven conveyor
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
Auger Wear - Structural Metal Condition		2 Minor Corrosion			
Bearings		2 Minor Wear			
Belt/Chain			X	Non Existent	Direct driven
Controls		1 Excellent			
Corrosion - Metal		2 Minor Corrosion			
Drive Assembly		1 Excellent			
Motor Coupling		2 Minor Wear But No Misalignment			
Obsolescence		1 Current, Supported			
Rollers and Tracking System			X	Non Existent	Screw type conveyor
Support		1 Excellent			
Trough Wear - Structural Metal Condition		2 Minor Deterioration			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.31

Consequence Score 4.60

Risk Score 7.82

Likelihood Score 1.70

Photo(s)



Asset Description **Cake Bin Discharge Conveyor**

System **Solids Handling**

Asset Type **CONVEYOR**

Location **D&D**

Asset ID **CNV78-20200**

Inspection Date **4/3/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Hydraulic Pressure			X	Non Existent	Motor driven conveyor
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
Auger Wear - Structural Metal Condition		2 Minor Corrosion			
Bearings		2 Minor Wear			
Belt/Chain			X	Non Existent	Direct driven
Controls		1 Excellent			
Corrosion - Metal		2 Minor Corrosion			
Drive Assembly		1 Excellent			
Motor Coupling		2 Minor Wear But No Misalignment			
Obsolescence		1 Current, Supported			
Rollers and Tracking System			X	Non Existent	Screw type conveyor
Support		1 Excellent			
Trough Wear - Structural Metal Condition		2 Minor Deterioration			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.31

Consequence Score 4.60

Risk Score 7.82

Likelihood Score 1.70

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Dryer Feed Conveyor	System	Solids Handling
Asset Type	CONVEYOR	Location	D&D
Asset ID	CNV78-20300	Inspection Date	4/3/2019
Comments	Inspection for Seepex progressing cavity pump / auger	Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Hydraulic Pressure		1 Yes			
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
Auger Wear - Structural Metal Condition		2 Minor Corrosion			
Bearings		2 Minor Wear			
Belt/Chain			X	Non Existent	Direct drive
Controls		1 Excellent			
Corrosion - Metal		2 Minor Corrosion			
Drive Assembly		1 Excellent			
Motor Coupling		2 Minor Wear But No Misalignment			
Obsolescence		1 Current, Supported			
Rollers and Tracking System			X	Non Existent	Progressing cavity pump
Support		1 Excellent			
Trough Wear - Structural Metal Condition			X	Non Existent	Progressing cavity pump

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.25 Consequence Score 4.60

Risk Score 7.82 Likelihood Score 1.70

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Dryer Discharge Conveyor	System	Solids Handling
Asset Type	CONVEYOR	Location	D&D
Asset ID	CNV78-20800	Inspection Date	4/3/2019
Comments	The auger shaft has warped from heat issues. Gear reducer has eccentric movement from the bent shaft	Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		5 no			
Acceptable Hydraulic Pressure			X	Non Existent	Motor driven conveyor
Acceptable Noise		5 no			Shaft is bent
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		5 no			
Acceptable Vibration		5 no			
All Components		1 yes			
All Safety Features Present		1 yes			
Auger Wear - Structural Metal Condition		5 Severe Pitting			
Bearings		2 Minor Wear			
Belt/Chain			X	Non Existent	Direct driven
Controls		1 Excellent			
Corrosion - Metal		5 Severe Pitting			
Drive Assembly		3 Moderate Wear			
Motor Coupling		4 Major Wear			
Obsolescence		5 Obsolete, Not Supported			
Rollers and Tracking System			X	Non Existent	Screw type conveyor
Support		1 Excellent			
Trough Wear - Structural Metal Condition		5 Failure Imminent			

Condition Category Poor. Condition Grade 4. Unable to meet level of service life. Failure imminent.

Condition Score 3.38 Consequence Score 4.60

Risk Score 23.00 Likelihood Score 5.00

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Dry Product Cooling Conveyor	System	Solids Handling
Asset Type	CONVEYOR	Location	D&D
Asset ID	CNV78-20900	Inspection Date	4/3/2019
Comments	The first 9 feet of the conveyor flight was replaced a few year's back. The entire conveyor auger is in need of replacement. The gear box could not be removed during the last repair, and will have to be replaced with the next repair.		Flag

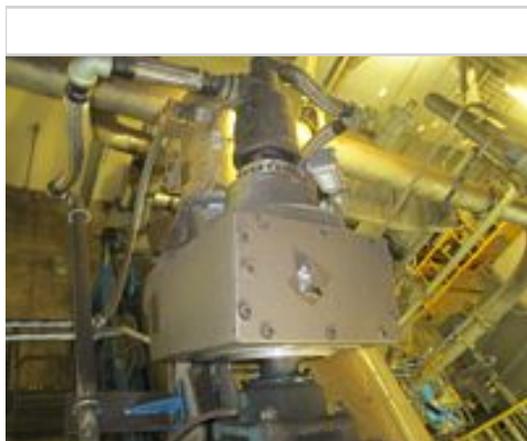
Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		5 no			
Acceptable Hydraulic Pressure			X	Non Existent	Motor driven conveyor
Acceptable Noise		5 no			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		5 no			
Acceptable Vibration		5 no			
All Components		1 yes			
All Safety Features Present		1 yes			
Auger Wear - Structural Metal Condition		5 Severe Pitting			
Bearings		4 Major Wear			
Belt/Chain			X	Non Existent	Direct driven
Controls		1 Excellent			
Corrosion - Metal		5 Severe Pitting			
Drive Assembly		3 Moderate Wear			
Motor Coupling		2 Minor Wear But No Misalignment			
Obsolescence		1 Current, Supported			
Rollers and Tracking System			X	Non Existent	Screw type conveyor
Support		1 Excellent			
Trough Wear - Structural Metal Condition		5 Failure Imminent			

Condition Category Poor. Condition Grade 4. Unable to meet level of service life. Failure imminent.

Condition Score 3.12 Consequence Score 4.60

Risk Score 23.00 Likelihood Score 5.00

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Cent #1 Discharge Conveyor	System	Solids Handling
Asset Type	CONVEYOR	Location	D&D
Asset ID	CNV78-30201	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Hydraulic Pressure			X	Non Existent	
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
Auger Wear - Structural Metal Condition		2 Minor Corrosion			
Bearings		2 Minor Wear			
Belt/Chain			X	Non Existent	Direct drive
Controls		1 Excellent			
Corrosion - Metal		1 Like New			
Drive Assembly		1 Excellent			
Motor Coupling		2 Minor Wear But No Misalignment			
Obsolescence		1 Current, Supported			
Rollers and Tracking System			X	Non Existent	Screw type conveyor
Support		1 Excellent			
Trough Wear - Structural Metal Condition		2 Minor Deterioration			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.25	Consequence Score	4.60
Risk Score	7.82	Likelihood Score	1.70

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Cent #2 Discharge Conveyor	System	Solids Handling
Asset Type	CONVEYOR	Location	D&D
Asset ID	CNV78-30202	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Hydraulic Pressure			X	Non Existent	
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
Auger Wear - Structural Metal Condition		2 Minor Corrosion			
Bearings		2 Minor Wear			
Belt/Chain			X	Non Existent	Direct drive
Controls		1 Excellent			
Corrosion - Metal		1 Like New			
Drive Assembly		1 Excellent			
Motor Coupling		2 Minor Wear But No Misalignment			
Obsolescence		1 Current, Supported			
Rollers and Tracking System			X	Non Existent	Screw type conveyor
Support		1 Excellent			
Trough Wear - Structural Metal Condition		2 Minor Deterioration			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.25	Consequence Score	4.60
Risk Score	7.82	Likelihood Score	1.70

Photo(s)



Asset Description **Retractable Loadout Chute #1**

System **Solids Handling**

Asset Type **CONVEYOR**

Location **D&D**

Asset ID **CTE78-10201**

Inspection Date **4/3/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Hydraulic Pressure			X	Non Existent	Motor driven conveyor
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
Auger Wear - Structural Metal Condition			X	Non Existent	Retractable chute
Bearings		2 Minor Wear			
Belt/Chain		2 Minor Wear			
Controls		1 Excellent			
Corrosion - Metal		2 Minor Corrosion			
Drive Assembly		1 Excellent			
Motor Coupling		2 Minor Wear But No Misalignment			
Obsolescence		1 Current, Supported			
Rollers and Tracking System			X	Non Existent	Retractable chute
Support		1 Excellent			
Trough Wear - Structural Metal Condition			X	Non Existent	Retractable chute

