



International Boundary Water Commission

Wastewater Treatment Facility

San Diego, California

Condition Assessment Report

January 30, 2024





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International Boundary Water Commission Wastewater Treatment Plant (IBWC)

RE: Condition Assessment Report

The following document is an accumulative report of the Condition Assessment Evaluation performed at your facility the week of October 9-13. The overall results were satisfactory and all discrepancies will be indicated for each individual machine with a recommended repair.

The following report contains: Maintenance History and Inspection of assets. Lists of all assets evaluated is provided, any discrepancies will have additional comments.

The Condition Assessment was completed by the Asset Management team and site staff.

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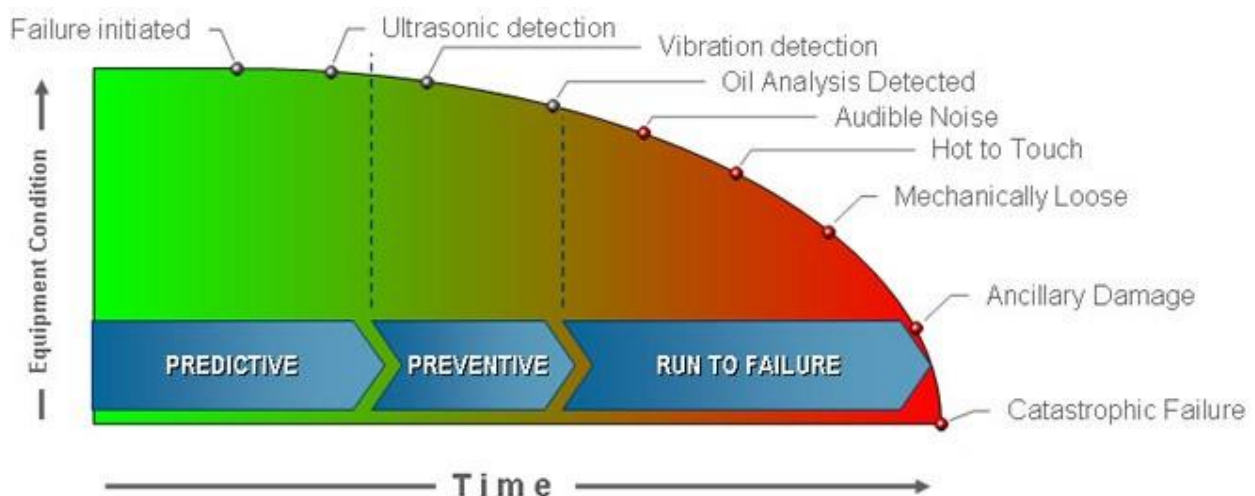
1. Condition Assessment Process Overview

A systematic asset condition assessment review was completed for the International Boundary Water Commission Wastewater Treatment Plant in San Diego, California. A condition assessment process allows identification, warranty repairs and maintenance/replacement prioritization of facility assets based on condition. The assessment provides a condition rating from advanced detection techniques by comparing detected values to standardized rating criteria adapted through a combination of industry best practices and Veolia operating experience. The end ratings are highly useful in a number of areas associated with the operation of the plant and maintenance planning, these include;

- Prioritize Corrective Work Orders to reduce Operation and/ or Compliance== Risks
- Long Range Planning
- Capital and Maintenance Budget Planning, Scoring 3-4
- Contract Renewal

A condition assessment was completed for all major plant assets. The condition assessment is intended to be a “snap shot” of the condition of an asset and give it a ranking number based on deficiency scoring where 1 is new and 4 is failed. Higher numerical values represent worse condition. In other words, evidence of defects, wear, or aging is necessary to give a higher value score. The purpose of developing a ranking number is to prioritize where maintenance and capital should be focused to increase reliability of system functions. Each asset was ranked in multiple areas such as performance, appearance, vibration levels, ultrasonic emission, infrared thermography readings, metal thickness testing, reliability, safety, etc. Appendix A defines the criteria and the ratings for each of these key criteria. Using a VWNA developed software tool, the selected assets were analyzed and rated according to these criteria.

If an asset is in a state of wear or aging, oftentimes an end-of-life can be predicted based on the principal of the potential for failure versus actual failure event curve (P-F curve). This phenomenon is commonly described in maintenance and condition assessment literature as the ability to detect issues with equipment in advance of a complete failure occurring by performing advanced condition assessment. With this advanced knowledge of issues being present and predictions of future deterioration and end-of-life, it becomes possible to make strategic refurbishment or replacement decisions. Below graph depicts the theoretical Statistical P-F curve.



The table below consist of a list of assets with an overall score of 3-4. Maintenance attention and continued monitoring of asset condition is required to keep the asset performing its function as intended.

Asset ID	Asset Description	Recommendations/Comments	Score
1	PUMP 1A, SUMP, GCPS 04116-SUMP1A	Out of service, replacement package submitted to IBWC for approval	4
12	RACK, REMOTE I/O, PLC, GCPS 04100-RPLC1-GCPS (includes Adaptors)	Currently working on an upgrade	3
13	PLC 1, GCPS 04100-PLC1-GCPS	Currently working on an upgrade	3
14	PLC 2, GCPS 04100-PLC2-GCPS	Currently working on an upgrade	3
38	VFD, PUMP 1, SUBMERSIBLE, GCPS 04103-ASD-P1	Replacement package submitted to IBWC for approval	3
40	VFD, PUMP 2, SUBMERSIBLE, GCPS 04104-ASD-P2	Replacement package submitted to IBWC for approval	3
42	VFD, PUMP 3, SUBMERSIBLE, GCPS 04105-ASD-P3	Replacement package submitted to IBWC for approval	3
43	PUMP 4, SUBMERSIBLE, GCPS 04106-P4	Replacement package submitted to IBWC for approval	4
44	VFD, PUMP 4, SUBMERSIBLE, GCPS 04106-ASD-P4	Replacement package submitted to IBWC for approval	3
50	BUILDING/STRUCTURE, HPS 04300-HPS-BLDG	Roof leak	3
62	RACK, REMOTE I/O, PLC, HPS 04300-RPLC1-HPS (includes Adaptors)	Currently working on an upgrade	3
65	PLC 1, HPS 04300-PLC1-HPS	Currently working on an upgrade	3
66	PLC 2, HPS 04300-PLC2-HPS	Currently working on an upgrade	3
87	PUMP 1, SUBMERSIBLE, HPS 04303-P1	Waiting for new VFD	4
97	TANK 1, SURGE, HPS 04308-SA1	Solenoids needs to be replaced and tanks cleaned. Scheduled for Q1 2024	3

98	TANK 2, SURGE, HPS 04309-SA2	Solenoids needs to be replaced and tanks cleaned. Scheduled for Q1 2024	3
119	BLOWER 3, AIR, PROCESS PAB3	Out of service	4
137	PUMP 1, MIXED LIQUOR, INTERMEDIATE IMLRP1	Out of service	4
138	PUMP 2, MIXED LIQUOR, INTERMEDIATE IMLRP2	Out of service	4
139	PUMP 3, MIXED LIQUOR, INTERMEDIATE IMLRP3	In need of maintenance	3
140	PUMP 4, MIXED LIQUOR, INTERMEDIATE IMLRP4	In need of maintenance	3
141	PUMP 5, MIXED LIQUOR, INTERMEDIATE IMLRP5	In need of maintenance	3
142	PUMP 6, MIXED LIQUOR, INTERMEDIATE IMLRP6	In need of maintenance	3
143	PUMP 7, MIXED LIQUOR, INTERMEDIATE IMLRP7	Out of service	4
181	PUMP 1A, WASTE ACTIVATED SLUDGE (WAS) WASP1A	Scheduled to be replaced Q1 2024	3
182	VFD, PUMP 1A, WASTE ACTIVATED SLUDGE (WAS) WASP1AVFD	Scheduled to be replaced in Q1 2024	3
183	PUMP 1B, WASTE ACTIVATED SLUDGE (WAS) WASP1B	Scheduled to be replaced Q1 2024	4
184	VFD, PUMP 1B, WASTE ACTIVATED SLUDGE (WAS) WASP1BVFD	Scheduled to be replaced in Q1 2024	3
195	TANK 1, SLUDGE, ACTIVATED AST1	In need of maintenance	3
196	DIFFUSERS, TANK 1, ACTIVATED SLUDGE AST1-DG	In need of maintenance	3
197	TANK 2, SLUDGE, ACTIVATED AST2	In need of maintenance	3

198	DIFFUSERS, TANK 2, ACTIVATED SLUDGE AST2- DG	In need of maintenance	3
199	TANK 3, SLUDGE, ACTIVATED AST3	In need of maintenance	3
200	DIFFUSERS, TANK 3, ACTIVATED SLUDGE AST3- DG	In need of maintenance	3
201	TANK 4, SLUDGE, ACTIVATED AST4	In need of maintenance	3
202	DIFFUSERS, TANK 4, ACTIVATED SLUDGE AST4- DG	In need of maintenance	3
203	TANK 5, SLUDGE, ACTIVATED AST5	In need of maintenance	3
204	DIFFUSERS, TANK 5, ACTIVATED SLUDGE AST5- DG	In need of maintenance	3
205	TANK 6, SLUDGE, ACTIVATED AST6	In need of maintenance	3
206	DIFFUSERS, TANK 6, ACTIVATED SLUDGE AST6- DG	In need of maintenance	3
207	TANK 7, SLUDGE, ACTIVATED AST7	In need of maintenance	3
208	DIFFUSERS, TANK 7, ACTIVATED SLUDGE AST7- DG	In need of maintenance	3
209	MIXER 1, ZONE A, ANAEROBIC (TANK 1) ASTMX 1A	In need of maintenance	3
210	MIXER 2, ZONE A, ANAEROBIC (TANK 2) ASTMX 2A	In need of maintenance	3
211	MIXER 3, ZONE A, ANAEROBIC (TANK 3) ASTMX 3A	In need of maintenance	3
212	MIXER 4, ZONE A, ANAEROBIC (TANK 4) ASTMX 4A	In need of maintenance	3
213	MIXER 5, ZONE A, ANAEROBIC (TANK 5) ASTMX 5A	In need of maintenance	3

214	MIXER 6, ZONE A, ANAEROBIC (TANK 6) ASTMX 6A	In need of maintenance	3
215	MIXER 7, ZONE A, ANAEROBIC (TANK 7) ASTMX 7A	In need of maintenance	3
216	MIXER 1, ZONE B, ANAEROBIC (TANK 1) ASTMX 1B	In need of maintenance	3
217	MIXER 2, ZONE B, ANAEROBIC (TANK 2) ASTMX 2B	In need of maintenance	3
218	MIXER 3, ZONE B, ANAEROBIC (TANK 3) ASTMX 3B	In need of maintenance	3
219	MIXER 4, ZONE B, ANAEROBIC (TANK 4) ASTMX 4B	In need of maintenance	3
220	MIXER 5, ZONE B, ANAEROBIC (TANK 5) ASTMX 5B	In need of maintenance	3
221	MIXER 6, ZONE B, ANAEROBIC (TANK 6) ASTMX 6B	In need of maintenance	3
222	MIXER 7, ZONE B, ANAEROBIC (TANK 7) ASTMX 7B	In need of maintenance	3
223	MIXER 1, ZONE C, ANAEROBIC (TANK 1) ASTMX 1C	In need of maintenance	3
224	MIXER 2, ZONE C, ANAEROBIC (TANK 2) ASTMX 2C	In need of maintenance	3
225	MIXER 3, ZONE C, ANAEROBIC (TANK 3) ASTMX 3C	In need of maintenance	3
226	MIXER 4, ZONE C, ANAEROBIC (TANK 4) ASTMX 4C	In need of maintenance	3
227	MIXER 5, ZONE C, ANAEROBIC (TANK 5) ASTMX 5C	In need of maintenance	3

228	MIXER 6, ZONE C, ANAEROBIC (TANK 6) ASTMX 6C	In need of maintenance	3
229	MIXER 7, ZONE C, ANAEROBIC (TANK 7) ASTMX 7C	In need of maintenance	3
230	MIXER 1, ZONE D, ANAEROBIC (TANK 1) ASTMX 1D	In need of maintenance	3
231	MIXER 2, ZONE D, ANAEROBIC (TANK 2) ASTMX 2D	In need of maintenance	3
232	MIXER 3, ZONE D, ANAEROBIC (TANK 3) ASTMX 3D	In need of maintenance	3
233	MIXER 4, ZONE D, ANAEROBIC (TANK 4) ASTMX 4D	In need of maintenance	3
234	MIXER 5, ZONE D, ANAEROBIC (TANK 5) ASTMX 5D	In need of maintenance	3
235	MIXER 6, ZONE D, ANAEROBIC (TANK 6) ASTMX 6D	In need of maintenance	3
236	MIXER 7, ZONE D, ANAEROBIC (TANK 7) ASTMX 7D	In need of maintenance	3
237	MIXER 1, ZONE E, ANAEROBIC (TANK 1) ASTMX 1E	In need of maintenance	3
238	MIXER 2, ZONE E, ANAEROBIC (TANK 2) ASTMX 2E	In need of maintenance	3
239	MIXER 3, ZONE E, ANAEROBIC (TANK 3) ASTMX 3E	In need of maintenance	3
240	MIXER 4, ZONE E, ANAEROBIC (TANK 4) ASTMX 4E	In need of maintenance	3
241	MIXER 5, ZONE E, ANAEROBIC (TANK 5) ASTMX 5E	In need of maintenance	3
242	MIXER 6, ZONE E, ANAEROBIC (TANK 6) ASTMX 6E	In need of maintenance	3

243	MIXER 7, ZONE E, ANAEROBIC (TANK 7) ASTMX 7E	In need of maintenance	3
244	MIXER 1, ZONE F, ANAEROBIC (TANK 1) ASTMX 1F	In need of maintenance	3
245	MIXER 2, ZONE F, ANAEROBIC (TANK 2) ASTMX 2F	In need of maintenance	3
246	MIXER 3, ZONE F, ANAEROBIC (TANK 3) ASTMX 3F	In need of maintenance	3
247	MIXER 4, ZONE F, ANAEROBIC (TANK 4) ASTMX 4F	In need of maintenance	3
248	MIXER 5, ZONE F, ANAEROBIC (TANK 5) ASTMX 5F	In need of maintenance	3
249	MIXER 6, ZONE F, ANAEROBIC (TANK 6) ASTMX 6F	In need of maintenance	3
250	MIXER 7, ZONE F, ANAEROBIC (TANK 7) ASTMX 7F	In need of maintenance	3
251	PIPING, AST ASTPG	In need of maintenance	3
327	UNIT 1, HANDLING, AIR, SST- LCC-1, SECONDARY SEDIMENTATION AREA SST- LCC-1 HVC-1	End of life	3
328	UNIT 2, HANDLING, AIR, SST- LCC-1, SECONDARY SEDIMENTATION AREA SST- LCC-1 HVC-2	End of life	3
360	COLLECTOR 8, SECONDARY SLUDGE SSC8	Currently out of service, drive sprockets in need of replacement	4
394	AREA, STORAGE, HW 00100- GRITBIN-BLDG	In need of maintenance	3
397	FAN, EXHAUST, STORAGE, HW 00389-EF2	In need of upgrade	3
398	FAN, EXHAUST, GRIT DEWATERING 00388-EF1	In need of upgrade	3

411	STRUCTURE/BUILDING, HW (HEADWORKS) 00100-HWE- BLDG	In need of upgrade	4
416	GALLERY, GRIT 00300-GRIT- BLDG	Some water leaks	3
419	SEDIMENTATION, PRIMARY 00300-PST-BLDG	Some water leaks	3
432	CONTAINMENT, POLYMER, PRIMARY SEDIMENTATION 00550-CONTAIN	A lot of wear	3
433	AREA, POLYMER, PRIMARY SEDIMENTATION 00550-POLY- BLDG	A lot of wear	3
435	AREA, FERRIC, PRIMARY SEDIMENTATION 00580- FERRIC-BLDG	A lot of wear	3
436	CONTAINMENT, FERRIC CHLORIDE, PST 00580- CONTAIN	A lot of wear	3
439	BOX, JUNCTION, BYPASS, PRIMARY EFFLUENT 00620- PEBJB-BLDG	A lot of wear	3
440	STRUCTURE, VAULT, METER, BYPASS, PRI EFF 00620- PEBMVS-BLDG	A lot of wear	3
453	STATION, NPW 01300-NPW- BLDG	A lot of wear	3
454	STRUCTURE, ENTRAINMENT, PLANT AIR 01540-AE-BLDG	A lot of wear	3
458	STRUCTURE, DISTRIBUTION, PLANT EFFLUENT 01540-EDS- BLDG	A lot of wear	3
461	STRUCTURE, EFFLUENT BLENDING 01500-EBS-BLDG	A lot of wear	3
463	STRUCTURE, VAULT, METER, EFFLUENT 01500-EMVS-BLDG	A lot of wear	3
469	CONTAINMENT, CAUSTIC, ORHW 00368-CONTAIN	A lot of wear	3