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.27

Consequence Score 4.60

Risk Score 7.82

Likelihood Score 1.70

Photo(s)



Asset Description	Retractable Loadout Chute #2	System	Solids Handling
Asset Type	CONVEYOR	Location	D&D
Asset ID	CTE78-10202	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Hydraulic Pressure			X	Non Existent	Motor driven conveyor
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
Auger Wear - Structural Metal Condition			X	Non Existent	Retractable chute
Bearings		2 Minor Wear			
Belt/Chain		2 Minor Wear			
Controls		1 Excellent			
Corrosion - Metal		2 Minor Corrosion			
Drive Assembly		1 Excellent			
Motor Coupling		2 Minor Wear But No Misalignment			
Obsolescence		1 Current, Supported			
Rollers and Tracking System			X	Non Existent	Retractable chute
Support		1 Excellent			
Trough Wear - Structural Metal Condition			X	Non Existent	Retractable chute

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.27 Consequence Score 4.60

Risk Score 7.82 Likelihood Score 1.70

Photo(s)



Asset Description	Retractable Loadout Chute #3	System	Solids Handling
Asset Type	CONVEYOR	Location	D&D
Asset ID	CTE78-10203	Inspection Date	4/3/2019
Comments	Load out chute 3 is failed, and left in the "up" position to facilitate trailer movement.	Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Hydraulic Pressure			X	Non Existent	Motor driven conveyor
Acceptable Noise		5 no			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		5 no			
All Components		5 no			
All Safety Features Present		1 yes			
Auger Wear - Structural Metal Condition			X	Non Existent	Retractable chute
Bearings		2 Minor Wear			
Belt/Chain		2 Minor Wear			
Controls		1 Excellent			
Corrosion - Metal		2 Minor Corrosion			
Drive Assembly		5 Failure Imminent			
Motor Coupling		2 Minor Wear But No Misalignment			
Obsolescence		1 Current, Supported			
Rollers and Tracking System			X	Non Existent	Retractable chute
Support		1 Excellent			
Trough Wear - Structural Metal Condition			X	Not Evaluated	Retractable chute

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 2.33

Consequence Score 4.60

Risk Score 12.88

Likelihood Score 2.80

Photo(s)



Asset Description	Bio Solids Dryer	System	Solids Handling
Asset Type	DRYER	Location	D&D
Asset ID	CNV78-20700	Inspection Date	4/3/2019
Comments	<p>The dryer shell has eroded and corroded through in several areas, and is currently patched with high temperature silicon sealant and muffler tape. Hardware and welds have rotted away. The scroll is heavily pitted, bearings, seals are at the end of their service life. While the dryer is still operable, a catastrophic failure may happen at any time.</p>		Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		5 no			
All Components		1 yes			
All Safety Features Present		1 yes			
Conduit and Supports		5 Very Poor			
Control Switches		2 Good			
Corrosion - Metal		5 Severe Pitting			
Drain System Clogs		5 Clogged Or Inadequate, Backed Up			
Drive Assembly		3 Moderate Wear			
Obsolescence		5 Obsolete, Not Supported			
Pipe System		5 Failure Imminent			
Tubing/Connections		5 Obstructed/Loose			

Condition Category Fair. Condition Grade 3. Major wear impacting level of service.

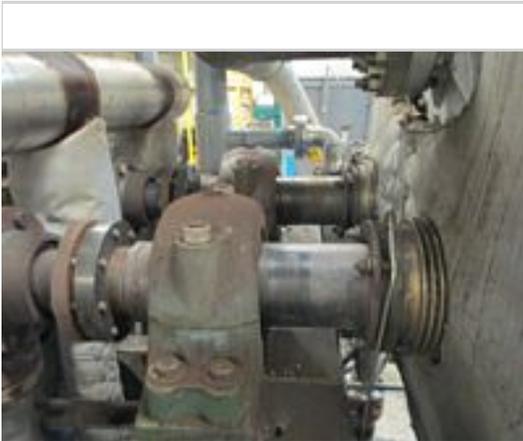
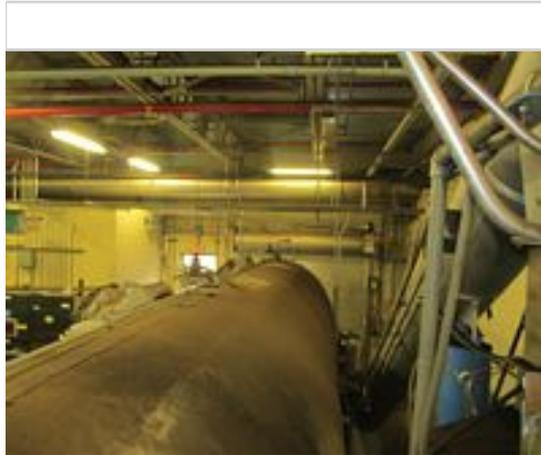
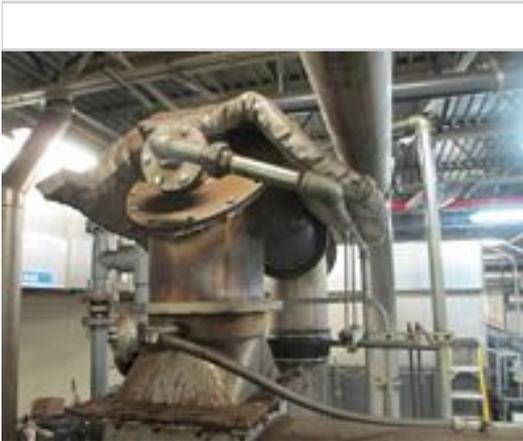
Condition Score 3.82 Consequence Score 4.60

Risk Score 21.16 Likelihood Score 4.60

Photo(s)



Photo(s)



Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Exhaust Fan #1	System	Solids Handling
Asset Type	FAN	Location	D&D
Asset ID	EXF78-01	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Guards Present		1 yes			
Belt		2 Minor Wear			
Controls		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Duct Work		1 Excellent			
Fan and Fan Motor		1 Excellent			
Installation/ Accessibility		1 Excellent			
Structural Integrity		1 Excellent			
Support		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.19 Consequence Score 5.05

Risk Score 8.58 Likelihood Score 1.70



Wilsonville Asset Condition Assessment Report

Asset Description	Exhaust Fan #2	System	Solids Handling
Asset Type	FAN	Location	D&D
Asset ID	EXF78-02	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Guards Present		1 yes			
Belt		2 Minor Wear			
Controls		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Duct Work		1 Excellent			
Fan and Fan Motor		1 Excellent			
Installation/ Accessibility		1 Excellent			
Structural Integrity		1 Excellent			
Support		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.19 Consequence Score 5.05

Risk Score 8.58 Likelihood Score 1.70



Wilsonville Asset Condition Assessment Report

Asset Description	Exhaust Fan #3	System	Solids Handling
Asset Type	FAN	Location	D&D
Asset ID	EXF78-03	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Guards Present		1 yes			
Belt		2 Minor Wear			
Controls		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Duct Work		1 Excellent			
Fan and Fan Motor		1 Excellent			
Installation/ Accessibility		1 Excellent			
Structural Integrity		1 Excellent			
Support		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.19 Consequence Score 5.05

Risk Score 8.58 Likelihood Score 1.70



Wilsonville Asset Condition Assessment Report

Asset Description	Exhaust Fan #4	System	Solids Handling
Asset Type	FAN	Location	D&D
Asset ID	EXF78-04	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Guards Present		1 yes			
Belt		2 Minor Wear			
Controls		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Duct Work		1 Excellent			
Fan and Fan Motor		1 Excellent			
Installation/ Accessibility		1 Excellent			
Structural Integrity		1 Excellent			
Support		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.19 Consequence Score 5.05

Risk Score 8.58 Likelihood Score 1.70

Asset Description **Thermal Heater System**

System **Solids Handling**

Asset Type **HEATER-IMMERSION**

Location **D&D**

Asset ID **HTR78-20400**

Inspection Date **4/2/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
All Safety Features Present		1 yes			
Conduit and Supports		2 Good			
Controls		1 Excellent			
Corrosion - Metal		2 Minor Corrosion			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.29

Consequence Score 3.40

Risk Score 8.16

Likelihood Score 2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Heater AHU78-01	System	Solids Handling
Asset Type	HVAC	Location	D&D
Asset ID	AHU78-01	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Corrosion		2 Minor			
Operating at Inspection		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.25 Consequence Score 1.90

Risk Score 4.37 Likelihood Score 2.30



Wilsonville Asset Condition Assessment Report

Asset Description	Make Up Air Unit	System	Solids Handling
Asset Type	HVAC	Location	D&D
Asset ID	MAU78-01	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Corrosion		2 Minor			
Operating at Inspection		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.25 Consequence Score 1.90

Risk Score 4.37 Likelihood Score 2.30

Photo(s)



Asset Description	Visibility / Dust Monitor	System	Solids Handling
Asset Type	INSTRUMENT	Location	D&D
Asset ID	AE_AIT78-10600	Inspection Date	4/4/2019
Comments	This instrument is functional but useless.	Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		5 Unable to Calibrate or not Calibrated			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.47 Consequence Score 3.25

Risk Score 6.18 Likelihood Score 1.90

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description **MCC 78-01A**

System **Solids Handling**

Asset Type **MCC**

Location **D&D**

Asset ID **MCC78-01A**

Inspection Date **4/2/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Connections Ok		1 yes			
Correct Components		1 yes			
Corrosion - Structural Metal Condition?		1 Like new			
Good House Keeping		1 yes			
Infrared		2 Normal			
Installation/ Accessibility		1 Excellent			
Internal Condition		1 Negligible			
Structural Integrity		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.25

Consequence Score 4.60

Risk Score 10.12

Likelihood Score 2.20

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description **MCC 78-01B**

System **Solids Handling**

Asset Type **MCC**

Location **D&D**

Asset ID **MCC78-01B**

Inspection Date **4/2/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Connections Ok		1 yes			
Correct Components		1 yes			
Corrosion - Structural Metal Condition?		1 Like new			
Good House Keeping		1 yes			
Infrared		2 Normal			
Installation/ Accessibility		1 Excellent			
Internal Condition		1 Negligible			
Structural Integrity		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.25

Consequence Score 4.60

Risk Score 10.12

Likelihood Score 2.20

Photo(s)



Asset Description	Foul Air Humidifier	System	Solids Handling
Asset Type	ODOR EQUIP	Location	D&D
Asset ID	HUM91-11500	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Drainage		1 yes			
Acceptable Smell or Heat		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
Coating Condition			X	Non Existent	
Controls		1 Excellent			
Corrosion - Concrete		2 Staining			
Corrosion - Metal		2 Minor Corrosion			
Duct Work			X	Non Existent	
Fan and Fan Motor			X	Non Existent	
Installation/Accessibility		1 Installed properly, easy to access			
Valves		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.20 Consequence Score 4.90

Risk Score 11.76 Likelihood Score 2.40

Photo(s)



Asset Description	Vent Scrubber / Condenser	System	Solids Handling
Asset Type	ODOR EQUIP	Location	D&D
Asset ID	SCB78-20600	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Drainage		1 yes			
Acceptable Smell or Heat		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
Coating Condition			X	Non Existent	
Controls		1 Excellent			
Corrosion - Concrete			X	Non Existent	
Corrosion - Metal		2 Minor Corrosion			
Duct Work		1 Excellent			
Fan and Fan Motor			X	Non Existent	
Installation/Accessibility		1 Installed properly, easy to access			
Valves		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.10	Consequence Score	4.90
Risk Score	11.76	Likelihood Score	2.40

Photo(s)



Asset Description **Centrifuge #1 Polyblend Unit**

System **Solids Handling**

Asset Type **POLYBLEND**

Location **D&D**

Asset ID **PLB78-31001**

Inspection Date **4/2/2019**

Comments

Flag

Question	Overriding?	Answer		NA	Flag	Answer Comment
Absence of Leaks		5	no			Leaking at packing of metering pump
All Safety Features Present		1	yes			
Control Gauges		2	Good			
Control Lamps		2	Good			
Control Switches		2	Good			
Corrosion - Metal		2	Minor Corrosion			
Drive Assembly		1	Excellent			
Mechanical - Pumps		3	10 to 20% needs maintenance			

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 2.25

Consequence Score 4.30

Risk Score 12.04

Likelihood Score 2.80

Photo(s)



Asset Description **Centrifuge #2 Polyblend Unit**

System **Solids Handling**

Asset Type **POLYBLEND**

Location **D&D**

Asset ID **PLB78-31002**

Inspection Date **4/2/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		5 no			Leaking at packing of metering pump
All Safety Features Present		1 yes			
Control Gauges		2 Good			
Control Lamps		2 Good			
Control Switches		2 Good			
Corrosion - Metal		2 Minor Corrosion			
Drive Assembly		1 Excellent			
Mechanical - Pumps		3 10 to 20% needs maintenance			

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 2.25

Consequence Score 4.30

Risk Score 12.04

Likelihood Score 2.80

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Dryer Cooling Tower Spray Pump	System	Solids Handling
Asset Type	PUMP-CENT	Location	D&D
Asset ID	PMP78-41000	Inspection Date	4/4/2019
Comments	This equipment is not used. The condensate that was to be cooled by the tower contains too much grease, and would foul the cooling tower	Flag	Not Evaluated

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks					
Absence of Pump Cavitation					
Acceptable Noise					
Acceptable Smell or Heat					
Acceptable Vibration					
Accessibility					
All Components					
All Safety Features Present					
Bearings					
Belt/Direct Drive/Couplings					
Check Valve					
Controls					
Corrosion - Metal					
Corrosion - Visible Coating Condition					
Drive Shaft					
Gallons per kW					
Gauges Operational					
Infrared					
Installation					
Isolation Valves Operational					
Lubrication OK at Inspection					
Mounting					
Obsolescence					
Oil Seal					
Packing Gland/Mechanical Seal					
Pipe Alignment					
Temperature - Bearing					
Vibration Analysis (0.10 in/sec)					

Condition Category Incomplete

Condition Score 0

Consequence Score 5.65

Risk Score 0

Likelihood Score 0

Photo(s)





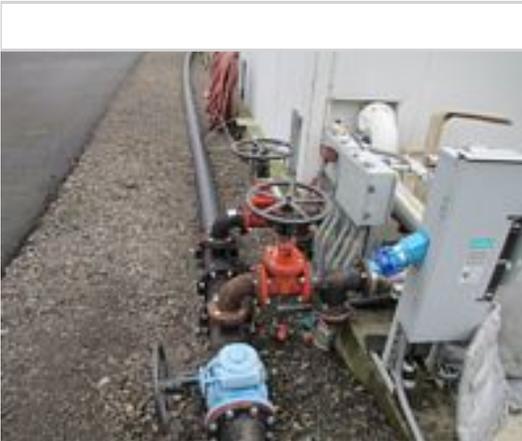
Wilsonville Asset Condition Assessment Report

Asset Description	Centrifuge Feed Pump #1	System	Solids Handling
Asset Type	PUMP-PROG CAV	Location	D&D
Asset ID	PMP82-20001	Inspection Date	4/3/2019
Comments	These vertical, submersed progressing cavity pumps were undersized (50 GPM). Are currently unused, replaced with Vogelsang rotary lobe pumps.	Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		5 no			
Acceptable Noise			X		
Acceptable Smell or Heat			X		
All Safety Features Present			X		
Coating Condition			X		
Corrosion			X		
Drive Assembly			X		
Obsolescence			X		
Tubing/Connections			X		

Condition Category	Very poor. Grade 5. Requires complete rehabilitation or replacement. Failed.		
Condition Score	5.00	Consequence Score	5.65
Risk Score	38.70	Likelihood Score	6.85

Photo(s)



These vertical, submersed progressing cavity pumps were undersized (50 GPM). Are currently unused, replaced with Vogelsang rotary lobe pumps.

These vertical, submersed progressing cavity pumps were undersized (50 GPM). Are currently unused, replaced with Vogelsang rotary lobe pumps.

Asset Description	Centrifuge Feed Pump #2	System	Solids Handling
Asset Type	PUMP-PROG CAV	Location	D&D
Asset ID	PMP82-20002	Inspection Date	4/3/2019
Comments	These vertical, submersed progressing cavity pumps were undersized (50 GPM). Are currently unused, replaced with Vogelsang rotary lobe pumps.	Flag	

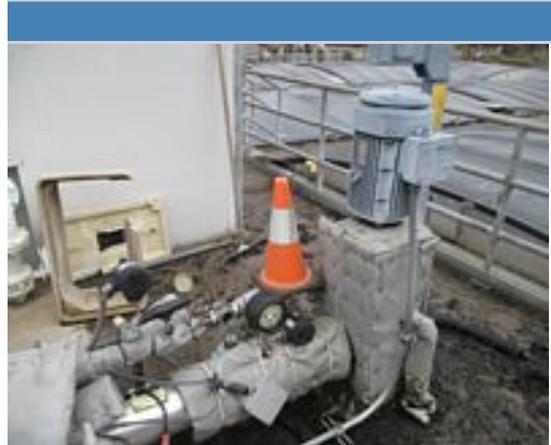
Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		5 no			
Acceptable Noise			X		
Acceptable Smell or Heat			X		
All Safety Features Present			X		
Coating Condition			X		
Corrosion			X		
Drive Assembly			X		
Obsolescence			X		
Tubing/Connections			X		

Condition Category Very poor. Grade 5. Requires complete rehabilitation or replacement. Failed.