474	CONTAINMENT, SODIUM HYPOCHLORITE, ORHW 00378-CONTAIN	A lot of wear	3
477	Flowmeter, 0-500GPM, FIT-ORPST Recirc Flow, ODOR REDUCTION, PRIMARY SEDIMENT AREA (ORPST) 00418-ORPST-BLDG	A lot of wear	3
481	CONTAINMENT, SODIUM HYPOCHLORITE, ORPST 00678-CONTAIN	A lot of wear	3
482	CONTAINMENT, CAUSTIC, ORPST 00668-CONTAIN	A lot of wear	3
486	Flowmeter, 0-1330GPM, FIT-ORSC4 Recirc Flow, ODOR REDUCTION, SOLIDS PROCESSING AREA (ORSP) 03700-ORSP-BLDG	A lot of wear	3
487	CONTAINMENT, CAUSTIC, ORSP 03728-CONTAIN	A lot of wear	3
492	CONTAINMENT, SODIUM HYPOCHLORITE, ORSP 03734-CONTAIN	A lot of wear	3
494	CONTAINMENT, SULFURIC ACID, ORSP 03738-CONTAIN	A lot of wear	3
506	CONTAINMENT, SODIUM HYPOCHLORITE, ORUSS 02278-CONTAIN	A lot of wear	3
510	BUILDING, PRESS, FILTER, BELT 02715-BLDG-BFP	A lot of corrosion	3
536	CONTAINMENT, STORAGE, POLYMER, BULK, SP 02601-CONTAIN	A lot of wear	3
538	STRUCTURE, ANTI-INTRUSION 01541-BLDG-AIS	In need of repairs	3
550	BUILDING, PERSONNEL (SP) 02613-PERSON-BLDG	Roof needs to be replaced, drain issues	3
622	STATION, FILL, FUEL TANK, DIESEL, 10K GAL 04220-DIESEL-TANK-FILL	In need of upgrade	3

623	TANK 1, DAY, GENERATOR 1, DIESEL ENGINE 04202- DAYTANK1	In need of upgrade	3
625	TANK 1, OVERFLOW, GENERATOR 1, DIESEL ENGINE 04202-OVF-TANK1	In need of upgrade	3
632	TANK, STORAGE, FUEL, DIESEL 00109-FUEL- STORAGE	In need of upgrade	3
635	TANK, STORAGE, FUEL, 10,000 GAL, GENERATOR 1 04220-DIESEL-TANK-10K	In need of upgrade	3
643	TANK 1, BULK STORAGE, FERRIC CHLORIDE, PST 00581-PFBT1	In need of replacement	3
644	TANK 2, BULK STORAGE, FERRIC CHLORIDE, PST 00582-PFBT2	In need of replacement	3
659	TANK 2, MIX, POLYMER, PST 00556-PPMT2	In need of replacement	3
681	TANK, STORAGE, CAUSTIC, ORHW 00365-ORSOHT1	In need of replacement	3
690	TANK, STORAGE, SODIUM HYPOCHLORITE, ORHW 00370-ORSHT1	In need of replacement	3
696	TANK 2, STORAGE, CAUSTIC, ORPST 00665-ORSOHT2	In need of replacement	3
703	TANK 2, STORAGE, SODIUM HYPOCHLORITE, ORPST 00670-ORSHT2	In need of replacement	3
708	TANK 4, STORAGE, CAUSTIC, ORSP 03725-ORSOHT4	In need of replacement	3
713	TANK 4, STORAGE, SODUM HYPOCHLORITE, ORSP 03730- ORSHT4	In need of replacement	3
719	TANK, STORAGE, SULFURIC ACID, ORSP 03735-ORSAT1	In need of replacement	3

725	TANK 3, CAUSTIC, ORUSS 02265-ORSOHT3	In need of replacement	3
730	TANK 3, SODIUM HYPOCHLORITE, ORUSS 02268-ORSHT3	In need of replacement	3
745	TANK 1, POLYMER, BULK, SP 02602-BPST1	In need of replacement	3
746	TANK 2, POLYMER, BULK, SP 02603-BPST2	In need of replacement	3
748	TANK 1, MIX, POLYMER, SP 02615-PMT1	In need of replacement	3
751	TANK 2, MIX, POLYMER, SP 02616-PMT2	In need of replacement	3
767	SILO 1, STORAGE, LIME 02810-LSS1	Out of service	3
768	SILO 2, STORAGE, LIME 02811-LSS2	Out of service	3
773	SCREW 1, TRANSFER, LIME 02830-LTC1	Out of service	3
774	SCREW 2, TRANSFER, LIME 02831-LTC2	Out of service	3
775	FEEDER 1, VOLUMETERIC, LIME 02820-LVF1	Out of service	3
776	FEEDER 2, VOLUMETERIC, LIME 02821-LVF2	Out of service	3
897	FAN 1, EXHAUST, ORHW 00352-OREF1	In need of repairs	3
899	FAN 2, EXHAUST, ORHW 00353-OREF2	In need of repairs	3
908	PUMP 1, RECIRCULATION, ORHW 00361-ORRP1B	In need of repairs	3
910	PUMP 2, RECIRCULATION, ORHW 00362-ORRP2B	In need of repairs	3
917	FAN 3, EXHAUST, ORPST 00652-OREF3	In need of repairs	3

919	FAN 4, EXHAUST, ORPST 00653-OREF4	In need of repairs	3
928	PUMP 3, RECIRCULATION, ORPST 00661-ORRP3	In need of repairs	3
937	FAN 7, EXHAUST, ORSP 03702-OREF7	In need of repairs	3
939	FAN 8, EXHAUST, ORSP 03703-OREF8	Needs to be tested for issues	3
941	FAN 9, EXHAUST, ORSP 03704-OREF9	In need of repairs	3
945	PUMP 10, RECIRCULATION, ORSP 03722-ORRP10	In need of repairs	3
947	PUMP 7, RECIRCULATION, ORSP 03711-ORRP7	In need of repairs	3
949	PUMP 8, RECIRCULATION, ORSP 03712-ORRP8	In need of repairs	3
951	PUMP 9, RECIRCULATION, ORSP 03721-ORRP9	In need of repairs	3
964	PUMP 5, RECIRCULATION, ORUSS 02261-ORRP5	In need of repairs	3
973	FAN 5, EXHAUST, ORUSS 02252-OREF5	In need of repairs	3
975	FAN 6, EXHAUST, ORUSS 02253-OREF6	In need of repairs	3
980	VALVE 1, BYPASS FC, 144", ENERGY DISSIPATING (ME41) 01540- EDS-ME41	Condition unknown	3
981	VALVE 1, BYPASS FC, 144", ENERGY DISSIPATING (ME42) 01540- EDS-ME42	Condition unknown	3

982	GATE 1, SLUICE, INLET, DISSIPATION, ENERGY, 144" (ME12) 01540-EDS-ME12	Condition unknown	3
983	GATE 2, SLUICE, INLET, DISSIPATION, ENERGY, 144" (ME13) 01540-EDS-ME13	Condition unknown	3
984	GATE 1, SLUICE, INLET, WEIR, OVERFLOW, EDS, 72" (ME14) 01540-EDS-ME14	Condition unknown	3
985	GATE 2, SLUICE, INLET, WEIR, OVERFLOW, EDS, 72" (ME15) 01540-EDS-ME15	Condition unknown	3
986	GATE, SLUICE, INLET, SBWRT, EDS, 72" (FUTURE) (ME18) 01540-EDS-ME18	Condition unknown	3
990	GATE, SLUICE, INLET, DISTRIBUTION, EFFLUENT, 96" (ME11) 01540-EDS-ME11	Condition unknown	3
991	GATE, SLUICE, RE-USE, MEXICO, EDS, (FUTURE) (ME17) 01540-EDS-ME17	Condition unknown	3
994	PIPING, CDWP CDWPPG	Not in use condition unknown	3
995	VALVES, CDWP CDWPVG	Not in use condition unknown	3
996	PUMP 1, WATER, DILUTION, CHEMICAL CDWP1	Not in use condition unknown	3

997	PUMP 2, WATER, DILUTION, CHEMICAL CDWP2	Not in use condition unknown	3
1010	METER, FLOW, MAGNETIC, 48", PLANT EFFLUENT 01506-FLOW-PE	Out of service	4
1013	GATE, SLUICE, EFFLUENT, PRIMARY PEG	Old and rusted	3
1020	CLASSIFIER/SEPARATOR 1, GRIT 00341-GC1	Rusted and need to be replaced, package submitted to IBWC	3
1021	CLASSIFIER/SEPARATOR 2, GRIT 00342-GC2	Rusted and need to be replaced, package submitted to IBWC	3
1022	CLASSIFIER/SEPARATOR 3, GRIT 00343-GC3	Rusted and need to be replaced, package submitted to IBWC	3
1040	GATE, SCUM, WELL 1, WET, INFLUENT, HW, 36" 00195-G-SLIDE-SCUM1	Rusted and needs to be replaced	3
1041	GATE, SCUM, WELL 2, WET, INFLUENT, HW, 36" 00195-G-SLIDE-SCUM2	Rusted and needs to be replaced	3
1047	SOFT START, PUMP 1, INFLUENT 00211-SS-IP1D	Needs to be replaced	4
1060	DRIVE, ADJUSTABLE SPEED, PUMP 5, INFLUENT 00215-ASD-IP5C	VFD being repaired. Pump out of service	4
1068	FLOW METER, 60" MAG, PUMP STATION, INFLUENT 00220-FLOW-IPS	Scheduled to be replaced Q1 2024	4
1070	SCREEN, BAR, MANUAL, CHANNEL 1, HW 00109-M-SCREEN-CH1	Poor condition	3

1071	SCREEN, BAR, MANUAL, CHANNEL 6, HW 00109-M- SCREEN-CH6	Poor condition	3
1087	SCREEN 3, BAR, MECHANICAL, HW 00130- SCN3	Currently being rebuilt, scheduled to be in service Q1 2024	4
1090	PLC 1, JB-1 00100-PLC-JB1	Out of service	4
1095	GATE, SLUICE, 96", JB-1 00100-GATE-JB1-96	Needs to be redesigned	4
1097	STRUCTURE, JB-1 00050- JB1-BUILDING	Needs to be redesigned	4
1098	WELL, WET, JB-1 00100- WELL-JB1	Needs to be redesigned	4
1099	GATE 1, SLIDE, INLET, CHANNEL 1, HW 00109-G- SLIDE-CH1-IN	Need to be replaced	3
1100	GATE 6, SLIDE, OUTLET, CHANNEL 1, HW 00109-G- SLIDE-CH1-OUT	Need to be replaced	3
1101	GATE 2, SLIDE, INLET, CHANNEL 2, HW 00109-G- SLIDE-CH2-IN	Need to be replaced	3
1102	GATE 6, SLIDE, OUTLET, CHANNEL 2, HW 00109-G- SLIDE-CH2-OUT	Need to be replaced	3
1103	GATE 3, SLIDE, INLET, CHANNEL 3, HW 00109-G- SLIDE-CH3-IN	Need to be replaced	3
1104	GATE 6, SLIDE, OUTLET, CHANNEL 3, HW 00109-G- SLIDE-CH3-OUT	Need to be replaced	3
1105	GATE 4, SLIDE, INLET, CHANNEL 4, HW 00109-G- SLIDE-CH4-IN	Need to be replaced	3
1106	GATE 6, SLIDE, OUTLET, CHANNEL 4, HW 00109-G- SLIDE-CH4-OUT	Need to be replaced	3

1107	GATE 5, SLIDE, INLET, CHANNEL 5, HW 00109-G-SLIDE-CH5-IN	Need to be replaced	3
1108	GATE 6, SLIDE, OUTLET, CHANNEL 5, HW 00109-G-SLIDE-CH5-OUT	Need to be replaced	3
1109	GATE 6, SLIDE, INLET, CHANNEL 6, HW 00109-G-SLIDE-CH6-IN	Need to be replaced	3
1110	GATE 6, SLIDE, OUTLET, CHANNEL 6, HW 00109-G-SLIDE-CH6-OUT	Need to be replaced	3
1113	GATE, INLET, CHANNEL, PUMP 1, INFLUENT, HW 00211-G-SLIDE-GATE1	Need to be replaced	3
1114	GATE, INLET, CHANNEL, PUMP 2, INFLUENT, HW 00212-G-SLIDE-GATE2	Need to be replaced	3
1115	GATE, INLET, CHANNEL, PUMP 3, INFLUENT, HW 00213-G-SLIDE-GATE3	Need to be replaced	3
1156	GENERATOR 1, DIESEL, STANDBY 04210-GEN1	Near end of life	3
1245	BLOWER 1, AIR, CHANNEL, PRIMARY 00600-PCAB1	Out of service, package has been submitted to IBWC	4
1247	BLOWER 2, AIR, CHANNEL, PRIMARY 00601-PCAB2	Out of service, package has been submitted to IBWC	4
1266	GRINDER 1, PRIMARY SLUDGE 00475-PSG1	Scheduled to be replaced Q1 2024	3
1273	PUMP 3, DISCFLO, PRIMARY SLUDGE 00460-DISC-PSP3	New pump to be installed	4

1281	VALVE, DISCHARGE, PRIMARY SKIMMINGS 00505-MV-PSKV3	Valves for Grinders not operational	3
1304	PUMP 1, NPW2P NPW2P-1	Need new VFD, package has been submitted to IBWC	3
1305	VFD, PUMP 1, NPW2P NPW2P-1-VFD	Need new VFD, package has been submitted to IBWC	3
1306	PUMP 2, NPW2P NPW2P-2	Out for repairs, package has been submitted to IBWC	4
1309	VFD, PUMP 3, NPW2P NPW2P-3-VFD	Need new VFD, package has been submitted to IBWC for upgrade	4
1311	PUMP 4, JOCKEY, NPW2P NPW2P-4	Out for repairs, package has been submitted to IBWC for upgrade	4
1315	STRAINER, NPW2P, SOUTH NPW-STR-S	In need of maintenance	3
1316	PUMP 1, TURBINE, NPW 01341-NPWP1	Need to be rebuilt, package has been submitted to IBWC	3
1317	PUMP 2, TURBINE, NPW 01342-NPWP2	Need to be rebuilt, package has been submitted to IBWC	3
1318	PUMP 3, TURBINE, NPW 01343-NPWP3	Need to be rebuilt, package has been submitted to IBWC	3
1319	PUMP 4, TURBINE, NPW 01344-NPWP4	Need to be rebuilt, package has been submitted to IBWC	3
1337	METER, FLOW, 30", EMERGENCY CONNECTION, PRIMARY EFFLUENT 00618-FLOW- PEEC (to City of San Diego Point Loma Treatment Plant)	Not in use condition unknown	4
1341	VALVE, SPRAYER, SKIMMER 1, ROTARY, PST 00403-MV-PSKS1	Scheduled to be replaced Q1 2024	4

1343	VALVE, SPRAYER, SKIMMER 2, ROTARY, PST 00406-MV-PSKS2	Scheduled to be replaced Q1 2024	4
1345	VALVE, SPRAYER, SKIMMER 3, ROTARY, PST 00409-MV-PSKS3	Scheduled to be replaced Q1 2024	4
1347	VALVE, SPRAYER, SKIMMER 4, ROTARY, PST 00412-MV-PSKS4	Scheduled to be replaced Q1 2024	4
1349	VALVE, SPRAYER, SKIMMER 5, ROTARY, PST 00415-MV-PSKS5	Scheduled to be replaced Q1 2024	4
1350	TANK 1, PRIMARY SEDIMENTATION, PST 00400-PST1	Out of service	4
1351	TANK 2, PRIMARY SEDIMENTATION, PST 00400-PST2	Out of service	4
1352	TANK 3, PRIMARY SEDIMENTATION, PST 00400-PST3	Out of service	4
1353	TANK 4, PRIMARY SEDIMENTATION, PST 00400-PST4	Out of service	4
1354	TANK 5, PRIMARY SEDIMENTATION, PST 00400-PST5	Tank repaired in need of new pump	4
1404	VALVE, CONTROL, FLOW, 42", PERC 00681-PERC	Not in use condition unknown	4
1414	METER, FLOW, 42" KROHNE, PERC, FE/FIT- 00681 00681-PERC- FLOWMETER	Not in use condition unknown	4
1419	CONNECTION, VALVE, EMERGENCY 00911-EMER- CONN (to City of San Diego Point Loma Treatment Plant)	Not in use condition unknown	4