Condition Score 5.00 Consequence Score 5.65

Risk Score 38.70 Likelihood Score 6.85

Photo(s)



Photo(s)



These vertical, submersed progressing cavity pumps were undersized (50 GPM). Are currently unused, replaced with Vogelsang rotary lobe pumps.

These vertical, submersed progressing cavity pumps were undersized (50 GPM). Are currently unused, replaced with Vogelsang rotary lobe pumps.



These vertical, submersed progressing cavity pumps were undersized (50 GPM). Are currently unused, replaced with Vogelsang rotary lobe pumps.

Asset Description **Dryer Condenser Sump Pump**

System **Solids Handling**

Asset Type **PUMP-SUB**

Location **D&D**

Asset ID **PMP78-40100**

Inspection Date **4/4/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Cavitation		1 yes			
Absence of Leaks		1 yes			
Acceptable Noise		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
Amperage Draw		1 Below Nameplate			
Chain/Cables/Rails		2 Minor Wear			
Check Valve Operates Properly		1 Excellent			
Connections Ok		1 yes			
Corrosion - Metal		2 Minor Corrosion			
Discharge Piping Condition		1 Corrosion Free, No Known Issues			
Festoon and Power Cable Condition		1 Excellent			
Installation		2 Normal			
Insulation Resistance (10 Meg Ohm)	Yes	1 > 10.0 Meg Ohm			500 Meg Ohms
Obsolescence		1 Current, Supported			
Oil OK at Inspection		1 yes			
Perfromance History		1 Yes			
Pump Rails		1 Excellent			
Valves		1 Excellent			
Volt and Amp Balance		1 V < +/- 1% ; A < +/- 5% FLA			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.14

Consequence Score 5.65

Risk Score 14.69

Likelihood Score 2.60

Photo(s)



Asset Description	Humidifier Flow Valve	System	Solids Handling
Asset Type	VALVE-BUTTERFLY	Location	D&D
Asset ID	FV91-11600	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Support		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 2.80

Risk Score 6.72 Likelihood Score 2.40



Asset Description **Load Out Slide Gate**

System **Solids Handling**

Asset Type **VALVE-SLIDE**

Location **D&D**

Asset ID **SL78-10300**

Inspection Date **4/3/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Oil/Grease		1 yes			
Actuator		2 Minor			
All Components		1 yes			
Coating Condition			X	Non Existent	Stainless steel
Corrosion - Concrete			X	Non Existent	
Corrosion - Mechanical Metals		2 Slight staining/small chips/holes in coating			
Corrosion - Metal		2 Minor Corrosion			
Exercise Program		1 Adequate schedule and met			
Functional		2 Fully Opens/Closes with Some Assistance			
Lubrication OK at Inspection		1 yes			
Manual Operator			X	Non Existent	
Metal Condition		2 Corrosion Staining			
Mounting		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.42

Consequence Score 1.60

Risk Score 3.04

Likelihood Score 1.90

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Thickened Biosolids Pump	System	Solids Handling
Asset Type	PUMP PD	Location	Process Gallery
Asset ID	PGB-P-80-6	Inspection Date	4/4/2019
Comments	The gravity belts and the associated equipment were not running due to the sludge dryer running better with WAS rather than TWAS. It was not in operation at the time of the assessment.	Flag	Not Evaluated

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks					
Acceptable Noise					
Acceptable Smell or Heat					
All Safety Features Present					
Coating					
Corrosion					
Drive Motor					
Obsolescence					
Operating at Inspection					
Tubing / Connections					

Condition Category Incomplete

Condition Score 0

Consequence Score 4.90

Risk Score 0

Likelihood Score 0



Wilsonville Asset Condition Assessment Report

Asset Description	TWAS Progressing Cavity Pump	System	Solids Handling
Asset Type	PUMP PD	Location	Process Gallery
Asset ID	PGB-P-80-7	Inspection Date	4/4/2019
Comments	The gravity belts and the associated equipment were not running due to the sludge dryer running better with WAS rather than TWAS. It was not in operation at the time of the assessment.	Flag	Not Evaluated

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks					
Acceptable Noise					
Acceptable Smell or Heat					
All Safety Features Present					
Coating					
Corrosion					
Drive Motor					
Obsolescence					
Operating at Inspection					
Tubing / Connections					

Condition Category Incomplete

Condition Score 0

Consequence Score 4.90

Risk Score 0

Likelihood Score 0



Wilsonville Asset Condition Assessment Report

Asset Description **Process Gallery Basement**

System **Solids Handling**

Asset Type **STRUCTURE**

Location **Process Gallery**

Asset ID **PGB**

Inspection Date **4/4/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Access Doors		1 1			
Architectural - Ceilings		1 Acceptable			
Architectural - Floors		2 Good			
Architectural - Roof		1 Acceptable			
Architectural - Windows - Physical Integrity/Appearance			X	Non Existent	
Corrosion - Cathodic Protection			X	Non Existent	
Corrosion - Concrete		2 Staining			
Corrosion - Mechanical/Piping Metal Condition		2 Minor Corrosion			
Corrosion - Metal		2 Minor Corrosion			
Corrosion - Pipes		2 Staining/chipping			
Corrosion - Soil Resistivity			X	Not Evaluated	
Corrosion - Visible Coating Condition			X	Non Existent	
Corrosion - Visible Concrete Condition		1 Like new			
Duct Work		1 Excellent			
External Wall		1 Very Good			
Fire Extinguisher Present/Certification Current		1 yes			
Handrails		2 Good			
Installation		1 Excellent			
Internal Wall		1 Very Good			
Lighting		1 Very Good			
Pipe System		1 Excellent			
Safety (General Review)		1 Very Good			
Stairs		1 Very Good			
Structural - Above Grade - Structure Irregularities/Code			X	Not Evaluated	Basement - below grade
Structural - Aboveground Pipe			X	Not Evaluated	Basement - below grade
Structural - Building and System Piping		2 Flexibility and bracing provided			
Structural - Columns		1 Very Good			
Structural - Condition of Foundations		1 No movement			
Structural - Connections in Lateral Force Resisting Systems		1 Direct Positive Connection Between Horizontal Transfer Elements (Diaphragm Or Bracing) And V			
Structural - Equipment Anchorage - Epoxy-Cast-In-Place or Wedge Anchors		1 Anchors/Bolts All Present And Fully Embedded And/Or Threaded			
Structural - Load Path/Redundancy		1 Complete Load Path To Foundation - 3 Or More Vertical Resisting Elements In Each Direction			
Structural - Piping Connections to Above Ground Facilities		2 Connections present, full flexibility			
Structural - Seismic		1 FEMA 154 score>3			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.29 Consequence Score 5.50

Risk Score 13.20 Likelihood Score 2.40



Wilsonville Asset Condition Assessment Report

Asset Description **Filtrate Pump VFD**

System

Solids Handling

Asset Type **VFD**

Location

Sec Process

Asset ID **VFD45-02001**

Inspection Date

4/3/2019

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
All Safety Features Present		1 yes			
Connections Ok		1 yes			
Corrosion - Mechanical Metals		1 Like New			
Display/Indicator Ok		1 yes			
General Appearance		1 Excellent			
Good Wire Labeling		1 yes			
Obsolescence		1 Current and supported			
Operates Properly		1 yes			
Operating at Inspection		1 yes			
Ventilation Fan		2 Slight Deficiency			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.10

Consequence Score 0

Risk Score 0

Likelihood Score 0



Wilsonville Asset Condition Assessment Report

Asset Description	GBT Feed Pump #1 VFD	System	Solids Handling
Asset Type	VFD	Location	Sec Process
Asset ID	VFD82-10001	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
All Safety Features Present		1 yes			
Connections Ok		1 yes			
Corrosion - Mechanical Metals		1 Like New			
Display/Indicator Ok		1 yes			
General Appearance		1 Excellent			
Good Wire Labeling		1 yes			
Obsolescence		1 Current and supported			
Operates Properly		1 yes			
Operating at Inspection		1 yes			
Ventilation Fan		2 Slight Deficiency			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.10	Consequence Score	4.30
Risk Score	7.31	Likelihood Score	1.70