1423	PRESS 2, BELT PRESS (BFP) 02696-BFP2	Working on a package for refurbishment	4
1429	PRESS 4, BELT PRESS (BFP) 02698-BFP4	Working on a package for refurbishment	4
1445	PUMP 2, FEED, SLUDGE, DISCFLO, BELT PRESS (BFP) 02636-DISC-SFP2	Package submitted to IBWC for upgrade	4
1447	PUMP 4, FEED, SLUDGE, DISCFLO, BELT PRESS (BFP) 02638-DISC-SFP4	Package submitted to IBWC for upgrade	4
1456	GRINDER 1, SLUDGE, BELT PRESS (BFP) 02625-SG1	Package submitted to IBWC for upgrade	4
1459	PUMP 1, BOOSTER, WASH WATER, BELT PRESS (BFP) 02707-WWP1	Package submitted to IBWC for upgrade	3
1461	PUMP 2, BOOSTER, WASH WATER, BELT PRESS (BFP) 02708-WWP2	Package submitted to IBWC for upgrade	3
1463	PUMP 3, BOOSTER, WASH WATER, BELT PRESS (BFP) 02709-WWP3	Package submitted to IBWC for upgrade	3
1465	PUMP 4, BOOSTER, WASH WATER, BELT PRESS (BFP) 02710-WWP4	Package submitted to IBWC for upgrade	3
1467	PIPING, MIXING, SLUDGE, USST SMP-PG	Scheduled to be replaced Q1 2024	3
1468	VALVES, MIXING, SLUDGE, USST SMP-VG	Scheduled to be replaced Q1 2024	3
1469	PUMP 1A, MIXING, SLUDGE, USST 02211-SMP1A	Scheduled to be replaced Q1 2024	4

1471	PUMP 1B, MIXING, SLUDGE, USST 02212-SMP1B	Scheduled to be replaced Q1 2024	4
1473	PUMP 1C, MIXING, SLUDGE, USST 02213-SMP1C	Scheduled to be replaced Q1 2024	4
1476	PUMP 2B, MIXING, SLUDGE, USST SMP-2B	Scheduled to be replaced Q1 2024	3
1477	PUMP 2C, MIXING, SLUDGE, USST SMP-2C	Scheduled to be replaced Q1 2024	4
1479	TANK 1, SLUDGE, UNSTABILIZED (USST) 02210-USST1	Needs to be cleaned and inspected	3
1480	CONVEYOR 1A, BELT PRESS (BFP) 02715-BFPC1A	In need of rebuild, package submitted for upgrade	3
1481	CONVEYOR 1B, BELT PRESS (BFP) 02715-BFPC1B	In need of rebuild, package submitted for upgrade	3
1482	CONVEYOR 2A, BELT PRESS (BFP) 02716-BFPC2A	In need of rebuild, package submitted for upgrade	3
1483	CONVEYOR 2B, BELT PRESS (BFP) 02716-BFPC2B	In need of rebuild, package submitted for upgrade	3
1486	CONVEYOR 1, TRUCK LOADING 02850-TLC1	In need of rebuild	3
1516	COLLECTOR 1, SLUDGE, DAF DSC1	In need of rebuild	3
1517	COLLECTOR 2, SLUDGE, DAF DSC2	In need of rebuild	3
1524	PIPING, DAF POLYMER DPFPPG	Old in need of upgrade	3
1546	TRUCK, DUMP, 10-YD 6x4, FREIGHTLINER (IBWC) 03800-10YD-DUMP, Model 2-112, Tag#: S-770	Old in need of upgrade	3

1547	TRUCK, DUMP, 2-TON (IBWC) 03800- 2TON_DUMP, Model F6001FD, Tag#: S-674	Old in need of upgrade	4
1556	CART 10, ELECTRIC, OPERATIONS 03800-VEH- CC10	In need of upgrade	3
1557	CART 4, Electric, Operations 03800-VEH-CC4	In need of upgrade	3
1558	CART 7, ELECTRIC, OPERATIONS 03800-VEH- CC7	In need of upgrade	3
1560	CART 8, ELECTRIC, ELECTRICAL MAINTENANCE 03800-VEH- CC8	In need of upgrade	3
1561	CART 5, ELECTRIC, MAINTENANCE 03800-VEH- CC5	In need of upgrade	3
1562	CART 6, ELECTRIC, MAINTENANCE 03800-VEH- CC6	In need of upgrade	3
1565	TRACTOR, JOHN DEERE 03800-TRACTOR_EM, Model 6400, Tag#: 80042	Out of service	4
1592	METER, FLOW, MAGNETIC, 30", CANYON COLLECTOR 01515-FLOW- CCM2	New meter needs to be installed	3
1629	PIPING, ORHW CHEMICAL STORAGE AREA SUMP 00368-ORSP-PG	Needs to be replaced	3
1630	VALVES, ORHW CHEMICAL STORAGE AREA SUMP 00368-ORSP- VG	Needs to be replaced	3

1631	PIPING, ODOR REDUCTION PRIMARY SEDIMENT AREA SUMP 00668-ORSP-PG	Needs to be replaced	3
1632	VALVES, ODOR REDUCTION PRIMARY SEDIMENT AREA SUMP 00668-ORSP-VG	Needs to be replaced	3
1633	PIPING, SP ODOR CONTROL AREA SUMP 03700-ORSP-SP-PG	Needs to be replaced	3
1634	VALVES, SP ODOR CONTROL AREA SUMP 03700-ORSP-SP-VG	Needs to be replaced	3
1635	PIPING, USS ODOR CONTROL AREA SUMP 02250-ORUSS-SP-PG	Needs to be replaced	3
1636	VALVES, USS ODOR CONTROL AREA SUMP 02250-ORUSS-SP-VG	Needs to be replaced	3
1638	TANK 2, SLUDGE, UNSTABILIZED (USST) 02210-LVL-USST2	Needs to be cleaned and inspected	3
1643	PIPING, FUEL, GENERATORS 04202-PG	Needs to be replaced	3
1644	VALVES, FUEL, GENERATORS 04202-VG	Needs to be replaced	3
1653	PIPING, CAUSTIC, ORHW 00365-PG	Old in need of upgrade	3
1654	VALVES, CAUSTIC, ORHW 00365-VG	Needs to be replaced	3
1655	PIPING, SODIUM HYPOCHLORITE, ORHW 00370-PG	Needs to be replaced	3
1656	VALVES, SODIUM HYPOCHLORITE, ORHW 00370-VG	Needs to be replaced	3

1657	PIPING, CAUSTIC, ORPST 00665-PG	Needs to be replaced	3
1658	VALVES, CAUSTIC, ORPST 00665-VG	Needs to be replaced	3
1659	PIPING, SODIUM HYPOCHLORITE, ORPST 00670-PG	Needs to be replaced	3
1660	VALVES, SODIUM HYPOCHLORITE, ORPST 00670-VG	Needs to be replaced	3
1661	PIPING, CAUSTIC, ORSP 0375-PG	Needs to be replaced	3
1662	VALVES, CAUSTIC, ORSP 0375-VG	Needs to be replaced	3
1663	PIPING, SODIUM HYPOCHLORITE, ORSP 03730-PG	Needs to be replaced	3
1664	VALVES, SODIUM HYPOCHLORITE, ORSP 03730-VG	Needs to be replaced	3
1665	PIPING, SULFURIC ACID, ORSP 03735-PG	Needs to be replaced	3
1666	VALVES, SULFURIC ACID, ORSP 03735-VG	Needs to be replaced	3
1667	PIPING, CAUSTIC, ORUSS 02265-PG	Needs to be replaced	3
1668	VALVES, CAUSTIC, ORUSS 02265-VG	Needs to be replaced	3
1669	PIPING, SODIUM HYPOCHLORITE, ORUSS 02270-PG	Needs to be replaced	3
1670	VALVES, SODIUM HYPOCHLORITE, ORUSS 02270-VG	Needs to be replaced	3
1673	PIPING/DUCTING, ORHW 00350-PG	Needs to be replaced	3
1674	VALVES, DUCTING, ORHW 00350-VG	Needs to be replaced	3

1675	PIPING/DUCTING, ORPST 00660-PG	Needs to be replaced	3
1676	VALVES, DUCTING, ORPST 00660-VG	Needs to be replaced	3
1677	PIPING/DUCTING, ORSP 03700-PG	Needs to be replaced	3
1678	VALVES, DUCTING, ORSP 03700-VG	Needs to be replaced	3
1679	PIPING/DUCTING, ORUSS 02250-PG	Needs to be replaced	3
1680	VALVES, DUCTING, ORUSS 02250-VG	Needs to be replaced	3
1681	PIPING, GRIT REMOVAL 00300-PG	Needs to be replaced	3
1682	VALVES, GRIT REMOVAL 00300-VG	Needs to be replaced	3
1683	PIPING, GRIT BLOWER 00300-GB-PG	Needs to be replaced	3
1684	VALVES, GRIT BLOWER 00300-GB-VG	Needs to be replaced	3
1686	VALVES, PUMP, INFLUENT 00200-VG	Hard to operate	3
1690	VALVES, PRIMARY SLUDGE 00450-VG	Needs to be replaced	3
1695	PIPING, FEED, SLUDGE, BELT PRESS (BFP) 02635- PG	Needs to be replaced, package submitted for upgrade	4
1696	VALVES, FEED, SLUDGE, BELT PRESS (BFP) 02635- VG	Needs to be replaced, package submitted for upgrade	4
1697	PIPING, WASH WATER, BELT PRESS (BFP) 02707- PG	Needs to be replaced, package submitted for upgrade	4
1698	VALVES, WASH WATER, BELT PRESS (BFP) 02707- VG	Needs to be replaced, package submitted for upgrade	4

1863	Cart 11, Club, Gas Operated, Carry All Plus	Clutch needs servicing	3
1864	Cart 12, Club, Gas Powered	Fuel system needs servicing	3
1865	Cart 13, Club, Gas Operated	Clutch needs servicing	3
1871	Mower, Lawn, Riding, Dixie Chopper	Needs electrical work	3
1876	Cart 14, Electric, Operations	Old in need of upgrade	3
1877	Cart 15, Electric, Operations	Old in need of upgrade	3
1892	Softener, Water, Solids Processing, Culligan	Not in use condition unknown	4
1900	COLLECTOR 13, SECONDARY SLUDGE SSC13	Out of service	4
1904	PUMP 6, INFLUENT 00216-IP6B	Removed	4
1937	PANEL, CONTROL, INFLUENT PUMP 5	Needs wiring upgrade	3
2040	GATE 3, OUTLET, TANK 2, RAPID MIX, PST 00401-G-SLIDE-GATE3	Hard to operate	3
2041	GATE 3, OUTLET, TANK 3, RAPID MIX, PST 00401-G-SLIDE-GATE3	Hard to operate	3
2650	PUMP 5, INFLUENT 00215-IP5B	High vibration	3
2651	PUMP 1, INFLUENT 00211-IP1B	Out of service	4

2652	PUMP 3, INFLUENT 00213-IP3B	Out of service, new pump to be installed in Q1 2024	4
2653	PUMP 4, INFLUENT 00214-IP4B	In need of refurbishment	3



Maintenance History and Inspection Scoring Report

Staff actively participated in the Inspection scoring portion of the condition assessment process. Inspection process included observing the asset, conduit, process tie-points, corrosion issues, base and grout condition, coating, piping, etc.

Inspection scores:

Score – 1, New or in excellent shape

Score – 2, Approximately 20% Life used, some wear, meeting designed functionality

Score – 3, Approximately 40% Life used, some wear, still meeting designed functionality

Score – 4, Approximately 60% Life used, worn, operating but no longer fully meeting designed functionality

Score – 5, Very worn, not meeting design functionality or equipment in failed condition

Asset ID	Asset Description	Inspection Score	Comments
1	PUMP 1A, SUMP, GCPS 04116-SUMP1A	5	Out of service, replacement package submitted to IBWC for approval
2	PUMP 1B, SUMP, GCPS 04116-SUMP1B	3	Replacement package submitted to IBWC for approval
5	HVAC UNIT, MCC ROOM, GCPS 04117-GCPS-HVAC	3	
6	BUILDING/STRUCTURE, GCPS 04100-GCLS-BLDG	3	
8	SWITCH, TRANSFER (ATS), GENERATOR, GCPS 04112-LCP-ATS	2	Tested in October 2023
12	RACK, REMOTE I/O, PLC, GCPS 04100-RPLC1-GCPS (includes Adaptors)	4	Currently working on an upgrade
13	PLC 1, GCPS 04100-PLC1-GCPS	4	Currently working on an upgrade
14	PLC 2, GCPS 04100-PLC2-GCPS	4	Currently working on an upgrade
15	GENERATOR, STANDBY, GCPS 04112-GCPS-GEN	2	
16	SWITCHGEAR, MCC, GCPS 04100-MSG-GCPS	3	
17	MCC, GCPS 04100-MCC-GCPS	3	
18	TRANSFORMER, SDG&E, GCPS 04100-SDGE-GCPS	3	
24	BLOWER, ODOR REDUCTION, GCPS 04113-BLOWER-ORGCPs	3	
27	PUMP 1, RECIRCULATION, ODOR REDUCTION, GCPS 04113-ORGCPs-P1	2	Pumps piping and media replaced in 2023
28	PUMP 2, RECIRCULATION, ODOR REDUCTION, GCPS 04113-ORGCPs-P2	2	Pumps piping and media replaced in 2023
29	PUMP 3, RECIRCULATION, ODOR REDUCTION, GCPS 04113-ORGCPs-P3	2	Pumps piping and media replaced in 2023
37	PUMP 1, SUBMERSIBLE, GCPS 04103-P1	3	
38	VFD, PUMP 1, SUBMERSIBLE, GCPS 04103-ASD-P1	4	Replacement package submitted to IBWC for approval
39	PUMP 2, SUBMERSIBLE, GCPS 04104-P2	3	Replacement package submitted to IBWC for approval
40	VFD, PUMP 2, SUBMERSIBLE, GCPS 04104-ASD-P2	4	Replacement package submitted to IBWC for approval
41	PUMP 3, SUBMERSIBLE, GCPS 04105-P3	3	Replacement package submitted to IBWC for approval
42	VFD, PUMP 3, SUBMERSIBLE, GCPS 04105-ASD-P3	4	Replacement package submitted to IBWC for approval
43	PUMP 4, SUBMERSIBLE, GCPS 04106-P4	5	Replacement package submitted to IBWC for approval
44	VFD, PUMP 4, SUBMERSIBLE, GCPS 04106-ASD-P4	4	Replacement package submitted to IBWC for approval

45	TANK 1, SURGE, GCPS 04108-SA1	2	
46	TANK 2, SURGE, GCPS 04109-SA2	2	
47	VALVE, INLET, WET WELL, GCPS 04101-MV-GCPS	2	Cleaned December 2023
48	FILTER, HURRICANE, SYSTEM, WELL WATER, GCPS 04135-WELL-H FILTER	3	
49	SYSTEM, WELL WATER, GCPS 04135-WELL-NPW	1	New 2023
50	BUILDING/STRUCTURE, HPS 04300-HPS-BLDG	4	Roof leak
51	PUMP 1A, SUMP, HPS 04316-SUMP1A	3	
52	PUMP 1B, SUMP, HPS 04316-SUMP1B	3	
55	HVAC UNIT, ROOM, MCC, HPS 04317-HPS-HVAC	1	New 2023
57	SWITCH, TRANSFER (ATS), GENERATOR, HPS 04312-LCP-ATS	2	Tested in October 2023
60	SWITCHGEAR, MCC, HPS 04310-MSG-HPS	3	
62	RACK, REMOTE I/O, PLC, HPS 04300-RPLC1-HPS (includes Adaptors)	4	Currently working on an upgrade
65	PLC 1, HPS 04300-PLC1-HPS	4	Currently working on an upgrade
66	PLC 2, HPS 04300-PLC2-HPS	4	Currently working on an upgrade
67	TRANSFORMER, SDG&E, HPS 04310-SDGE-HPS	3	
69	GENERATOR, STANDBY, HPS 04312-HPS-GEN	3	
74	BLOWER, ODOR REDUCTION, HPS 04313-BLOWER-ORHPS	3	
76	PUMP 1, RECIRCULATION, ODOR REDUCTION, HPS 04313-ORHPS-P1	2	Pumps piping and media replaced in 2023
77	PUMP 2, RECIRCULATION, ODOR REDUCTION, HPS 04313-ORHPS-P2	2	Pumps piping and media replaced in 2023
78	PUMP 3, RECIRCULATION, ODOR REDUCTION, HPS 04313-ORHPS-P3	2	Pumps piping and media replaced in 2023
83	VALVES, CHECK, 30-INCH PIPE, HPS 04300-PVRV30-HPS	3	
87	PUMP 1, SUBMERSIBLE, HPS 04303-P1	5	Waiting for new VFD
88	VFD, PUMP 1, SUBMERSIBLE, HPS 04303-ASD-P1	3	New VFD has been ordered
89	PUMP 2, SUBMERSIBLE, HPS 04304-P2	1	New pump installed 2023
90	VFD, PUMP 2, SUBMERSIBLE, HPS 04304-ASD-P2	3	New VFD has been ordered
91	PUMP 3, SUBMERSIBLE, HPS 04305-P3	1	New pump installed 2023

92	VFD, PUMP 3, SUBMERSIBLE, HPS 04305-ASD-P3	3	New VFD has been ordered
93	PUMP 4, SUBMERSIBLE, HPS 04306-P4	3	
94	VFD, PUMP 4, SUBMERSIBLE, HPS 04306-ASD-P4	3	New VFD has been ordered
97	TANK 1, SURGE, HPS 04308-SA1	4	Solenoids needs to be replaced and tanks cleaned. Scheduled for Q1 2024
98	TANK 2, SURGE, HPS 04309-SA2	4	Solenoids needs to be replaced and tanks cleaned. Scheduled for Q1 2024
99	VALVE, INLET, WET WELL, HPS 04301-MV-HPS	3	
111	UNIT 1, HANDLING, AIR, NORTH BLOWER STRUCTURE AST-LCC-HVC-1, Unit 1 and unit 2 is a split system HVAC	3	
112	UNIT 2, HANDLING, AIR, NORTH BLOWER STRUCTURE AST-LCC-HVC-2A, Unit 1 and unit 2 is a split system HVAC	3	
117	BLOWER 1, AIR, PROCESS PAB1	3	
118	BLOWER 2, AIR, PROCESS PAB2	3	
119	BLOWER 3, AIR, PROCESS PAB3	5	Out of service
120	FEEDER 806L, PAB1, BLOWER, AIR, PROCESS BRK-PAB1	3	
121	FEEDER 806L, PAB2, BLOWER, AIR, PROCESS BRK-PAB2	3	
122	FEEDER 806L, PAB3, BLOWER, AIR, PROCESS BRK-PAB3	3	
124	PIPING, BLOWER, AIR, PROCESS PAB-PG	3	
125	FILTER 1, AIR, PROCESS PAF1	3	
126	FILTER 2, AIR, PROCESS PAF2	3	
127	FILTER 3, AIR, PROCESS PAF3	3	
128	SILENCER 1, AIR, PROCESS PAS1	3	
129	SILENCER 2, AIR, PROCESS PAS2	3	
130	SILENCER 3, AIR, PROCESS PAS3	3	
131	PIPING, SCAB SCABPG	3	
132	VALVES, SCAB SCABVG	3	
133	BLOWER 1, AIR, SECONDARY CHANNEL (SCAB) SCAB1	3	
134	BLOWER 2, AIR, SECONDARY CHANNEL (SCAB) SCAB2	3	
135	BLOWER 3, AIR, SECONDARY CHANNEL (SCAB) SCAB3	3	
136	PIPING, MIXED LIQUOR, INTERMEDIATE IMLRPPG	3	
137	PUMP 1, MIXED LIQUOR, INTERMEDIATE IMLRP1	5	Out of service

138	PUMP 2, MIXED LIQUOR, INTERMEDIATE IMLRP2	5	Out of service
139	PUMP 3, MIXED LIQUOR, INTERMEDIATE IMLRP3	4	In need of maintenance
140	PUMP 4, MIXED LIQUOR, INTERMEDIATE IMLRP4	4	In need of maintenance
141	PUMP 5, MIXED LIQUOR, INTERMEDIATE IMLRP5	4	In need of maintenance
142	PUMP 6, MIXED LIQUOR, INTERMEDIATE IMLRP6	4	In need of maintenance
143	PUMP 7, MIXED LIQUOR, INTERMEDIATE IMLRP7	5	Out of service
144	VALVES, MIXED LIQUOR, INTERMEDIATE IMLRPVG	3	
145	PIPING, LOP LOPPG	3	
146	PUMP 1, TANK DRAIN, ACTIVATED SLUDGE ASTDP1, MO.P08LA-12L	3	
151	VALVES, AST ASTVG	3	
154	PUMP, HEAT NBS-HVC-1B	3	
162	METER, FLOW, RAS, AST 1 FE/FIT- 0704	3	
163	METER, FLOW, RAS, AST 2 FE/FIT- 0708	3	
164	METER, FLOW, RAS, AST 3 FE/FIT- 0712	3	
165	METER, FLOW, RAS, AST 4 FE/FIT- 0716	3	
166	METER, FLOW, RAS, AST 5 FE/FIT- 0720	3	
167	METER, FLOW, RAS, AST 6 FE/FIT- 0724	3	
168	METER, FLOW, RAS, AST 7 FE/FIT- 0728	3	
169	PIPING, RASP RASPPG	3	
181	PUMP 1A, WASTE ACTIVATED SLUDGE (WAS) WASP1A	4	Scheduled to be replaced Q1 2024
182	VFD, PUMP 1A, WASTE ACTIVATED SLUDGE (WAS) WASP1AVFD	4	Scheduled to be replaced in Q1 2024
183	PUMP 1B, WASTE ACTIVATED SLUDGE (WAS) WASP1B	5	Scheduled to be replaced Q1 2024
184	VFD, PUMP 1B, WASTE ACTIVATED SLUDGE (WAS) WASP1BVFD	4	Scheduled to be replaced in Q1 2024
186	PUMP 1A, SECONDARY SKIMMINGS SSKP1A	2	
187	PUMP 1B, SECONDARY SKIMMINGS SSKP1B	2	
188	PUMP STATION, SECONDARY SKIMMINGS SSPS-BLGD	3	
191	PUMP 1, TANK DRAIN, SECONDARY SEDIMENTATION SSTDP1	3	

195	TANK 1, SLUDGE, ACTIVATED AST1	4	In need of maintenance
196	DIFFUSERS, TANK 1, ACTIVATED SLUDGE AST1-DG	4	In need of maintenance
197	TANK 2, SLUDGE, ACTIVATED AST2	4	In need of maintenance
198	DIFFUSERS, TANK 2, ACTIVATED SLUDGE AST2-DG	4	In need of maintenance
199	TANK 3, SLUDGE, ACTIVATED AST3	4	In need of maintenance
200	DIFFUSERS, TANK 3, ACTIVATED SLUDGE AST3-DG	4	In need of maintenance
201	TANK 4, SLUDGE, ACTIVATED AST4	4	In need of maintenance
202	DIFFUSERS, TANK 4, ACTIVATED SLUDGE AST4-DG	4	In need of maintenance
203	TANK 5, SLUDGE, ACTIVATED AST5	4	In need of maintenance
204	DIFFUSERS, TANK 5, ACTIVATED SLUDGE AST5-DG	4	In need of maintenance
205	TANK 6, SLUDGE, ACTIVATED AST6	4	In need of maintenance
206	DIFFUSERS, TANK 6, ACTIVATED SLUDGE AST6-DG	4	In need of maintenance
207	TANK 7, SLUDGE, ACTIVATED AST7	4	In need of maintenance
208	DIFFUSERS, TANK 7, ACTIVATED SLUDGE AST7-DG	4	In need of maintenance
209	MIXER 1, ZONE A, ANAEROBIC (TANK 1) ASTMX 1A	4	In need of maintenance
210	MIXER 2, ZONE A, ANAEROBIC (TANK 2) ASTMX 2A	4	In need of maintenance
211	MIXER 3, ZONE A, ANAEROBIC (TANK 3) ASTMX 3A	4	In need of maintenance
212	MIXER 4, ZONE A, ANAEROBIC (TANK 4) ASTMX 4A	4	In need of maintenance
213	MIXER 5, ZONE A, ANAEROBIC (TANK 5) ASTMX 5A	4	In need of maintenance
214	MIXER 6, ZONE A, ANAEROBIC (TANK 6) ASTMX 6A	4	In need of maintenance
215	MIXER 7, ZONE A, ANAEROBIC (TANK 7) ASTMX 7A	4	In need of maintenance
216	MIXER 1, ZONE B, ANAEROBIC (TANK 1) ASTMX 1B	4	In need of maintenance
217	MIXER 2, ZONE B, ANAEROBIC (TANK 2) ASTMX 2B	4	In need of maintenance
218	MIXER 3, ZONE B, ANAEROBIC (TANK 3) ASTMX 3B	4	In need of maintenance
219	MIXER 4, ZONE B, ANAEROBIC (TANK 4) ASTMX 4B	4	In need of maintenance
220	MIXER 5, ZONE B, ANAEROBIC (TANK 5) ASTMX 5B	4	In need of maintenance
221	MIXER 6, ZONE B, ANAEROBIC (TANK 6) ASTMX 6B	4	In need of maintenance

222	MIXER 7, ZONE B, ANAEROBIC (TANK 7) ASTMX 7B	4	In need of maintenance
223	MIXER 1, ZONE C, ANAEROBIC (TANK 1) ASTMX 1C	4	In need of maintenance
224	MIXER 2, ZONE C, ANAEROBIC (TANK 2) ASTMX 2C	4	In need of maintenance
225	MIXER 3, ZONE C, ANAEROBIC (TANK 3) ASTMX 3C	4	In need of maintenance
226	MIXER 4, ZONE C, ANAEROBIC (TANK 4) ASTMX 4C	4	In need of maintenance
227	MIXER 5, ZONE C, ANAEROBIC (TANK 5) ASTMX 5C	4	In need of maintenance
228	MIXER 6, ZONE C, ANAEROBIC (TANK 6) ASTMX 6C	4	In need of maintenance
229	MIXER 7, ZONE C, ANAEROBIC (TANK 7) ASTMX 7C	4	In need of maintenance
230	MIXER 1, ZONE D, ANAEROBIC (TANK 1) ASTMX 1D	4	In need of maintenance
231	MIXER 2, ZONE D, ANAEROBIC (TANK 2) ASTMX 2D	4	In need of maintenance
232	MIXER 3, ZONE D, ANAEROBIC (TANK 3) ASTMX 3D	4	In need of maintenance
233	MIXER 4, ZONE D, ANAEROBIC (TANK 4) ASTMX 4D	4	In need of maintenance
234	MIXER 5, ZONE D, ANAEROBIC (TANK 5) ASTMX 5D	4	In need of maintenance
235	MIXER 6, ZONE D, ANAEROBIC (TANK 6) ASTMX 6D	4	In need of maintenance
236	MIXER 7, ZONE D, ANAEROBIC (TANK 7) ASTMX 7D	4	In need of maintenance
237	MIXER 1, ZONE E, ANAEROBIC (TANK 1) ASTMX 1E	4	In need of maintenance
238	MIXER 2, ZONE E, ANAEROBIC (TANK 2) ASTMX 2E	4	In need of maintenance
239	MIXER 3, ZONE E, ANAEROBIC (TANK 3) ASTMX 3E	4	In need of maintenance
240	MIXER 4, ZONE E, ANAEROBIC (TANK 4) ASTMX 4E	4	In need of maintenance
241	MIXER 5, ZONE E, ANAEROBIC (TANK 5) ASTMX 5E	4	In need of maintenance
242	MIXER 6, ZONE E, ANAEROBIC (TANK 6) ASTMX 6E	4	In need of maintenance
243	MIXER 7, ZONE E, ANAEROBIC (TANK 7) ASTMX 7E	4	In need of maintenance
244	MIXER 1, ZONE F, ANAEROBIC (TANK 1) ASTMX 1F	4	In need of maintenance
245	MIXER 2, ZONE F, ANAEROBIC (TANK 2) ASTMX 2F	4	In need of maintenance
246	MIXER 3, ZONE F, ANAEROBIC (TANK 3) ASTMX 3F	4	In need of maintenance
247	MIXER 4, ZONE F, ANAEROBIC (TANK 4) ASTMX 4F	4	In need of maintenance
248	MIXER 5, ZONE F, ANAEROBIC (TANK 5) ASTMX 5F	4	In need of maintenance

249	MIXER 6, ZONE F, ANAEROBIC (TANK 6) ASTMX 6F	4	In need of maintenance
250	MIXER 7, ZONE F, ANAEROBIC (TANK 7) ASTMX 7F	4	In need of maintenance
251	PIPING, AST ASTPG	4	In need of maintenance
273	PIPING, PUMP, DRAIN, AST ASTDPPG	3	
274	PIPING, PUMP, SUMP, AST ASTSPPG	3	
279	LIGHTING, AREA, TANK, AST LG-06	3	
280	LIGHTING, TUNNEL, AST LG-07	3	
293	VALVE 1A, CONTROL, DROP LEG (ROTORK ACTUATOR) PACV1A	3	
294	VALVE 1B, CONTROL, DROP LEG (ROTORK ACTUATOR) PACV1B	3	
295	VALVE 1C, CONTROL, DROP LEG (ROTORK ACTUATOR) PACV1C	3	
296	VALVE 2A, CONTROL, DROP LEG (ROTORK ACTUATOR) PACV2A	3	
297	VALVE 2B, CONTROL, DROP LEG (ROTORK ACTUATOR) PACV2B	3	
298	VALVE 2C, CONTROL, DROP LEG (ROTORK ACTUATOR) PACV2C	3	
299	VALVE 3A, CONTROL, DROP LEG (ROTORK ACTUATOR) PACV3A	3	
300	VALVE 3B, CONTROL, DROP LEG (ROTORK ACTUATOR) PACV3B	3	
301	VALVE 3C, CONTROL, DROP LEG (ROTORK ACTUATOR) PACV3C	3	
302	VALVE 4A, CONTROL, DROP LEG (ROTORK ACTUATOR) PACV4A	3	
303	VALVE 4B, CONTROL, DROP LEG (ROTORK ACTUATOR) PACV4B	3	
304	VALVE 4C, CONTROL, DROP LEG (ROTORK ACTUATOR) PACV4C	3	
305	VALVE 5A, CONTROL, DROP LEG (ROTORK ACTUATOR) PACV5A	3	
306	VALVE 5B, CONTROL, DROP LEG (ROTORK ACTUATOR) PACV5B	3	
307	VALVE 5C, CONTROL, DROP LEG (ROTORK ACTUATOR) PACV5C	3	
308	VALVE 6A, CONTROL, DROP LEG (ROTORK ACTUATOR) PACV6A	3	
309	VALVE 6B, CONTROL, DROP LEG (ROTORK ACTUATOR) PACV6B	3	
310	VALVE 6C, CONTROL, DROP LEG (ROTORK ACTUATOR) PACV6C	3	
311	VALVE 7A, CONTROL, DROP LEG (ROTORK ACTUATOR) PACV7A	3	
312	VALVE 7B, CONTROL, DROP LEG (ROTORK ACTUATOR) PACV7B	3	
313	VALVE 7C, CONTROL, DROP LEG (ROTORK ACTUATOR) PACV7C	3	