Asset Description	Process Gallery Exhaust fan #3	System	Support Equipment
Asset Type	FAN	Location	
Asset ID	PG-40-EF-03	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Guards Present		1 yes			
Belt		2 Minor Wear			
Controls		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Duct Work		1 Excellent			
Fan and Fan Motor		1 Excellent			
Installation/ Accessibility		1 Excellent			
Structural Integrity		1 Excellent			
Support		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.19 Consequence Score 5.05

Risk Score 9.60 Likelihood Score 1.90

Photo(s)



Photo(s)

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	D&D Area Generator Set	System	Support Equipment
Asset Type	GENERATOR	Location	D&D
Asset ID	GEN78-01	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
Air Filter		1 Excellent			
All Components		1 yes			
All Safety Guards Present		1 yes			
Automatic Transfer Switch		1 Excellent			
Battery/ Charging System		1 Excellent			
Control Gauges (Hour Meters Volts & Amps)		2 Good			
Control Switches		2 Good			
Cooling System		1 Proper Coolant Additives No Corrosion			
Corrosion - Structural Metal Condition?		1 Like new			
Exhaust System		1 Excellent			
Heater Jacket		1 Excellent			
Hoses and Belts		1 Excellent			
Monitoring Panel		1 Excellent			
Oil OK at Inspection		1 yes			
Oil Pressure		1 Good			
Running at Inspection		1 yes			
Starting System		1 Proper Operation			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.10 Consequence Score 1.90

Risk Score 4.37 Likelihood Score 2.30

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Air Conditioner ACU78-01	System	Support Equipment
Asset Type	HVAC	Location	D&D
Asset ID	ACU78-01	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Corrosion		1 Negligible			
Operating at Inspection		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 1.60

Risk Score 1.60 Likelihood Score 1.00



Wilsonville Asset Condition Assessment Report

Asset Description	Air Conditioner ACU78-02	System	Support Equipment
Asset Type	HVAC	Location	D&D
Asset ID	ACU78-02	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Corrosion		1 Negligible			
Operating at Inspection		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 1.30

Risk Score 1.30 Likelihood Score 1.00



Wilsonville Asset Condition Assessment Report

Asset Description	Truck Scale	System	Support Equipment
Asset Type	SCALE	Location	D&D
Asset ID	WE78-10500	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Calibration		2 Occasionally Found Out of Calibration			
Certification Current		1 yes			
Corrosion - Metal		2 Minor Corrosion			
Display Ok		1 yes			
Line Load and Signal Protection		1 Yes			
Obsolescence		1 Current, Supported			
Safety Devices		1 Excellent			
UPS System		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.25	Consequence Score	2.80
Risk Score	6.72	Likelihood Score	2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	UPS 78-01	System	Support Equipment
Asset Type	UPS	Location	D&D
Asset ID	UPS78-01	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Acceptable Noise		1 yes			
Acceptable Smell or Heat		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
Ambient Environment		1 No Environmental Impact			
Control Switches		2 Good			
Good Housekeeping		1 Yes			
Monitoring Panel		1 Excellent			
Obsolescence		1 Current, Supported			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.10	Consequence Score	4.00
Risk Score	9.60	Likelihood Score	2.40



Wilsonville Asset Condition Assessment Report

Asset Description	Rotary Valve	System	Support Equipment
Asset Type	VALVE	Location	D&D
Asset ID	VLV78-21100	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Noise		1 yes			
Actuator		2 Minor			
All Components		1 yes			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Lubrication OK at Inspection		1 yes			
Manual Operator			X	Non Existent	
Packing Gland		2 Normal			
Pipe Alignment		1 Straight			
Support		1 Excellent			
Valve Isolates (Holds)		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

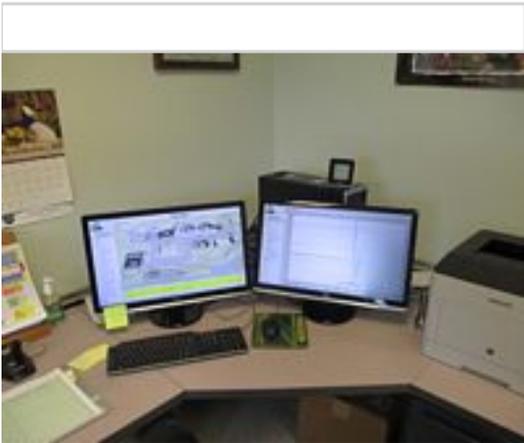
Condition Score	1.30	Consequence Score	1.60
Risk Score	3.04	Likelihood Score	1.90

Asset Description	Wastewater Plant SCADA system	System	Support Equipment
Asset Type	SCADA	Location	Operations Building
Asset ID	SCADA	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Communication		2 Good			
Display Ok		1 yes			
Good Wire Labeling		1 yes			
I/O Capacity		2 10% Spares			
I/O Functionality		1 Excellent			
Instrumentation - UPS		1 Normal Maintenance			
PLC Standard		1 Meets Standards			
Proper Drawings Accessible		1 yes			
Redundancy		1 yes			
Signal		2 Normal Operation			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.30	Consequence Score	3.40
Risk Score	8.16	Likelihood Score	2.40



Asset Description	Plant Drain Pump Control Panel	System	Support Equipment
Asset Type	CONTROL PANEL	Location	Plant Drain
Asset ID	LCP96-10000	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Acceptable Smell or Heat		1 yes			
All Safety Features Present		1 yes			
Control Switches		2 Good			
Good House Keeping		1 yes			
Good Wire Labeling		1 yes			
Infrared		2 Normal			
Installation		1 Excellent			
Obsolescence		1 Current and supported			
Operating at Inspection		1 yes			
Panel Labeling		1 yes			
Structural (Panel)		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.17 Consequence Score 5.95

Risk Score 10.12 Likelihood Score 1.70

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Flow Element 96-11000	System	Support Equipment
Asset Type	FLOW METER	Location	Plant Drain
Asset ID	FE96-11000	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Grounding		1 yes			
Installation/ Accessibility		2 Minor Defects			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.38 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)



Photo(s)



Wilsonville Asset Condition Assessment Report

Asset Description	Flow Indicator 96-11000	System	Support Equipment
Asset Type	FLOW METER	Location	Plant Drain
Asset ID	FET96-11000	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Calibration		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Grounding		1 yes			
Installation/ Accessibility		2 Minor Defects			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.38 Consequence Score 2.65

Risk Score 6.36 Likelihood Score 2.40

Photo(s)



Photo(s)

Asset Description	Plant Drain Pump #1	System	Support Equipment
Asset Type	PUMP-SUB	Location	Plant Drain
Asset ID	PMP96-10001	Inspection Date	4/1/2019
Comments	Seal fail light on control panel lit at time of inspection	Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Cavitation		1 yes			
Absence of Leaks		5 no			Seal fail light lit at time of inspection
Acceptable Noise		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
Amperage Draw		3 At Nameplate			
Chain/Cables/Rails		2 Minor Wear			
Check Valve Operates Properly		1 Excellent			
Connections Ok		1 yes			
Corrosion - Metal		2 Minor Corrosion			
Discharge Piping Condition		1 Corrosion Free, No Known Issues			
Festoon and Power Cable Condition		2 Minor Wear/deterioration			
Installation		1 Excellent			
Insulation Resistance (10 Meg Ohm)	Yes	3 1.5 - 10.0 Meg Ohm			2.2 Meg Ohms
Obsolescence		1 Current, Supported			
Oil OK at Inspection			X	Not Evaluated	
Performance History		1 Yes			
Pump Rails		1 Excellent			
Valves		1 Excellent			
Volt and Amp Balance		1 V < +/- 1% ; A < +/- 5% FLA			

Condition Category Poor. Condition Grade 4. Unable to meet level of service life. Failure imminent.

Condition Score 3.00 Consequence Score 5.65

Risk Score 29.38 Likelihood Score 5.20

Photo(s)



Asset Description	Plant Drain Pump #2	System	Support Equipment
Asset Type	PUMP-SUB	Location	Plant Drain
Asset ID	PMP96-10002	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Cavitation		1 yes			
Absence of Leaks		1 yes			
Acceptable Noise		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
Amperage Draw		3 At Nameplate			
Chain/Cables/Rails		2 Minor Wear			
Check Valve Operates Properly		1 Excellent			
Connections Ok		1 yes			
Corrosion - Metal		2 Minor Corrosion			
Discharge Piping Condition		1 Corrosion Free, No Known Issues			
Festoon and Power Cable Condition		2 Minor Wear/deterioration			
Installation		1 Excellent			
Insulation Resistance (10 Meg Ohm)	Yes	5 < 1.5 Meg Ohm			0.3 Meg Ohms
Obsolescence		1 Current, Supported			
Oil OK at Inspection			X	Not Evaluated	
Performance History		1 Yes			
Pump Rails		3 Mild Deterioration			
Valves		1 Excellent			
Volt and Amp Balance		1 V < +/- 1% ; A < +/- 5% FLA			

Condition Category Very poor. Grade 5. Requires complete rehabilitation or replacement. Failed.