318	VALVES, LOP LOPVG	3	
322	PANEL, CONTROL, LOCAL (PANEL VIEW) LCP-SSKPS1	3	
323	PANEL, CONTROL, LOCAL, COMPRESSORS BCP-SSKPSI	3	
325	PANEL, CONTROL, LOCAL, PUMPS, SECONDARY SKIMMINGS LCP-SSKPS1	3	
326	VALVES, RASP RASPVG	3	
327	UNIT 1, HANDLING, AIR, SST-LCC-1, SECONDARY SEDIMENTATION AREA SST-LCC-1 HVC-1	4	End of life
328	UNIT 2, HANDLING, AIR, SST-LCC-1, SECONDARY SEDIMENTATION AREA SST-LCC-1 HVC-2	4	End of life
329	ACTUATOR, VALVE, SKIMMING, SECONDARY,SSKV1A, FCV-1145	3	
330	ACTUATOR, VALVE, SKIMMING, SECONDARY, SSKV1B, FCV-1146	3	
331	ACTUATOR, VALVE, SKIMMING, SECONDARY, SSKV1C, FCV-1147	3	
332	DRIVE 1, SKIMMING, SECONDARY (ROTORK ACTUATOR) SSKS1	3	
333	DRIVE 10, SKIMMING, SECONDARY (ROTORK ACTUATOR) SSKS10	3	
334	DRIVE 2, SKIMMING, SECONDARY (ROTORK ACTUATOR) SSKS2	3	
335	DRIVE 3, SKIMMING, SECONDARY (ROTORK ACTUATOR) SSKS3	3	
336	DRIVE 4, SKIMMING, SECONDARY (ROTORK ACTUATOR) SSKS4	3	
337	DRIVE 5, SKIMMING, SECONDARY (ROTORK ACTUATOR) SSKS5	3	
338	DRIVE 6, SKIMMING, SECONDARY (ROTORK ACTUATOR) SSKS6	3	
339	DRIVE 7, SKIMMING, SECONDARY (ROTORK ACTUATOR) SSKS7	3	
340	DRIVE 8, SKIMMING, SECONDARY (ROTORK ACTUATOR) SSKS8	3	
341	DRIVE 9, SKIMMING, SECONDARY (ROTORK ACTUATOR) SSKS9	3	
352	COLLECTOR 1, SECONDARY SLUDGE SSC1	3	Drive sprockets in need of replacement
353	COLLECTOR 10, SECONDARY SLUDGE SSC10	3	Drive sprockets in need of replacement
354	COLLECTOR 2, SECONDARY SLUDGE SSC2	3	Drive sprockets in need of replacement
355	COLLECTOR 3, SECONDARY SLUDGE SSC3	3	Drive sprockets in need of replacement
356	COLLECTOR 4, SECONDARY SLUDGE SSC4	3	Drive sprockets in need of replacement
357	COLLECTOR 5, SECONDARY SLUDGE SSC5	3	Drive sprockets in need of replacement

358	COLLECTOR 6, SECONDARY SLUDGE SSC6	3	Drive sprockets in need of replacement
359	COLLECTOR 7, SECONDARY SLUDGE SSC7	3	Drive sprockets in need of replacement
360	COLLECTOR 8, SECONDARY SLUDGE SSC8	5	Currently out of service, drive sprockets in need of replacement
361	COLLECTOR 9, SECONDARY SLUDGE SSC9	3	Drive sprockets in need of replacement
362	METER 1, FLOW, SECONDARY SLUDGE FE/FIT-1185A	3	
363	METER 10, FLOW, SECONDARY SLUDGE FE/FIT-1185J	3	
364	METER 2, FLOW, SECONDARY SLUDGE FE/FIT-1185B	3	
365	METER 3, FLOW, SECONDARY SLUDGE FE/FIT-1185C	3	
366	METER 4, FLOW, SECONDARY SLUDGE FE/FIT-1185D	3	
367	METER 5, FLOW, SECONDARY SLUDGE FE/FIT-1185E	3	
368	METER 6, FLOW, SECONDARY SLUDGE FE/FIT-1185F	3	
369	METER 7, FLOW, SECONDARY SLUDGE FE/FIT-1185G	3	
370	METER 8, FLOW, SECONDARY SLUDGE FE/FIT-1185H	3	
371	METER 9, FLOW, SECONDARY SLUDGE FE/FIT-1185I	3	
383	PIPING, WAS WASPPG	3	
384	VALVES, WAS WASPVG	3	
394	AREA, STORAGE, HW 00100-GRITBIN-BLDG	4	In need of maintenance
397	FAN, EXHAUST, STORAGE, HW 00389-EF2	4	In need of upgrade
398	FAN, EXHAUST, GRIT DEWATERING 00388-EF1	4	In need of upgrade
403	HVAC UNIT 1, HW 00354-HW-HVAC1	1	
404	HVAC UNIT 2, HW 00354-HW-HVAC2	3	
411	STRUCTURE/BUILDING, HW (HEADWORKS) 00100-HWE-BLDG	5	In need of upgrade
415	Flowmeter, 0-460GPM, FIT-ORSC1, Recirc Flow, ODOR REDUCTION, HEADWORKS AREA 00350-ORHW-BLDG	3	
416	GALLERY, GRIT 00300-GRIT-BLDG	4	Some water leaks
419	SEDIMENTATION, PRIMARY 00300-PST-BLDG	4	Some water leaks
420	HVAC UNIT 1, SEDIMENTATION, PRIMARY (NORTH) 00423-PST-HVAC	1	New 2023

427	PUMP STATION AREA, SKIMMINGS, PST 00418-SKIM-BLDG	3	
432	CONTAINMENT, POLYMER, PRIMARY SEDIMENTATION 00550-CONTAIN	4	A lot of wear
433	AREA, POLYMER, PRIMARY SEDIMENTATION 00550-POLY-BLDG	4	A lot of wear
435	AREA, FERRIC, PRIMARY SEDIMENTATION 00580-FERRIC- BLDG	4	A lot of wear
436	CONTAINMENT, FERRIC CHLORIDE, PST 00580-CONTAIN	4	A lot of wear
439	BOX, JUNCTION, BYPASS, PRIMARY EFFLUENT 00620-PEBBJ-BLDG	4	A lot of wear
440	STRUCTURE, VAULT, METER, BYPASS, PRI EFF 00620-PEBMVS- BLDG	4	A lot of wear
453	STATION, NPW 01300-NPW-BLDG	4	A lot of wear
454	STRUCTURE, ENTRAINMENT, PLANT AIR 01540-AE-BLDG	4	A lot of wear
458	STRUCTURE, DISTRIBUTION, PLANT EFFLUENT 01540-EDS-BLDG	4	A lot of wear
461	STRUCTURE, EFFLUENT BLENDING 01500-EBS-BLDG	4	A lot of wear
463	STRUCTURE, VAULT, METER, EFFLUENT 01500-EMVS-BLDG	4	A lot of wear
469	CONTAINMENT, CAUSTIC, ORHW 00368-CONTAIN	4	A lot of wear
474	CONTAINMENT, SODIUM HYPOCHLORITE, ORHW 00378- CONTAIN	4	A lot of wear
477	Flowmeter, 0-500GPM, FIT-ORPST Recirc Flow, ODOR REDUCTION, PRIMARY SEDIMENT AREA (ORPST) 00418-ORPST-BLDG	4	A lot of wear
481	CONTAINMENT, SODIUM HYPOCHLORITE, ORPST 00678- CONTAIN	4	A lot of wear
482	CONTAINMENT, CAUSTIC, ORPST 00668-CONTAIN	4	A lot of wear
486	Flowmeter, 0-1330GPM, FIT-ORSC4 Recirc Flow, ODOR REDUCTION, SOLIDS PROCESSING AREA (ORSP) 03700-ORSP-BLDG	4	A lot of wear
487	CONTAINMENT, CAUSTIC, ORSP 03728-CONTAIN	4	A lot of wear
492	CONTAINMENT, SODIUM HYPOCHLORITE, ORSP 03734- CONTAIN	4	A lot of wear
494	CONTAINMENT, SULFURIC ACID, ORSP 03738-CONTAIN	4	A lot of wear

506	CONTAINMENT, SODIUM HYPOCHLORITE, ORUSS 02278-CONTAIN	4	A lot of wear
507	Flowmeter, 0-350GPM, FIT-ORSC3 Recirc Flow, ODOR REDUCTION, USS BUILDING 02250-ORUSS-BLDG	3	
510	BUILDING, PRESS, FILTER, BELT 02715-BLDG-BFP	4	A lot of corrosion
511	FAN 2, SUPPLY, AIR, BELT PRESS (BFP) 02632-SF2	2	
512	FAN 3, SUPPLY, AIR, BELT PRESS (BFP) 02632-SF3	3	
520	PROCESSING, SOLIDS 02600-SP-BLDG	3	
522	HVAC UNIT 1, SOLIDS PROCESSING (WEST) 02614-SP-HVAC1	1	
523	HVAC UNIT 2, SOLIDS PROCESSING (EAST) 02614-SP-HVAC2	3	
528	BUILDING, LOADING, TRUCK, SLUDGE 02800-TRUCK-BLDG	3	
529	LIGHTING, TUNNEL SST-LG-T	3	
531	AREA, USST 02200-USST-BLDG	3	
532	LIGHTING, USST AREA LG-01	3	
536	CONTAINMENT, STORAGE, POLYMER, BULK, SP 02601-CONTAIN	4	A lot of wear
537	MAKEUP, POLYMER, SP 02600-SP_POLY-BLDG	3	
538	STRUCTURE, ANTI-INTRUSION 01541-BLDG-AIS	4	In need of repairs
539	BUILDING, CONTROL, GENERATOR 04200-GEN-BLDG	3	
540	HVAC UNIT, CONTROL ROOM, GENERATOR 04220-HVAC-GEN	3	
542	GENERATOR, DIESEL ENGINE, TRAILER 1 04200-GEN-TRAILER-BLDG	3	
544	BUILDING, SWITCHGEAR, MAIN (MSB) 01300-MSG-BLDG	3	
545	HVAC 1 (NORTH), MSB 01314-MSG-HVAC1	1	
546	HVAC 2 (SOUTH), MSB 01314-MSG-HVAC2	3	
550	BUILDING, PERSONNEL (SP) 02613-PERSON-BLDG	4	Roof needs to be replaced, drain issues
551	HVAC UNIT, PERSONNEL BUILDING (OPS ROOM) 02619-OPSRM-HVAC	1	New 2023
552	HVAC UNIT 1, PERSONNEL BUILDING (NORTH) 02619-ADMIN-HVAC1	3	

553	HVAC UNIT 2, PERSONNEL BUILDING (SOUTH) 02619-ADMIN-HVAC2	3	
557	LIGHTING, BUILDING, BLOWER/ELECTRICAL LG-08	3	
559	BUS "A" FEEDER 801 MCC-ASTN1	3	
560	BUS "A" FEEDER 803 MCC-ASTN2	3	
561	BUS "B" FEEDER 802 MCC-ASTN1	3	
562	BUS "B" FEEDER 804 MCC-ASTN2	3	
565	PANEL, CONTROL, BLOWER, LOCAL LCP-BSC	3	
566	PANEL, CONTROL, LOCAL LCP-ASTN	3	
567	PANEL, CONTROL, LOCAL (PAB1) LCP-B1	3	
568	PANEL, CONTROL, LOCAL (PAB2) LCP-B2	3	
569	PANEL, CONTROL, LOCAL (PAB3) LCP-B3	3	
570	BREAKER, MAIN BUSS A, 4000AF/3200AT LSIG, A ACB BRK-A	3	
571	BREAKER, MAIN BUSS B, 4000AF/3200AT LSIG, A ACB BRK-B	3	
572	STRUCTURE, BLOWER, NORTH NBS-BLGD	3	
574	PANEL, CONTROL, LOCAL (ROOM 209) LCP-ADMIN	3	
578	AIR HANDLING UNIT 1, BUILDING, OPERATIONS/MAINTENANCE HVAC-1	3	
579	AIR HANDLING UNIT 2, BUILDING, OPERATIONS/MAINTENANCE HVAC-2	3	
583	STRUCTURE, MAINTENANCE MAINT-BLDG	3	
594	PANEL, CONTROL, LOCAL, SST SST-LCP-1	3	
595	LIGHTING, SST AREA LG-09	3	
596	LIGHTING, BUILDING, CONTROL, SST LG-11	3	
597	LIGHTING, TUNNEL, SST LG-10	3	
598	PANEL, CONTROL, LOCAL, DAF 1 BCP-DAF1	3	
599	PANEL, CONTROL, LOCAL, DAF 2 BCP-DAF2	3	
600	LIGHTING, POLYMER AREA, DAF LG-03	3	
601	DISK, RUPTURE, 42", STRUCTURE, ANTI-INTRUSION 01541-RUPTURE_DISK	3	
602	GATE, FLAP, 36", STRUCTURE, ANTI-INTRUSION 01541-FGATE-AIS	3	

610	LIGHTING, DAF AREA LG-02	3	
615	LIGHTING, GROUNDS AREA LG-05, North Fence area	3	
618	GROUNDS, PLANT (GENERAL) 00000- GRNDS-BLDG	3	
619	SYSTEM, SECURITY, PLANT 00000- SECURITY	3	
622	STATION, FILL, FUEL TANK, DIESEL, 10K GAL 04220-DIESEL-TANK-FILL	4	In need of upgrade
623	TANK 1, DAY, GENERATOR 1, DIESEL ENGINE 04202-DAYTANK1	4	In need of upgrade
625	TANK 1, OVERFLOW, GENERATOR 1, DIESEL ENGINE 04202-OVF-TANK1	4	In need of upgrade
632	TANK, STORAGE, FUEL, DIESEL 00109-FUEL-STORAGE	4	In need of upgrade
635	TANK, STORAGE, FUEL, 10,000 GAL, GENERATOR 1 04220-DIESEL-TANK- 10K	4	In need of upgrade
643	TANK 1, BULK STORAGE, FERRIC CHLORIDE, PST 00581-PFBT1	4	In need of replacement
644	TANK 2, BULK STORAGE, FERRIC CHLORIDE, PST 00582-PFBT2	4	In need of replacement
659	TANK 2, MIX, POLYMER, PST 00556- PPMT2	4	In need of replacement
681	TANK, STORAGE, CAUSTIC, ORHW 00365-ORSOHT1	4	In need of replacement
690	TANK, STORAGE, SODIUM HYPOCHLORITE, ORHW 00370- ORSHT1	4	In need of replacement
696	TANK 2, STORAGE, CAUSTIC, ORPST 00665-ORSOHT2	4	In need of replacement
703	TANK 2, STORAGE, SODIUM HYPOCHLORITE, ORPST 00670- ORSHT2	4	In need of replacement
708	TANK 4, STORAGE, CAUSTIC, ORSP 03725-ORSOHT4	4	In need of replacement
713	TANK 4, STORAGE, SODUM HYPOCHLORITE, ORSP 03730- ORSHT4	4	In need of replacement
719	TANK, STORAGE, SULFURIC ACID, ORSP 03735-ORSAT1	4	In need of replacement
725	TANK 3, CAUSTIC, ORUSS 02265- ORSOHT3	4	In need of replacement
730	TANK 3, SODIUM HYPOCHLORITE, ORUSS 02268-ORSHT3	4	In need of replacement
745	TANK 1, POLYMER, BULK, SP 02602- BPST1	4	In need of replacement
746	TANK 2, POLYMER, BULK, SP 02603- BPST2	4	In need of replacement
748	TANK 1, MIX, POLYMER, SP 02615- PMT1	4	In need of replacement
751	TANK 2, MIX, POLYMER, SP 02616- PMT2	4	In need of replacement

767	SILO 1, STORAGE, LIME 02810-LSS1	4	Out of service
768	SILO 2, STORAGE, LIME 02811-LSS2	4	Out of service
773	SCREW 1, TRANSFER, LIME 02830-LTC1	4	Out of service
774	SCREW 2, TRANSFER, LIME 02831-LTC2	4	Out of service
775	FEEDER 1, VOLUMETERIC, LIME 02820-LVF1	4	Out of service
776	FEEDER 2, VOLUMETERIC, LIME 02821-LVF2	4	Out of service
791	PLC 1, PRESS 1, FILTER, BELT 02695-BFP1-PLC1	2	Package submitted to IBWC for upgrade
792	PLC 2, PRESS 1, FILTER, BELT 02695-BFP1-PLC2	2	Package submitted to IBWC for upgrade
793	PLC 1, PRESS 2, FILTER, BELT 02696-BFP2-PLC1	2	Package submitted to IBWC for upgrade
794	PLC 2, PRESS 2, FILTER, BELT 02696-BFP2-PLC2	2	Package submitted to IBWC for upgrade
795	PLC 1, PRESS 3, FILTER, BELT 02697-BFP3-PLC1	2	Package submitted to IBWC for upgrade
796	PLC 2, PRESS 3, FILTER, BELT 02697-BFP3-PLC2	2	Package submitted to IBWC for upgrade
797	PLC 1, PRESS 4, FILTER, BELT 02698-BFP4-PLC1	2	Package submitted to IBWC for upgrade
798	PLC 2, PRESS 4, FILTER, BELT 02698-BFP4-PLC2	2	Package submitted to IBWC for upgrade
800	PLC 1, EDS 01540-PLC1-EDS	2	
801	PLC 1, CONTROL BUILDING, GENERATOR 04200-GEN-PLC1	1	Upgraded 2023
802	PLC 2, CONTROL BUILDING, GENERATOR 04200-GEN-PLC2	1	Upgraded 2023
803	PLC, REMOTE, I/O 1, HW 00107-RPLC-HWE1	2	
804	PLC, REMOTE, I/O 2, HW 00107-RPLC-HWE2	2	
807	PLC 1, ODOR REDUCTION, HW 00350-PLC-ORHW1	2	
808	PLC 2, ODOR REDUCTION, HW 00350-PLC-ORHW2	2	
809	PLC I/O 1, REMOTE, ODOR REDUCTION, HW 00350-RPLC-ORHW1	2	
811	PLC 1, HW 00107-PLC-HWE1	2	
812	PLC 2, HW 00107-PLC-HWE2	2	
815	PLC 1, LCP-LS1, LIME STABILIZATION 02800-LS1-PLC1	2	
816	PLC 1, LCP-LS2, LIME STABILIZATION 02800-LS2-PLC1	2	
818	PLC, REMOTE, I/O 3, MSB 03175-RPLC-NaOCL3	2	