Condition Score 5.00 Consequence Score 5.65

Risk Score 38.70 Likelihood Score 6.85

Photo(s)



Photo(s)



Asset Description	Air Release Valve 96-12001	System	Support Equipment
Asset Type	VALVE-ARV	Location	Plant Drain
Asset ID	ARV96-12001	Inspection Date	4/1/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Noise		1 yes			
All Components		1 yes			
Connections Ok		1 yes			
Corrosion - Metal		2 Minor Corrosion			
Functional		1 Fully Opens/Closes, Stops on Limits, and Holds Without Assistance			
Functioning Correctly		1 Yes			
Installation		2 Normal			
Installation/Accessibility/Enclosure		1 Excellent			
Media Depth and Condition			X	Non Existent	
PRV Tubing Condition		1 PRV Control Tubing, Connections Excellent			
Site Access		1 Very Good			
Support		2 Minor			
Valve Isolates (Holds)		1 yes			
Vault Cover			X	Non Existent	

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.23 Consequence Score 2.50

Risk Score 6.00 Likelihood Score 2.40

Photo(s)



Asset Description	Biosystems Gas Monitor	System	Support Equipment
Asset Type	INSTRUMENT	Location	Process Control Laboratory
Asset ID	GAS-M-70-1	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Wire Labeling		1 yes			
All Components		1 yes			
Calibration		2 Occasionally Found Out of Calibration			
Connections Ok		1 yes			
Display Ok		1 yes			
Indicator		2 Good			
Installation/ Accessibility		1 Excellent			
Operating at Inspection		1 yes			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.29 Consequence Score 5.05

Risk Score 9.60 Likelihood Score 1.90

Photo(s)



Asset Description	Plant Drain Air Compressor	System	Support Equipment
Asset Type	AIR COMPRESSOR	Location	Process Gallery
Asset ID	PD-PG-1AKB9	Inspection Date	4/5/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
Auto Bleed Valve			X	Non Existent	
Belt		2 Minor Wear			
Control Gauges (Hour Meters Volts & Amps)		2 Good			
Corrosion - Structural Metal Condition?		1 Like new			
Day Tank		1 Excellent			
Operating at Inspection		1 yes			
Structural Integrity		1 Excellent			
Tubing / Connections		2 Normal			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.25 Consequence Score 5.05

Risk Score 9.60 Likelihood Score 1.90

Photo(s)



Asset Description	Process Gallery Exhaust fan #1	System	Support Equipment
Asset Type	FAN	Location	Process Gallery
Asset ID	PG-40-EF-01	Inspection Date	4/4/2019
Comments		Flag	

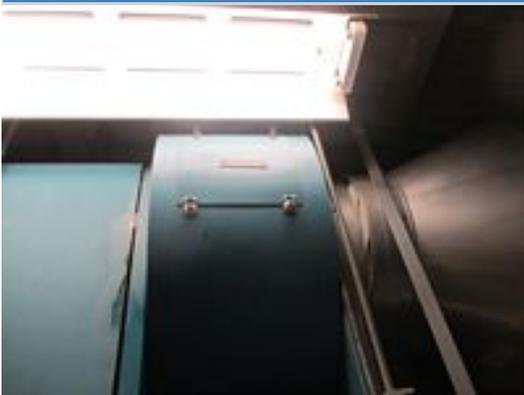
Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Guards Present		1 yes			
Belt		2 Minor Wear			
Controls		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Duct Work		1 Excellent			
Fan and Fan Motor		1 Excellent			
Installation/ Accessibility		1 Excellent			
Structural Integrity		1 Excellent			
Support		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.19 Consequence Score 5.05

Risk Score 9.60 Likelihood Score 1.90

Photo(s)



Photo(s)

Asset Description	Process Gallery Exhaust fan #2	System	Support Equipment
Asset Type	FAN	Location	Process Gallery
Asset ID	PG-40-EF-02	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
All Safety Guards Present		1 yes			
Belt		2 Minor Wear			
Controls		1 Excellent			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Duct Work		1 Excellent			
Fan and Fan Motor		1 Excellent			
Installation/ Accessibility		1 Excellent			
Structural Integrity		1 Excellent			
Support		1 Excellent			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.19 Consequence Score 5.05

Risk Score 9.60 Likelihood Score 1.90

Photo(s)



Asset Description	Galley Air Control Unit	System	Support Equipment
Asset Type	HVAC	Location	Process Gallery
Asset ID	PG-40-ACU-1	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Corrosion		2 Minor			
Operating at Inspection		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.25 Consequence Score 1.90

Risk Score 4.37 Likelihood Score 2.30

Photo(s)



Asset Description	Gallery Air Supply Unit #1	System	Support Equipment
Asset Type	HVAC	Location	Process Gallery
Asset ID	PG-40-ASU-1	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Corrosion		2 Minor			
Operating at Inspection		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.25 Consequence Score 1.90

Risk Score 4.37 Likelihood Score 2.30

Photo(s)



Asset Description	Gallery Air Supply Unit #2	System	Support Equipment
Asset Type	HVAC	Location	Process Gallery
Asset ID	PG-40-ASU-2	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
Corrosion		2 Minor			
Operating at Inspection		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.25 Consequence Score 1.90

Risk Score 4.37 Likelihood Score 2.30

Photo(s)



Asset Description	Plant Drain Pump #1	System	Support Equipment
Asset Type	PUMP CENT	Location	Process Gallery
Asset ID	PGB-P-45-2-1	Inspection Date	4/5/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Absence of Pump Cavitations		1 yes			
Acceptable Noise		1 yes			
All Safety Guards Present		1 yes			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Mounting		1 Excellent			
Vibration Analysis		2 -Good .039 - .15 inches/sec			0.12" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.29 Consequence Score 5.05

Risk Score 9.60 Likelihood Score 1.90

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description **Process Gallery Sump Pump #1** System **Support Equipment**
Asset Type **SUB PUMP** Location **Process Gallery**
Asset ID **PGB-P-40-01** Inspection Date **4/4/2019**
Comments Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
All Safety Features Present		1 yes			
Insulation Resistance	Yes	1 Greater than 10 Meg Ohm			
Operating at Inspection		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 5.05

Risk Score 9.60 Likelihood Score 1.90



Wilsonville Asset Condition Assessment Report

Asset Description **Process Gallery Sump Pump #2** System **Support Equipment**
Asset Type **SUB PUMP** Location **Process Gallery**
Asset ID **PGB-P-40-02** Inspection Date **4/4/2019**
Comments Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
All Safety Features Present		1 yes			
Insulation Resistance	Yes	1 Greater than 10 Meg Ohm			
Operating at Inspection		1 yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.00 Consequence Score 5.05

Risk Score 9.60 Likelihood Score 1.90



Wilsonville Asset Condition Assessment Report

Asset Description	Secondary Scum Pump	System	Support Equipment
Asset Type	PUMP-CENT	Location	Sec Process
Asset ID	PMP50-20100	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Absence of Pump Cavitation		1 Yes			
Acceptable Noise		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
Accessibility		1 Open, Easy Access			
All Components		1 yes			
All Safety Features Present		1 yes			
Bearings		2 Minor Wear			
Belt/Direct Drive/Couplings			X	Non Existent	Submersible pump
Check Valve		1 Opens, Closes, Seats, No Defects			
Controls		1 Excellent			
Corrosion - Metal		2 Minor Corrosion			
Corrosion - Visible Coating Condition		2 Minor damage			
Drive Shaft			X	Non Existent	Submersible pump
Gallons per kW		1 At BEP			
Gauges Operational		1 Yes			
Infrared			X	Not Evaluated	Submersible pump
Installation		1 Excellent			
Isolation Valves Operational		1 yes			
Lubrication OK at Inspection		1 yes			
Mounting		1 Excellent			
Obsolescence		1 Current, Supported			
Oil Seal		1 Excellent			
Packing Gland/Mechanical Seal		2 Normal			
Pipe Alignment		1 Straight			
Temperature - Bearing			X	Not Found	Submersible pump
Vibration Analysis (0.10 in/sec)			X	Not Evaluated	Submersible pump