819	PLC I/O 2, REMOTE, ODOR REDUCTION, HW 00350-RPLC-ORHW2	3	
822	PLC 1, ORSP 03700-PLC-ORSP1	2	
823	PLC 2, ORSP 03700-PLC-ORSP2	2	
824	PLC, REMOTE, I/O 1, ORSP 03700-RPLC-ORSP1	2	
825	PLC, REMOTE, I/O 2, ORSP 03700-RPLC-ORSP2	2	
831	PLC 1, PEB 00620-PLC-PEB1	3	
832	PLC 2, PEB 00620-PLC-PEB2	3	
833	PLC, REMOTE, I/O 1, PEB 00620-RPLC-PEB1	3	
834	PLC 1, PANEL, PERC 00640-PERC-PLC1	3	
835	PLC 2, PANEL, PERC 00640-PERC-PLC2	3	
836	PLC UNIT, PERSONNEL BUILDING 00025-PLC-PERSONNEL	3	
839	PLC 1, CENTER, CONTROL, PLANT 03102-PLC-PCC1	2	
840	PLC 2, CENTER, CONTROL, PLANT 03102-PLC-PCC2	2	
841	PLC, REMOTE, I/O 1, CENTER, CONTROL, PLANT 03102-RPLC-PCC1	2	
842	PLC, REMOTE, I/O 2, CENTER, CONTROL, PLANT 03150-RPLC-PCC2	2	
844	PLC 1A, FECL3-POLYMER, PST 00416-PLC-PSTE1A	2	
845	PLC 1, ODOR REDUCTION, PST 00419-PLC-ORPST1	2	
846	PLC 2, ODOR REDUCTION, PST 00419-PLC-ORPST2	2	
847	PLC I/O 1, REMOTE, ODOR REDUCTION, PST 00419-RPLC-ORPST1	2	
849	PLC 1, PST 00416-PLC-PSTE1	2	
850	PLC 2, PST 00416-PLC-PSTE2	2	
851	PLC, REMOTE, I/O 1, PST 00416-RPLC-PSTE1	2	
852	PLC, REMOTE, I/O 2, PST 00416-RPLC-PSTE2	2	
853	PLC, REMOTE, I/O 3, PST 00416-RPLC-PSTE3	2	
854	PLC, REMOTE, I/O 4, PST 00416-RPLC-PSTE4	2	
855	PLC I/O, REMOTE, PUMP, SKIMMINGS, PST 00418-RPLC-PSKPS	2	
856	PLC 1, SODIUM HYPOCHLORITE 01309-PLC-NaOCL1	2	

857	PLC 2, SODIUM HYPOCHLORITE 01309-PLC-NaOCL2	2	
858	PLC 1, REMOTE, SODIUM HYPOCHLORITE 01309-RPLC- NaOCL1	2	
859	PLC 2, REMOTE, SODIUM HYPOCHLORITE 01309-RPLC- NaOCL2	2	
864	PLC 1, SOLIDS PROCESSING 02204- PLC-SP1	2	
865	PLC 2, SOLIDS PROCESSING 02204- PLC-SP2	2	
866	PLC 1, MAKEUP, POLYMER, SOLIDS PROCESSING 02204-PLC-POLYDYNE	2	
867	PLC, REMOTE, I/O 1, SOLIDS PROCESSING 02204-RPLC-SP1	2	
868	PLC, REMOTE, I/O 2, SOLIDS PROCESSING 02204-RPLC-SP2	2	
872	PLC 1, ODOR REDUCTION, USS 02250-PLC-ORUSS1	2	
873	PLC 2, ODOR REDUCTION, USS 02250-PLC-ORUSS2	2	
874	PLC I/O 1, REMOTE, ODOR REDUCTION, USS 02250-RPLC- ORUSS1	2	
879	PANEL 3, FIRE ALARM AST-FAP-03	3	
897	FAN 1, EXHAUST, ORHW 00352- OREF1	4	In need of repairs
899	FAN 2, EXHAUST, ORHW 00353- OREF2	4	In need of repairs
908	PUMP 1, RECIRCULATION, ORHW 00361-ORRP1B	4	In need of repairs
910	PUMP 2, RECIRCULATION, ORHW 00362-ORRP2B	4	In need of repairs
917	FAN 3, EXHAUST, ORPST 00652- OREF3	4	In need of repairs
919	FAN 4, EXHAUST, ORPST 00653- OREF4	4	In need of repairs
928	PUMP 3, RECIRCULATION, ORPST 00661-ORRP3	4	In need of repairs
929	PUMP 4, RECIRCULATION, ORPST 00662-ORRP4	1	New 2023
937	FAN 7, EXHAUST, ORSP 03702- OREF7	4	In need of repairs
939	FAN 8, EXHAUST, ORSP 03703- OREF8	4	Needs to be tested for issues
941	FAN 9, EXHAUST, ORSP 03704- OREF9	4	In need of repairs
945	PUMP 10, RECIRCULATION, ORSP 03722-ORRP10	4	In need of repairs
947	PUMP 7, RECIRCULATION, ORSP 03711-ORRP7	4	In need of repairs

949	PUMP 8, RECIRCULATION, ORSP 03712-ORRP8	4	In need of repairs
951	PUMP 9, RECIRCULATION, ORSP 03721-ORRP9	4	In need of repairs
964	PUMP 5, RECIRCULATION, ORUSS 02261-ORRP5	4	In need of repairs
973	FAN 5, EXHAUST, ORUSS 02252-OREF5	4	In need of repairs
975	FAN 6, EXHAUST, ORUSS 02253-OREF6	4	In need of repairs
980	VALVE 1, BYPASS FC, 144", ENERGY DISSIPATING (ME41) 01540-EDS-ME41	4	Condition unknown
981	VALVE 1, BYPASS FC, 144", ENERGY DISSIPATING (ME42) 01540-EDS-ME42	4	Condition unknown
982	GATE 1, SLUICE, INLET, DISSIPATION, ENERGY, 144" (ME12) 01540-EDS-ME12	4	Condition unknown
983	GATE 2, SLUICE, INLET, DISSIPATION, ENERGY, 144" (ME13) 01540-EDS-ME13	4	Condition unknown
984	GATE 1, SLUICE, INLET, WEIR, OVERFLOW, EDS, 72" (ME14) 01540-EDS-ME14	4	Condition unknown
985	GATE 2, SLUICE, INLET, WEIR, OVERFLOW, EDS, 72" (ME15) 01540-EDS-ME15	4	Condition unknown
986	GATE, SLUICE, INLET, SBWRT, EDS, 72" (FUTURE) (ME18) 01540-EDS-ME18	4	Condition unknown
990	GATE, SLUICE, INLET, DISTRIBUTION, EFFLUENT, 96" (ME11) 01540-EDS-ME11	4	Condition unknown
991	GATE, SLUICE, RE-USE, MEXICO, EDS, (FUTURE) (ME17) 01540-EDS-ME17	4	Condition unknown
994	PIPING, CDWP CDWPPG	4	Not in use condition unknown
995	VALVES, CDWP CDWPVG	4	Not in use condition unknown
996	PUMP 1, WATER, DILUTION, CHEMICAL CDWP1	4	Not in use condition unknown
997	PUMP 2, WATER, DILUTION, CHEMICAL CDWP2	4	Not in use condition unknown
998	GATE 1, EFFLUENT, BLENDED, EBS 01504-G-SLIDE-BEG1	3	Not in use condition unknown
999	ACTUATOR, GATE 1, EFFLUENT, BLENDED, EBS 01504-MV-BEG1	3	Not in use condition unknown
1000	ACTUATOR, GATE 1, BYPASS, EFFLUENT, PRIMARY, EBS 01502-MV-PEBG1	3	Not in use condition unknown
1001	GATE 1, BYPASS, EFFLUENT, PRIMARY, EBS 01502-G-SLIDE-PEBG1	3	Not in use condition unknown
1002	GATE 2, EFFLUENT, SECONDARY, EBS 01503-G-SLIDE-SEG1	3	Not in use condition unknown

1003	ACTUATOR, GATE 2, EFFLUENT, SECONDARY, EBS 01503-MV-SEG1	3	Not in use condition unknown
1010	METER, FLOW, MAGNETIC, 48", PLANT EFFLUENT 01506-FLOW-PE	5	Out of service
1013	GATE, SLUICE, EFFLUENT, PRIMARY PEG	4	Old and rusted
1014	PIPE, OUTFALL, LAND, SOUTH BAY 01540-SBLO	3	
1015	BLOWER 1, AIR, GRIT 00301-GB1	2	
1017	BLOWER 2, AIR, GRIT 00302-GB2	2	
1020	CLASSIFIER/SEPARATOR 1, GRIT 00341-GC1	4	Rusted and need to be replaced, package submitted to IBWC
1021	CLASSIFIER/SEPARATOR 2, GRIT 00342-GC2	4	Rusted and need to be replaced, package submitted to IBWC
1022	CLASSIFIER/SEPARATOR 3, GRIT 00343-GC3	4	Rusted and need to be replaced, package submitted to IBWC
1031	PUMP 1, DISCFLO, GRIT, PRIMARY 00311-DISCFLO-GP1	3	Replacement package submitted to IBWC
1032	PUMP 2, DISCFLO, GRIT, PRIMARY 00312-DISCFLO-GP2B	3	Replacement package submitted to IBWC
1033	PUMP 3, DISCFLO, GRIT, PRIMARY 00313-DISCFLO-GP3B	3	Replacement package submitted to IBWC
1034	PUMP 4, DISCFLO, GRIT, PRIMARY 00314-DISCFLO-GP4B	3	Replacement package submitted to IBWC
1035	PUMP 5, DISCFLO, GRIT, PRIMARY 00315-DISCFLO-GP5B	3	Replacement package submitted to IBWC
1036	PUMP 6, DISCFLO, GRIT, PRIMARY 00316-DISCFLO-GP6B	2	
1040	GATE, SCUM, WELL 1, WET, INFLUENT, HW, 36" 00195-G-SLIDE-SCUM1	4	Rusted and needs to be replaced
1041	GATE, SCUM, WELL 2, WET, INFLUENT, HW, 36" 00195-G-SLIDE-SCUM2	4	Rusted and needs to be replaced
1044	PANEL, CONTROL, BUBBLER 1, PUMP STATION, INFLUENT 00201-BCP1-IPSA	2	
1045	PANEL, CONTROL, BUBBLER 2, PUMP STATION, INFLUENT 00202-BCP2-IPSA	2	
1046	DRIVE, ADJUSTABLE SPEED, PUMP 1, INFLUENT 00211-ASD-IP1C	2	
1047	SOFT START, PUMP 1, INFLUENT 00211-SS-IP1D	5	Needs to be replaced
1051	PUMP 2, INFLUENT 00212-IP2B	3	
1052	SOFT START, PUMP 2, INFLUENT 00212-SS-IP2C	3	

1053	DRIVE, ADJUSTABLE SPEED, PUMP 3, INFLUENT 00213-ASD-IP3C	3	Pump out of service
1054	SOFT START, PUMP 3, INFLUENT 00213-SS-IP3D	3	Pump out of service
1059	SOFT START, PUMP 4, INFLUENT 00214-SS-IP4C	3	
1060	DRIVE, ADJUSTABLE SPEED, PUMP 5, INFLUENT 00215-ASD-IP5C	5	VFD being repaired. Pump out of service
1061	SOFT START, PUMP 5, INFLUENT 00215-SS-IP5D	3	Pump out of service
1068	FLOW METER, 60" MAG, PUMP STATION, INFLUENT 00220-FLOW-IPS	5	Scheduled to be replaced Q1 2024
1070	SCREEN, BAR, MANUAL, CHANNEL 1, HW 00109-M-SCREEN-CH1	4	Poor condition
1071	SCREEN, BAR, MANUAL, CHANNEL 6, HW 00109-M-SCREEN-CH6	4	Poor condition
1072	CONVEYOR 1, SCREENING, HW 00160-CNV1	3	
1081	SCREEN 1, BAR, MECHANICAL, HW 00110-SCN1	2	New soft starter have been ordered
1084	SCREEN 2, BAR, MECHANICAL, HW 00120-SCN2	2	New soft starter have been ordered
1087	SCREEN 3, BAR, MECHANICAL, HW 00130-SCN3	5	Currently being rebuilt, scheduled to be in service Q1 2024
1090	PLC 1, JB-1 00100-PLC-JB1	5	Out of service
1095	GATE, SLUICE, 96", JB-1 00100-GATE-JB1-96	5	Needs to be redesigned
1097	STRUCTURE, JB-1 00050-JB1-BUILDING	5	Needs to be redesigned
1098	WELL, WET, JB-1 00100-WELL-JB1	5	Needs to be redesigned
1099	GATE 1, SLIDE, INLET, CHANNEL 1, HW 00109-G-SLIDE-CH1-IN	4	Need to be replaced
1100	GATE 6, SLIDE, OUTLET, CHANNEL 1, HW 00109-G-SLIDE-CH1-OUT	4	Need to be replaced
1101	GATE 2, SLIDE, INLET, CHANNEL 2, HW 00109-G-SLIDE-CH2-IN	4	Need to be replaced
1102	GATE 6, SLIDE, OUTLET, CHANNEL 2, HW 00109-G-SLIDE-CH2-OUT	4	Need to be replaced
1103	GATE 3, SLIDE, INLET, CHANNEL 3, HW 00109-G-SLIDE-CH3-IN	4	Need to be replaced
1104	GATE 6, SLIDE, OUTLET, CHANNEL 3, HW 00109-G-SLIDE-CH3-OUT	4	Need to be replaced
1105	GATE 4, SLIDE, INLET, CHANNEL 4, HW 00109-G-SLIDE-CH4-IN	4	Need to be replaced

1106	GATE 6, SLIDE, OUTLET, CHANNEL 4, HW 00109-G-SLIDE-CH4-OUT	4	Need to be replaced
1107	GATE 5, SLIDE, INLET, CHANNEL 5, HW 00109-G-SLIDE-CH5-IN	4	Need to be replaced
1108	GATE 6, SLIDE, OUTLET, CHANNEL 5, HW 00109-G-SLIDE-CH5-OUT	4	Need to be replaced
1109	GATE 6, SLIDE, INLET, CHANNEL 6, HW 00109-G-SLIDE-CH6-IN	4	Need to be replaced
1110	GATE 6, SLIDE, OUTLET, CHANNEL 6, HW 00109-G-SLIDE-CH6-OUT	4	Need to be replaced
1113	GATE, INLET, CHANNEL, PUMP 1, INFLUENT, HW 00211-G-SLIDE- GATE1	4	Need to be replaced
1114	GATE, INLET, CHANNEL, PUMP 2, INFLUENT, HW 00212-G-SLIDE- GATE2	4	Need to be replaced
1115	GATE, INLET, CHANNEL, PUMP 3, INFLUENT, HW 00213-G-SLIDE- GATE3	4	Need to be replaced
1122	MCC, EDS 01540-MCC-EDS	3	
1123	DISTRIBUTION, DPLC-20, CONTROL ROOM, GENERATOR 04220-DPLC-20	3	
1125	MCC, HW 00115-MCC-HWE	3	
1128	MCC, MSB 03176-MCC-MSB	3	
1129	MCC, DAF DAF-MCC	3	
1130	MCC, SST SST-MCC	3	
1131	PANEL, CONTROL, MSG - RTU-MSB 03175-LCP-RTU	3	
1132	MCC, SODIUM HYPOCHLORITE 01310-NaOCL-MCC	3	
1133	MCC, ORUSST 02600-MCC-ORUSST	3	
1139	MCC A, PRIMARY SEDIMENT 00421- MCC-PSTEA	3	
1140	MCC B, PRIMARY SEDIMENT 00421- MCC-PSTEB	3	
1141	MCC, PRIMARY SEDIMENTATION 00309-MCC-PSTE	3	
1146	MCC, OREF, PST 00652-MCC-PST	3	
1148	MCC, SP 02206-MCC-SPPB	3	
1149	MCC, SP 02607-MCC-SP	3	
1150	MCC, ODOR REDUCTION, USS 02252- MCC-SPPB	3	
1151	MCC, PUMP, MIX, SLUDGE, USS 02211-MCC-SMP1	3	
1156	GENERATOR 1, DIESEL, STANDBY 04210-GEN1	4	Near end of life
1173	PANEL, SWITCHGEAR, MAIN, GENERATOR 1 04204-MSG-GEN1	3	