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.17 Consequence Score 5.65

Risk Score 14.69 Likelihood Score 2.60



Wilsonville Asset Condition Assessment Report

Asset Description	Transformer 40-01	System	Support Equipment
Asset Type	TRANSFORMER	Location	Sec Process
Asset ID	TX-40-01	Inspection Date	4/3/2019
Comments	Dry type transformer	Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Acceptable Noise		1 yes			
Acceptable Smell or Heat		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
Anchored Correctly		1 Yes			
Arc Flash Boundary Available and Posted		5 No			
Control Gauges (Hour Meters Volts & Amps)			X	Non Existent	Dry type transformer
Control Switches			X	Non Existent	Dry type transformer
Corrosion - Metal		1 Like New			
DGA			X	Non Existent	Dry type transformer
Infrared		2 Normal			
Installation/Accessibility		1 Installed properly, easy to access			
Installation/Accessibility/Serviceability		1 Excellent			
Obsolescence		1 Current, Supported			
Oil Analysis			X	Not Evaluated	Dry type transformer
Oil Level within Range			X	Non Existent	Dry type transformer
Safety Devices		1 Excellent			
Unit is Level		1 Yes			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.36 Consequence Score 4.60

Risk Score 11.04 Likelihood Score 2.40



Wilsonville Asset Condition Assessment Report

Asset Description	UPS 40-01	System	Support Equipment
Asset Type	UPS	Location	Sec Process
Asset ID	UPS40-01	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Burn Marks		1 yes			
Acceptable Noise		1 yes			
Acceptable Smell or Heat		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
Ambient Environment		1 No Environmental Impact			
Control Switches		2 Good			
Good Housekeeping		1 Yes			
Monitoring Panel		1 Excellent			
Obsolescence		1 Current, Supported			

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score	1.10	Consequence Score	4.00
Risk Score	9.60	Likelihood Score	2.40

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description **Secondary Area Generator Set** System **Support Equipment**
 Asset Type **GENERATOR** Location **Secondary Clarifier**
 Asset ID **GEN40-01** Inspection Date **4/4/2019**
 Comments Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Oil/Grease		1 yes			
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
Air Filter		1 Excellent			
All Components		1 yes			
All Safety Guards Present		1 yes			
Automatic Transfer Switch		1 Excellent			
Battery/ Charging System		1 Excellent			
Control Gauges (Hour Meters Volts & Amps)		2 Good			
Control Switches		2 Good			
Cooling System		1 Proper Coolant Additives No Corrosion			
Corrosion - Structural Metal Condition?		1 Like new			
Exhaust System		1 Excellent			
Heater Jacket		1 Excellent			
Hoses and Belts		1 Excellent			
Monitoring Panel		1 Excellent			
Oil OK at Inspection					
Oil Pressure		1 Good			
Running at Inspection		1 yes			
Starting System		1 Proper Operation			

Condition Category Incomplete

Condition Score 0 Consequence Score 1.90

Risk Score 0 Likelihood Score 0

Photo(s)



Asset Description	Plant Air compressor #1	System	Support Equipment
Asset Type	AIR COMPRESSOR	Location	Shop
Asset ID	SHOP-M-30-2-1	Inspection Date	4/4/2019
Comments	Compressor failed, hole in side of block due to failed connecting rod	Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		5 no			
Acceptable Smell or Heat			X		
Acceptable Vibration			X		
All Components			X		
Auto Bleed Valve			X		
Belt			X		
Control Gauges (Hour Meters Volts & Amps)			X		
Corrosion - Structural Metal Condition?			X		
Day Tank			X		
Operating at Inspection			X		
Structural Integrity			X		
Tubing / Connections			X		

Condition Category Very poor. Grade 5. Requires complete rehabilitation or replacement. Failed.

Condition Score 5.00 Consequence Score 5.05

Risk Score 34.59 Likelihood Score 6.85

Photo(s)



Asset Description	Plant Air Compressor #2	System	Support Equipment
Asset Type	AIR COMPRESSOR	Location	Shop
Asset ID	SHOP-M-30-2-2	Inspection Date	4/4/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		5 no			Minor seepage
Acceptable Smell or Heat		1 yes			
Acceptable Vibration		1 yes			
All Components		1 yes			
Auto Bleed Valve		2 2			
Belt		2 Minor Wear			
Control Gauges (Hour Meters Volts & Amps)		2 Good			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Day Tank		1 Excellent			
Operating at Inspection		1 yes			
Structural Integrity		1 Excellent			
Tubing / Connections		2 Normal			

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 1.77

Consequence Score 5.05

Risk Score 15.15

Likelihood Score 3.00

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Portable Air Compressor	System	Support Equipment
Asset Type	COMPRESSOR-AIR	Location	Shop
Asset ID	SHOP-M-30-2-3	Inspection Date	4/4/2019
Comments		Flag	Not Evaluated

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks					
Acceptable Noise					
Acceptable Smell or Heat					
Acceptable Vibration					
Air Dryer/Water Trap Operational					
Air Filter					
All Components					
All Safety Features Present					
Auto Bleed Valve					
Belt					
Coating Condition					
Compressor					
Conduit and Supports					
Control Gauges					
Control Switches					
Corrosion - Metal					
Day Tank					
Infrared					
Insulation Resistance (10 Meg Ohm)					
Motor					
Mounting					
Obsolescence					
Oil Level within Range					
Oil Seal					
Pipe Alignment					
Piping/Connections					
Pressure Relief Valve Functional					
Valves					
Vents Clean					
Vibration Analysis (0.10 in/sec)					
Volt and Amp Balance					

Condition Category Incomplete

Condition Score 0

Consequence Score 5.05

Risk Score 0

Likelihood Score 0



Wilsonville Asset Condition Assessment Report

Asset Description	John Deere Portable Pump	System	Support Equipment
Asset Type	PUMP-CENT	Location	Shop
Asset ID	JD Portable Pump	Inspection Date	4/4/2019
Comments		Flag	Not Evaluated

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks					
Absence of Pump Cavitation					
Acceptable Noise					
Acceptable Smell or Heat					
Acceptable Vibration					
Accessibility					
All Components					
All Safety Features Present					
Bearings					
Belt/Direct Drive/Couplings					
Check Valve					
Controls					
Corrosion - Metal					
Corrosion - Visible Coating Condition					
Drive Shaft					
Gallons per kW					
Gauges Operational					
Infrared					
Installation					
Isolation Valves Operational					
Lubrication OK at Inspection					
Mounting					
Obsolescence					
Oil Seal					
Packing Gland/Mechanical Seal					
Pipe Alignment					
Temperature - Bearing					
Vibration Analysis (0.10 in/sec)					

Condition Category Incomplete

Condition Score 0

Consequence Score 5.35

Risk Score 0

Likelihood Score 0

Asset Description **W-3 Pump #1 Motor**

System

Support Equipment

Asset Type **MOTOR**

Location

W-3 Reuse Station

Asset ID **W3-M-90-1-1**

Inspection Date

4/2/2019

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Smell or Heat		5 no			Running warmer than normal
All Components		1 yes			
All Safety Guards Present		1 yes			
Bearings		2 Minor Wear			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Drive Shaft Alignment		1 Excellent			
Insulation Resistance	Yes		X	Not Evaluated	Monitored by VFD
Oil Level within Range			X	Non Existent	Greased bearings
Operating at Inspection		1 yes			
Structural Integrity		1 Excellent			
Vibration Analysis	Yes	2 2 -Good .039 - .15 inches/sec			0.08" / second

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 1.70

Consequence Score 5.05

Risk Score 15.15

Likelihood Score 3.00

Photo(s)



Asset Description	W-3 Pump #2 Motor	System	Support Equipment
Asset Type	MOTOR	Location	W-3 Reuse Station
Asset ID	W3-M-90-1-2	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Smell or Heat		5 no			Running warmer than normal
All Components		1 yes			
All Safety Guards Present		1 yes			
Bearings		2 Minor Wear			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Drive Shaft Alignment		1 Excellent			
Insulation Resistance	Yes		X	Not Evaluated	Monitored by VFD
Oil Level within Range			X	Non Existent	Greased bearings
Operating at Inspection		1 yes			
Structural Integrity		1 Excellent			
Vibration Analysis	Yes	2 -Good .039 - .15 inches/sec			0.10" / second

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 1.70

Consequence Score 5.05

Risk Score 15.15

Likelihood Score 3.00

Photo(s)