1174	TRANSFORMER, DISTRIBUTION, GENERATOR BUILDING 04230-TSP- 20	3	
1177	A-BUS, MSG, CONTROL, GENERATOR 01350-MSG-A_BUS	3	
1178	B-BUS, MSG, CONTROL, GENERATOR 01360-MSG-B_BUS	3	
1180	SUBSTATION, TRANSFORMER, 12KV, HW 00240-SUBSTATION	3	
1181	SWITCHGEAR, MAIN, 480 VOLT, HW 00240-MSG-HWE	3	
1182	SWITCH, TRANSFER (ATS), PANEL, HW, DPC4/DPL4 00240-TSC4	3	
1185	BREAKER, GROUND, MSB 01300- MSG-GBREAKER	3	
1190	SWITCH, TRANSFER (ATS), PANEL, POWER, DISTRIBUTION, MSG DPC8 01336-TSC8	3	
1191	SWITCH, TRANSFER (ATS), PANEL, POWER, DISTRIBUTION, MSG DPL8 01336-TSL8	3	
1195	SWITCH, TRANSFER (ATS), POWER, DISTRIBUTION, PERSONNEL DPC6 02623-TSC6	3	
1217	SWITCH, TRANSFER (ATS), POWER AST-TSP-11	3	
1218	SWITCH, TRANSFER (ATS), POWER SST-TSP-12	3	
1219	SUBSTATION, TRANSFORMER, 12KV, PST 00482-SUBSTATION	3	
1220	SWITCHGEAR, MAIN, 480V, PST 00482-MSG-PST	3	
1221	SWITCH, TRANSFER (ATS), PANEL, POWER, DISTRIBUTION, PST DPC8 00482-TSC1	3	
1225	SWITCHGEAR, MAIN, 480V, SP 02633- MSG-SP	3	
1226	SUBSTATION, TRANSFORMER, 12KV, SP 02633-SUBSTATION	3	
1227	SWITCH, TRANSFER (ATS), PANEL, POWER, DISTRIBUTION, SP DPC5 02621-TSC5	3	
1228	SWITCH, TRANSFER (ATS), PANEL, POWER, DISTRIBUTION, SP DPL5 02621-TSL5	3	
1229	BREAKER, TIE, 4000AF/2000AT BRK- TIE	3	
1230	TRANSFORMER, 12KV-460/277V AST- T-5A	3	
1231	TRANSFORMER, 12KV-460/277V AST- T-5B	3	
1232	TRANSFORMER, 12KV-460/277V SST- T-6A	3	

1233	TRANSFORMER, 12KV-460/277V SST-T-6B	3	
1245	BLOWER 1, AIR, CHANNEL, PRIMARY 00600-PCAB1	5	Out of service, package has been submitted to IBWC
1247	BLOWER 2, AIR, CHANNEL, PRIMARY 00601-PCAB2	5	Out of service, package has been submitted to IBWC
1252	VALVE 1, HOPPER, SLUDGE, TANK 1, PRIMARY SEDIMENTATION 00450-MV-PSV1A LIMITTORQUE	1	
1253	VALVE 2, HOPPER, SLUDGE, TANK 1, PRIMARY SEDIMENTATION 00450-MV-PSV1B LIMITTORQUE	1	
1254	VALVE 1, HOPPER, SLUDGE, TANK 2, PRIMARY SEDIMENTATION 00451-MV-PSV2A LIMITTORQUE	1	
1255	VALVE 2, HOPPER, SLUDGE, TANK 2, PRIMARY SEDIMENTATION 00451-MV-PSV2B LIMITTORQUE	1	
1265	METER, FLOW, 8", COMMON LINE, PRIMARY SLUDGE 00474-FLOW-PSCF1	3	
1266	GRINDER 1, PRIMARY SLUDGE 00475-PSG1	4	Scheduled to be replaced Q1 2024
1269	PUMP 1, DISCFLO, PRIMARY SLUDGE 00452-DISC-PSP1	3	
1271	PUMP 2, DISCFLO, PRIMARY SLUDGE 00456-DISC-PSP2	3	
1273	PUMP 3, DISCFLO, PRIMARY SLUDGE 00460-DISC-PSP3	5	New pump to be installed
1277	PANEL, CONTROL, VFD, BENASHAW, PSP 3 00460-AFD-BENSHAW-PSP3	2	
1281	VALVE, DISCHARGE, PRIMARY SKIMMINGS 00505-MV-PSKV3	4	Valves for Grinders not operational
1285	PUMP 1, PRIMARY SKIMMINGS 00501-PSKP1	3	
1287	PUMP 2, PRIMARY SKIMMINGS 00502-PSKP2	3	
1289	VALVE, RECYCLE, PRIMARY SKIMMINGS 00503-MV-PSKV1 LIMITTORQUE	3	
1290	VALVE, RETURN, SUB-NATANT, PRIMARY SKIMMINGS 00504-MV-PSKV2 LIMITTORQUE	3	
1300	PANEL, CONTROL, PUMP, NPW 01341-MCC-NaOCL	3	
1304	PUMP 1, NPW2P NPW2P-1	4	Need new VFD, package has been submitted to IBWC
1305	VFD, PUMP 1, NPW2P NPW2P-1-VFD	4	Need new VFD, package has been submitted to IBWC

1306	PUMP 2, NPW2P NPW2P-2	5	Out for repairs, package has been submitted to IBWC
1307	VFD, PUMP 2, NPW2P NPW2P-2-VFD	3	Package has been submitted to IBWC for upgrade
1308	PUMP 3, NPW2P NPW2P-3	2	Pump has been rebuilt, package has been submitted for upgrade
1309	VFD, PUMP 3, NPW2P NPW2P-3-VFD	5	Need new VFD, package has been submitted to IBWC for upgrade
1311	PUMP 4, JOCKEY, NPW2P NPW2P-4	5	Out for repairs, package has been submitted to IBWC for upgrade
1312	PUMP 5, JOCKEY, NPW2P NPW2P-5	1	Rebuilt 2023, package has been submitted to IBWC for upgrade
1314	STRAINER, NPW2P, NORTH NPW-STR-N	3	
1315	STRAINER, NPW2P, SOUTH NPW-STR-S	4	In need of maintenance
1316	PUMP 1, TURBINE, NPW 01341-NPWP1	4	Need to be rebuilt, package has been submitted to IBWC
1317	PUMP 2, TURBINE, NPW 01342-NPWP2	4	Need to be rebuilt, package has been submitted to IBWC
1318	PUMP 3, TURBINE, NPW 01343-NPWP3	4	Need to be rebuilt, package has been submitted to IBWC
1319	PUMP 4, TURBINE, NPW 01344-NPWP4	4	Need to be rebuilt, package has been submitted to IBWC
1320	WELL, WET, NPW 01340-WELL-NPW	3	
1324	VFD, A-B 1336 PLUS II, PUMP 1, TURBINE, NPW 01341-AFD-NPWP1	3	
1326	VFD, A-B 1336 PLUS II, PUMP 2, TURBINE, NPW 01342-AFD-NPWP2	3	
1328	VFD, A-B 1336 PLUS II, PUMP 3, TURBINE, NPW 01343-AFD-NPWP3	3	
1330	VFD, A-B 1336 PLUS II, PUMP 4, TURBINE, NPW 01344-AFD-NPWP4	3	
1332	GATE, WEIR, NPW2P (54 X 54) NPW-WG-1	3	
1333	PIPING, NPW2P NPW2PPG	3	
1334	VALVES, NPW2P NPW2PVG	3	
1335	PIPING, NPWPS2CLP NPWPS2CLPPG	3	
1336	VALVES, NPWPS2CLP NPWPS2CLPVG	3	
1337	METER, FLOW, 30", EMERGENCY CONNECTION, PRIMARY EFFLUENT 00618-FLOW-PEEC (to City of San Diego Point Loma Treatment Plant)	5	Not in use condition unknown
1341	VALVE, SPRAYER, SKIMMER 1, ROTARY, PST 00403-MV-PSKS1	5	Scheduled to be replaced Q1 2024
1343	VALVE, SPRAYER, SKIMMER 2, ROTARY, PST 00406-MV-PSKS2	5	Scheduled to be replaced Q1 2024

1345	VALVE, SPRAYER, SKIMMER 3, ROTARY, PST 00409-MV-PSKS3	5	Scheduled to be replaced Q1 2024
1347	VALVE, SPRAYER, SKIMMER 4, ROTARY, PST 00412-MV-PSKS4	5	Scheduled to be replaced Q1 2024
1349	VALVE, SPRAYER, SKIMMER 5, ROTARY, PST 00415-MV-PSKS5	5	Scheduled to be replaced Q1 2024
1350	TANK 1, PRIMARY SEDIMENTATION, PST 00400-PST1	5	Out of service
1351	TANK 2, PRIMARY SEDIMENTATION, PST 00400-PST2	5	Out of service
1352	TANK 3, PRIMARY SEDIMENTATION, PST 00400-PST3	5	Out of service
1353	TANK 4, PRIMARY SEDIMENTATION, PST 00400-PST4	5	Out of service
1354	TANK 5, PRIMARY SEDIMENTATION, PST 00400-PST5	5	Tank repaired in need of new pump
1365	PANEL, CONTROL, LOCAL, FECL3-POLY, PST 00416-LCP-PSTE-1A	3	
1394	METER, FLOW, MAGNETIC, 24", PEB 00625-FLOW-PEBM1	2	
1402	GATE, KNIFE, INLET, 24", PEB 00625-G-KNIFE-IN	3	
1403	GATE, KNIFE, OUTLET, 24", PEB 00625-G-KNIFE-OUT	3	
1404	VALVE, CONTROL, FLOW, 42", PERC 00681-PERC	5	Not in use condition unknown
1406	VALVE, CONTROL, FLOW, 48", PEB 00626-BMCV2	2	
1408	GATE, KNIFE, INLET, 48", PEB 00626-G-KNIFE-IN	3	
1409	GATE, KNIFE, OUTLET, 48", PEB 00626-G-KNIFE-OUT	3	
1414	METER, FLOW, 42" KROHNE, PERC, FE/FIT-00681 00681-PERC-FLOWMETER	5	Not in use condition unknown
1419	CONNECTION, VALVE, EMERGENCY 00911-EMER-CONN (to City of San Diego Point Loma Treatment Plant)	5	Not in use condition unknown
1420	PRESS 1, BELT PRESS (BFP) 02695-BFP1	3	Working on a package for refurbishment
1423	PRESS 2, BELT PRESS (BFP) 02696-BFP2	5	Working on a package for refurbishment
1426	PRESS 3, BELT PRESS (BFP) 02697-BFP3	3	Working on a package for refurbishment
1429	PRESS 4, BELT PRESS (BFP) 02698-BFP4	5	Working on a package for refurbishment
1444	PUMP 1, FEED, SLUDGE, DISCFLO, BELT PRESS (BFP) 02635-DISC-SFP1	3	Package submitted to IBWC for upgrade
1445	PUMP 2, FEED, SLUDGE, DISCFLO, BELT PRESS (BFP) 02636-DISC-SFP2	5	Package submitted to IBWC for upgrade

1446	PUMP 3, FEED, SLUDGE, DISCFLO, BELT PRESS (BFP) 02637-DISC-SFP3	3	Package submitted to IBWC for upgrade
1447	PUMP 4, FEED, SLUDGE, DISCFLO, BELT PRESS (BFP) 02638-DISC-SFP4	5	Package submitted to IBWC for upgrade
1456	GRINDER 1, SLUDGE, BELT PRESS (BFP) 02625-SG1	5	Package submitted to IBWC for upgrade
1459	PUMP 1, BOOSTER, WASH WATER, BELT PRESS (BFP) 02707-WWP1	4	Package submitted to IBWC for upgrade
1461	PUMP 2, BOOSTER, WASH WATER, BELT PRESS (BFP) 02708-WWP2	4	Package submitted to IBWC for upgrade
1463	PUMP 3, BOOSTER, WASH WATER, BELT PRESS (BFP) 02709-WWP3	4	Package submitted to IBWC for upgrade
1465	PUMP 4, BOOSTER, WASH WATER, BELT PRESS (BFP) 02710-WWP4	4	Package submitted to IBWC for upgrade
1467	PIPING, MIXING, SLUDGE, USST SMP-PG	4	Scheduled to be replaced Q1 2024
1468	VALVES, MIXING, SLUDGE, USST SMP-VG	4	Scheduled to be replaced Q1 2024
1469	PUMP 1A, MIXING, SLUDGE, USST 02211-SMP1A	5	Scheduled to be replaced Q1 2024
1471	PUMP 1B, MIXING, SLUDGE, USST 02212-SMP1B	5	Scheduled to be replaced Q1 2024
1473	PUMP 1C, MIXING, SLUDGE, USST 02213-SMP1C	5	Scheduled to be replaced Q1 2024
1475	PUMP 2A, MIXING, SLUDGE, USST SMP-2A	3	Scheduled to be replaced Q1 2024
1476	PUMP 2B, MIXING, SLUDGE, USST SMP-2B	4	Scheduled to be replaced Q1 2024
1477	PUMP 2C, MIXING, SLUDGE, USST SMP-2C	5	Scheduled to be replaced Q1 2024
1479	TANK 1, SLUDGE, UNSTABILIZED (USST) 02210-USST1	4	Needs to be cleaned and inspected
1480	CONVEYOR 1A, BELT PRESS (BFP) 02715-BFPC1A	4	In need of rebuild, package submitted for upgrade
1481	CONVEYOR 1B, BELT PRESS (BFP) 02715-BFPC1B	4	In need of rebuild, package submitted for upgrade
1482	CONVEYOR 2A, BELT PRESS (BFP) 02716-BFPC2A	4	In need of rebuild, package submitted for upgrade
1483	CONVEYOR 2B, BELT PRESS (BFP) 02716-BFPC2B	4	In need of rebuild, package submitted for upgrade
1486	CONVEYOR 1, TRUCK LOADING 02850-TLC1	4	In need of rebuild
1489	CONVEYOR 2, TRUCK LOADING 02851-TLC2	3	
1493	HANDLING UNIT, AIR, COMPRESSOR ROOM, DAF-LCC DAF-HVC-1	3	
1497	PANEL 1, CONTROL, AIR, DAF DACP1	3	

1498	PANEL 2, CONTROL, AIR, DAF DACP2	3	
1499	PANEL 1, CONTROL, BUBBLER DAF DBCP1	3	
1500	PANEL 2, CONTROL, BUBBLER DAF DBCP2	3	
1501	PANEL, CONTROL, HIGH-LEVEL ALARM, POLYMER, DAF FCP-DAF	3	
1503	LIGHTING, BUILDING, CONTROL, DAF LG-04	3	
1504	STRUCTURE, CONTROL, DAF DAF-BLGD	3	
1505	TANK 1, DAF DAFT1	3	
1506	TANK 2, DAF DAFT2	3	
1511	TANK 1, POLYMER, BULK, DAF DPST1	3	
1513	TANK 1, MIXING, POLYMER, DAF DPMT1	3	
1516	COLLECTOR 1, SLUDGE, DAF DSC1	4	In need of rebuild
1517	COLLECTOR 2, SLUDGE, DAF DSC2	4	In need of rebuild
1518	VALVES, DAF POLYMER DPFPVG	3	
1522	PUMP 1, PRESSURIZATION, DAF DPP1	3	
1523	PUMP 2, PRESSURIZATION, DAF DPP2	3	
1524	PIPING, DAF POLYMER DPFPPG	4	Old in need of upgrade
1525	PUMP 1, SLUDGE, THICKENED WASTE ACTIVATED (TWAS) TWASP1	3	
1526	PUMP 2, SLUDGE, THICKENED WASTE ACTIVATED (TWAS) TWASP2	3	
1528	PIPING, TWASP TWASPPG	3	
1529	VALVES, TWASP TWASPVG	3	
1540	GENERATOR, PORTABLE 03800-PORTABLE GEN	3	
1546	TRUCK, DUMP, 10-YD 6x4, FREIGHTLINER (IBWC) 03800-10YD-DUMP, Model 2-112, Tag#: S-770	4	Old in need of upgrade
1547	TRUCK, DUMP, 2-TON (IBWC) 03800-2TON_DUMP, Model F6001FD, Tag#: S-674	5	Old in need of upgrade
1555	FORKLIFT, CLARK 03800-FKLIFT, 11 Ton, CDP-100, Tag#: 80041	3	
1556	CART 10, ELECTRIC, OPERATIONS 03800-VEH-CC10	4	In need of upgrade
1557	CART 4, Electric, Operations 03800-VEH-CC4	4	In need of upgrade
1558	CART 7, ELECTRIC, OPERATIONS 03800-VEH-CC7	4	In need of upgrade
1560	CART 8, ELECTRIC, ELECTRICAL MAINTENANCE 03800-VEH-CC8	4	In need of upgrade