Asset Description	W-3 Pump #3 Motor	System	Support Equipment
Asset Type	MOTOR	Location	W-3 Reuse Station
Asset ID	W3-M-90-1-3	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Acceptable Noise		1 yes			
Acceptable Smell or Heat		5 no			Running warmer than normal
All Components		1 yes			
All Safety Guards Present		1 yes			
Bearings		2 Minor Wear			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Drive Shaft Alignment		1 Excellent			
Insulation Resistance	Yes		X	Not Evaluated	Monitored by VFD
Oil Level within Range			X	Non Existent	Greased bearings
Operating at Inspection		1 yes			
Structural Integrity		1 Excellent			
Vibration Analysis	Yes	2 -Good .039 - .15 inches/sec			0.06" / second

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 1.70

Consequence Score 5.05

Risk Score 15.15

Likelihood Score 3.00

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	W-3 Pump #1	System	Support Equipment
Asset Type	PUMP-VERT TURBINE	Location	W-3 Reuse Station
Asset ID	W3-P-90-1-1	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Cavitation		1 yes			
Absence of Leaks		5 no			Leaking at packing
All Safety Features Present		1 yes			
Coating Condition		3 Moderate Defects			
Corrosion - Metal		2 Minor Corrosion			
Gallons per kW		1 At BEP			
Motor Coupling		2 Minor Wear But No Misalignment			
Packing Gland		3 Maintenance Overdue			
Vibration Analysis (0.10 in/sec)		1 Smooth, < 0.10 in/sec			0.08" / second

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 2.11

Consequence Score 5.05

Risk Score 15.15

Likelihood Score 3.00

Photo(s)



Asset Description	W-3 Pump #2	System	Support Equipment
Asset Type	PUMP-VERT TURBINE	Location	W-3 Reuse Station
Asset ID	W3-P-90-1-2	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Cavitation		1 yes			
Absence of Leaks		1 yes			
All Safety Features Present		1 yes			
Coating Condition		3 Moderate Defects			
Corrosion - Metal		2 Minor Corrosion			
Gallons per kW		1 At BEP			
Motor Coupling		2 Minor Wear But No Misalignment			
Packing Gland		4 Maintenance Required			
Vibration Analysis (0.10 in/sec)		2 Good, 0.10 - 0.20 in/sec			0.10" / second

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 1.89

Consequence Score 5.05

Risk Score 15.15

Likelihood Score 3.00

Photo(s)



Excessive leakage from packing area

Asset Description	W-3 Pump #3	System	Support Equipment
Asset Type	PUMP-VERT TURBINE	Location	W-3 Reuse Station
Asset ID	W3-P-90-1-3	Inspection Date	4/2/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Cavitation		1 yes			
Absence of Leaks		1 yes			
All Safety Features Present		1 yes			
Coating Condition		5 Complete Coating Failure			
Corrosion - Metal		4 Significant Metal Loss			
Gallons per kW		1 At BEP			
Motor Coupling		2 Minor Wear But No Misalignment			
Packing Gland		2 Normal			
Vibration Analysis (0.10 in/sec)		1 Smooth, < 0.10 in/sec			0.06" / second

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 2.00

Consequence Score 5.05

Risk Score 15.15

Likelihood Score 3.00

Photo(s)



Asset Description **W-3 Strainer / Motor**

System **Support Equipment**

Asset Type **STRAINER**

Location **W-3 Reuse Station**

Asset ID **W-3-M-90-1**

Inspection Date **4/2/2019**

Comments

Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
All Components		1 yes			
All Safety Features Present		1 yes			
Controls		1 Excellent			
Corrosion		3 Moderate			
Drive Motor		1 Excellent			
Gearbox		1 Excellent			
General Appearance		3 Maintenance Required			
Isolation Valves Operational		1 yes			
Lubrication		2 Normal			
Piping Condition		3 Slight Deterioration			

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 1.64

Consequence Score 5.05

Risk Score 15.15

Likelihood Score 3.00

Photo(s)



Asset Description	Town Center Lift Pump #1	System	Town Center LS
Asset Type	PUMP CENT	Location	Town Center Liftstation
Asset ID	TOWNCENTER-LS-02-P-1	Inspection Date	4/3/2019
Comments		Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Absence of Pump Cavitations		1 yes			
Acceptable Noise		1 yes			
All Safety Guards Present		1 yes			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Mounting		1 Excellent			
Vibration Analysis		2 -Good .039 - .15 inches/sec			0.10" / second

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.29 Consequence Score 4.30

Risk Score 13.54 Likelihood Score 3.15

Photo(s)





Wilsonville Asset Condition Assessment Report

Asset Description	Town Center Lift Pump #2	System	Town Center LS
Asset Type	PUMP CENT	Location	Town Center Liftstation
Asset ID	TOWNCENTER-LS-02-P-2	Inspection Date	4/3/2019
Comments	This pump replaced with a submersible pump due to priming issues with existing pump. Pump insulation resistance at 132 meg ohms	Flag	

Question	Overriding?	Answer	NA	Flag	Answer Comment
Absence of Leaks		1 yes			
Absence of Pump Cavitations		1 yes			
Acceptable Noise		1 yes			
All Safety Guards Present		1 yes			
Corrosion - Structural Metal Condition?		2 Minor corrosion			
Mounting		1 Excellent			
Vibration Analysis			X	Not Evaluated	Submersible pump

Condition Category Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.

Condition Score 1.17 Consequence Score 4.30

Risk Score 13.54 Likelihood Score 3.15



Wilsonville Asset Condition Assessment Report

Asset Description **Town Center Lift Station** System **Town Center LS**
 Asset Type **SITE** Location **Town Center Liftstation**
 Asset ID **TOWNCENTER-LS-02** Inspection Date **4/3/2019**
 Comments Flag

Question	Overriding?	Answer	NA	Flag	Answer Comment
Civil - Drainage		2 5% needs maintenance			
Civil- Fences and Security		1 Normal maintenance			
Civil- Flood Protection		1 Normal maintenance			
Civil- Roads		1 Normal maintenance			
Civil- Vegetation and Landscaping		3 10 to 20% needs maintenance			
Site Access		1 Very Good			
Site Lighting Adequate		5 No			

Condition Category Good. Condition Grade 2. Minor wear.

Condition Score 2.00 Consequence Score 4.30

Risk Score 18.28 Likelihood Score 4.25

Photo(s)



Appendix G
LOS and Likelihood Categories

LOS Category	Wt.	Negligible = 1	Low = 4	Moderate = 7	Severe = 10
Safety of Public and Employees	35%	No injuries or adverse health effects	No lost-time injuries or medical attention required	Lost-time injury or medical attention required	Loss of life or widespread outbreak of illness
Public Confidence	30%	No social or economic impact on the community. No reactive media coverage.	Minor disruption . No adverse media coverage. Some complaints.	Substantial but short-term disruption. Adverse media coverage due to public impact	Long-term impact. Area-wide disruption. Regional media coverage.
Regulatory Compliance	15%	No State or local permit violations	Possible technical violation	Probable enforcement action, but fines or surcharge unlikely	Enforcement action with fines or surcharge or public notification required
Financial Impact	10%	Can be repaired within utility budget (<\$2,500)	Can be repaired between \$2,500 and \$25,000	Can be repaired between \$25,000 to \$99,999	Greater than \$100,000. Requires City Council approval
Service Delivery	10%	No impact	Minor impact to process or out of service less than 4 hours. No loss of service to the public	Major impact to process, out of service <24 hours. Loss of service to the public.	Major impact to process, out of service >24 hours, loss of service to the public
	100%				

Likelihood Category	Wt.	Negligible = 1	Unlikely = 3	Possible = 5	Likely = 7	Very Likely = 10
Physical Condition	55%	Very good. Condition Grade 1. New or nearly new. Only normal maintenance required.	Good. Condition Grade 2. Minor wear.	Fair. Condition Grade 3. Major wear impacting level of service.	Poor. Condition Grade 4. Unable to meet level of service life. Failure imminent.	Very poor. Grade 5. Requires complete rehabilitation or replacement. Failed.
Reliability	15%	No corrective work order events within 12 months	<2 corrective work order events within 12 months	2-5 corrective work order events within 12 months	6-8 corrective work order events within 12 months	>8 corrective work order events within 12 months
Performance	10%	Sufficient capacity to meet average and peak requirements. Appropriate utilization and function.	Under-utilized or oversized, causing O&M issues.	Sufficient capacity, but does not meet functional requirements, or over-utilized.	Able to meet current average capacity demand, but not peak demands.	Unable to meet current average capacity needs.
O and M protocols	10%	Complete, up-to-date, written, easily accessible and is being used.	Complete, written, up-to-date, but under utilized.	Partially developed	Written, but out-date and not used.	No written protocols.
Redundancy	10%	More than 100%	100%			None
	100%					