1561	CART 5, ELECTRIC, MAINTENANCE 03800-VEH-CC5	4	In need of upgrade
1562	CART 6, ELECTRIC, MAINTENANCE 03800-VEH-CC6	4	In need of upgrade
1565	TRACTOR, JOHN DEERE 03800- TRACTOR_EM, Model 6400, Tag#: 80042	5	Out of service
1573	EXTINGUISHERS, FIRE, AST AST- FEX-Group	1	
1575	EXTINGUISHERS, FIRE, DAF DAF- FEX-Group	1	
1577	PANEL 1, FIRE ALARM, DAF DAF-FAP- 01	1	
1578	PANEL 4, FIRE ALARM, (ROOM 209) FAP-04	2	
1579	PANEL 5, FIRE ALARM, (HALLWAY) FAP-05	2	
1580	EXTINGUISHERS, FIRE P/M BLD-FEX Group	1	
1581	SYSTEM, SUPPRESSION, FIRE FSSU- 01	1	
1587	PANEL 2, FIRE ALARM, SST SST-FAP- 02	1	
1588	EXTINGUISHERS, FIRE, SST SST- FEX-Group	1	
1591	METER, FLOW, MAGNETIC, 16", CANYON COLLECTOR 01515-FLOW- CCM1	2	
1592	METER, FLOW, MAGNETIC, 30", CANYON COLLECTOR 01515-FLOW- CCM2	4	New meter needs to be installed
1593	STRUCTURE, VAULT, METER, CANYON COLLECTOR 01514-CCMVS- BLDG	3	
1596	COLLECTOR, CANYON, DEL SOL 00012-CYN-DELSOL	3	
1597	COLLECTOR, CANYON, GOAT 00014- CYN-GOAT	3	
1598	COLLECTOR, CANYON, SILVA DRAIN 00011-CYN-SILVA	3	
1599	COLLECTOR, CANYON, SMUGGLER'S GULCH 00013-CYN- SMUGGLERS	3	
1600	COLLECTOR, CANYON, STEWARTS DRAIN 00010-CYN-STEWARTS	3	
1601	PIPING, GCPS 04100-PG-GCPS	3	
1602	VALVES, GCPS 04100-VG-GCPS	3	
1603	GROUNDS, GCPS 04100-GCPS- GRNDS	3	
1604	PIPING, PUMP, SUMP, GCPS 04100- SP-PG-GCPS	3	
1605	VALVES, PUMP, SUMP, GCPS 04100- SP-VG-GCPS	3	

1606	GROUNDS, HPS 04300-HPS-GRNDS	3	
1607	PIPING, HPS 04300-PG-HPS	3	
1608	VALVES, HPS 04300-VG-HPS	3	
1609	PIPING, PUMP, SUMP, HPS 04300-SP-PG-HPS	3	
1610	VALVES, PUMP, SUMP, HPS 04300-SP-VG-HPS	3	
1611	PIPING, SECONDARY SKIMMINGS SSKP-PG	3	
1612	VALVES, SECONDARY SKIMMINGS SSKP-VG	3	
1613	PIPING, SUMP, SECONDARY SKIMMINGS PS SSKSP-PG	3	
1614	VALVES, SUMP, SECONDARY SKIMMINGS PS SSKSP-VG	3	
1615	PIPING, SECONDARY DRAINAGE SSTDP-PG	3	
1616	VALVES, SECONDARY DRAINAGE SSTDP-VG	3	
1617	PIPING, SECONDARY SUMPS SSTSP-PG	3	
1618	VALVES, SECONDARY SUMPS SSTSP-VG	3	
1619	PIPING, PRIMARY SUMPS 00615-PSSP-PG	3	
1620	VALVES, PRIMARY SUMPS 00615-PSSP-VG	3	
1621	PIPING, PST SKIMMINGS SUMP 00616-PSKSP-PG	3	
1622	VALVES, PST SKIMMINGS SUMP 00616-PSKSP-VG	3	
1623	PIPING, PRI SED POLYMER ADDITION AREA SUMP 00617-SP-PG	3	
1624	VALVES, PRI SED POLYMER ADDITION AREA SUMP 00617-SP-VG	3	
1625	PIPING, EFFLUENT DISTRIBUTION STRUCTURE SUMP 01540-SP-PG	3	
1626	VALVES, EFFLUENT DISTRIBUTION STRUCTURE SUMP 01540-SP-VG	3	
1627	PIPING, EFFLUENT STRUCTURE METER VAULT SUMP 01509-EMSSP-PG	3	
1628	VALVES, EFFLUENT STRUCTURE METER VAULT SUMP 01509-EMSSP-VG	3	
1629	PIPING, ORHW CHEMICAL STORAGE AREA SUMP 00368-ORSP-PG	4	Needs to be replaced
1630	VALVES, ORHW CHEMICAL STORAGE AREA SUMP 00368-ORSP-VG	4	Needs to be replaced

1631	PIPING, ODOR REDUCTION PRIMARY SEDIMENT AREA SUMP 00668-ORSP-PG	4	Needs to be replaced
1632	VALVES, ODOR REDUCTION PRIMARY SEDIMENT AREA SUMP 00668-ORSP-VG	4	Needs to be replaced
1633	PIPING, SP ODOR CONTROL AREA SUMP 03700-ORSP-SP-PG	4	Needs to be replaced
1634	VALVES, SP ODOR CONTROL AREA SUMP 03700-ORSP-SP-VG	4	Needs to be replaced
1635	PIPING, USS ODOR CONTROL AREA SUMP 02250-ORUSS-SP-PG	4	Needs to be replaced
1636	VALVES, USS ODOR CONTROL AREA SUMP 02250-ORUSS-SP-VG	4	Needs to be replaced
1638	TANK 2, SLUDGE, UNSTABILIZED (USST) 02210-LVL-USST2	4	Needs to be cleaned and inspected
1639	VALVES, MANUAL VALVES, BLOWER, AIR, PROCESS PAB-VG	3	
1640	STRUCTURE, INFLUENT CHANNEL, AST ASTC-STRUCTURE	3	
1641	PIPING, SUMP, STORAGE AREA, POLYMER, BULK, DAF DSP-PG	3	
1642	VALVES, SUMP, STORAGE AREA, POLYMER, BULK, DAF DSP-VG	3	
1643	PIPING, FUEL, GENERATORS 04202-PG	4	Needs to be replaced
1644	VALVES, FUEL, GENERATORS 04202-VG	4	Needs to be replaced
1645	PIPING, FERRIC CHLORIDE 00588-PG	3	
1646	VALVES, FERRIC CHLORIDE 00588-VG	3	
1647	PIPING, ADDITION, POLYMER, PST 00550-PG	3	
1648	VALVES, ADDITION, POLYMER, PST 00550-VG	3	
1653	PIPING, CAUSTIC, ORHW 00365-PG	4	Old in need of upgrade
1654	VALVES, CAUSTIC, ORHW 00365-VG	4	Needs to be replaced
1655	PIPING, SODIUM HYPOCHLORITE, ORHW 00370-PG	4	Needs to be replaced
1656	VALVES, SODIUM HYPOCHLORITE, ORHW 00370-VG	4	Needs to be replaced
1657	PIPING, CAUSTIC, ORPST 00665-PG	4	Needs to be replaced
1658	VALVES, CAUSTIC, ORPST 00665-VG	4	Needs to be replaced
1659	PIPING, SODIUM HYPOCHLORITE, ORPST 00670-PG	4	Needs to be replaced
1660	VALVES, SODIUM HYPOCHLORITE, ORPST 00670-VG	4	Needs to be replaced
1661	PIPING, CAUSTIC, ORSP 0375-PG	4	Needs to be replaced
1662	VALVES, CAUSTIC, ORSP 0375-VG	4	Needs to be replaced

1663	PIPING, SODIUM HYPOCHLORITE, ORSP 03730-PG	4	Needs to be replaced
1664	VALVES, SODIUM HYPOCHLORITE, ORSP 03730-VG	4	Needs to be replaced
1665	PIPING, SULFURIC ACID, ORSP 03735-PG	4	Needs to be replaced
1666	VALVES, SULFURIC ACID, ORSP 03735-VG	4	Needs to be replaced
1667	PIPING, CAUSTIC, ORUSS 02265-PG	4	Needs to be replaced
1668	VALVES, CAUSTIC, ORUSS 02265-VG	4	Needs to be replaced
1669	PIPING, SODIUM HYPOCHLORITE, ORUSS 02270-PG	4	Needs to be replaced
1670	VALVES, SODIUM HYPOCHLORITE, ORUSS 02270-VG	4	Needs to be replaced
1671	PIPING, POLYMER, BELT PRESS (BFP), SP 02600-PG	3	
1672	VALVES, POLYMER, BELT PRESS (BFP), SP 02600-VG	3	
1673	PIPING/DUCTING, ORHW 00350-PG	4	Needs to be replaced
1674	VALVES, DUCTING, ORHW 00350-VG	4	Needs to be replaced
1675	PIPING/DUCTING, ORPST 00660-PG	4	Needs to be replaced
1676	VALVES, DUCTING, ORPST 00660-VG	4	Needs to be replaced
1677	PIPING/DUCTING, ORSP 03700-PG	4	Needs to be replaced
1678	VALVES, DUCTING, ORSP 03700-VG	4	Needs to be replaced
1679	PIPING/DUCTING, ORUSS 02250-PG	4	Needs to be replaced
1680	VALVES, DUCTING, ORUSS 02250-VG	4	Needs to be replaced
1681	PIPING, GRIT REMOVAL 00300-PG	4	Needs to be replaced
1682	VALVES, GRIT REMOVAL 00300-VG	4	Needs to be replaced
1683	PIPING, GRIT BLOWER 00300-GB-PG	4	Needs to be replaced
1684	VALVES, GRIT BLOWER 00300-GB-VG	4	Needs to be replaced
1685	PIPING, PUMP, INFLUENT 00200-PG	3	
1686	VALVES, PUMP, INFLUENT 00200-VG	4	Hard to operate
1687	PIPING, AIR, CHANNEL, PRIMARY 00600-PG	3	
1688	VALVES, AIR, CHANNEL, PRIMARY 00600-VG	3	
1689	PIPING, PRIMARY SLUDGE 00450-PG	3	
1690	VALVES, PRIMARY SLUDGE 00450-VG	4	Needs to be replaced

1691	PIPING, PRIMARY SKIMMINGS 00500-PG	3	
1692	VALVES, PRIMARY SKIMMINGS 00500-VG	3	
1693	PIPING, NPW 01340-PG	3	
1694	VALVES, NPW 01340-VG	3	
1695	PIPING, FEED, SLUDGE, BELT PRESS (BFP) 02635-PG	5	Needs to be replaced, package submitted for upgrade
1696	VALVES, FEED, SLUDGE, BELT PRESS (BFP) 02635-VG	5	Needs to be replaced, package submitted for upgrade
1697	PIPING, WASH WATER, BELT PRESS (BFP) 02707-PG	5	Needs to be replaced, package submitted for upgrade
1698	VALVES, WASH WATER, BELT PRESS (BFP) 02707-VG	5	Needs to be replaced, package submitted for upgrade
1699	PIPING, PRESSURIZATION, DAF DPP-PG	3	
1700	VALVES, PRESSURIZATION, DAF DPP-VG	3	
1701	ENGINE, DIESEL, GENERATOR, TRAILER 2 04250-GEN-TRAILER-BLDG2	2	
1702	STATION, FILL, FUEL TANK, DIESEL, 10K GAL 04270-DIESEL-TANK-FILL2	2	
1703	TANK, DAY, GENERATOR 2, DIESEL ENGINE 04252-DAYTANK2	2	
1704	PANEL, ALARM, DAY TANK 2, GENERATOR 2, DIESEL ENGINE 04252-FCP-DT2	1	
1705	TANK 1, OVERFLOW, GENERATOR 2, DIESEL ENGINE 04252-OVF-TANK2	2	
1706	PANEL, ALARM, STORAGE, GENERATOR 2, DIESEL 04252-FCP-FOST2	1	
1707	PANEL, ALARM, STORAGE, GENERATOR 2, DIESEL 04252-FOST2	1	
1711	TANK, STORAGE, FUEL, 10,000 GAL, GENERATOR 2 04270-DIESEL-TANK-10K	2	
1714	GENERATOR 2, DIESEL, STANDBY 04260-GEN2	2	
1715	PANEL, LCP, GENERATOR 2, DIESEL, STANDBY 04260-LCP-GEN2	2	
1716	CONVEYOR 2, SCREENING, HW 00170-CNV2	3	
1845	Loader, Caterpillar, CAT928G	3	
1846	Backhoe, Caterpillar 430F, Tag#: 80174	3	
1852	ASSEMBLY, FILTER, AIR, MCC, Headworks, Purafil	2	

1853	ASSEMBLY, FILTER, AIR, MCC, Blower Bldg., Purafil	2	
1854	ASSEMBLY, FILTER, AIR, MCC, SST/RAS, Purafil	2	
1860	Well, Wet, NPW2P, Secondary NPW	2	
1862	Pump, Polymer Addition, AST, PP410	2	
1863	Cart 11, Club, Gas Operated, Carry All Plus	4	Clutch needs servicing
1864	Cart 12, Club, Gas Powered	4	Fuel system needs servicing
1865	Cart 13, Club, Gas Operated	4	Clutch needs servicing
1868	Lighting, Grounds Area LG-12, South Fence Area	3	Needs electrical work
1871	Mower, Lawn, Riding, Dixie Chopper	4	Needs electrical work
1872	Gate, Sluice, Inlet, 24" Isolation, Goat Canyon Collector	3	
1873	Gate, Sluice, Inlet, 30" Isolation, Smuggler's Gulch Canyon Collector	3	
1876	Cart 14, Electric, Operations	4	Old in need of upgrade
1877	Cart 15, Electric, Operations	4	Old in need of upgrade
1879	Man lift, Battery Operated, Skyjack ST3226	3	
1888	Truck, Dodge, 2008, RAM 2500, 5.7 Li Hemi, Tag# 26931J1	3	
1889	Truck, Ford, F150XL, White, Tag# 41719H1	3	
1890	Truck, Dodge, Ram 1500, White, 2008, Tag# 26920J1	3	
1892	Softener, Water, Solids Processing, Culligan	5	Not in use condition unknown
1896	TANK 1, EQUALIZATION BASIN, EQBT1	3	
1897	TANK 2, EQUALIZATION BASIN, EQBT2	3	
1898	COLLECTOR 11, SECONDARY SLUDGE SSC11	3	
1899	COLLECTOR 12, SECONDARY SLUDGE SSC12	3	
1900	COLLECTOR 13, SECONDARY SLUDGE SSC13	5	Out of service
1901	DRIVE 11, SKIMMING, SECONDARY (ROTORK ACTUATOR) SSKS11	3	
1902	DRIVE 12, SKIMMING, SECONDARY (ROTORK ACTUATOR) SSKS12	3	
1903	DRIVE 13, SKIMMING, SECONDARY (ROTORK ACTUATOR) SSKS13	3	
1904	PUMP 6, INFLUENT 00216-IP6B	5	Removed
1905	Truck, Ford, 4X4, F150XL, White, Tag# 28526F2	3	

1907	MIXER 1, EQUALIZATION BASIN (TANK 1) EQTMX 1	3	
1908	MIXER 2, EQUALIZATION BASIN (TANK 1) EQTMX 2	3	
1909	MIXER 3, EQUALIZATION BASIN (TANK 1) EQTMX 3	3	
1910	MIXER 4, EQUALIZATION BASIN (TANK 2) EQTMX 4	3	
1911	MIXER 5, EQUALIZATION BASIN (TANK 2) EQTMX 5	3	
1912	MIXER 6, EQUALIZATION BASIN (TANK 2) EQTMX 6	3	
1914	PUMP 1, SUBMERSIBLE, EQB-P1	2	
1915	PUMP 2, SUBMERSIBLE, EQB-P2	2	
1916	PUMP 1A, RETURN ACTIVATED SLUDGE (RAS) RASP1A	3	
1917	PUMP 1B, RETURN ACTIVATED SLUDGE (RAS) RASP1B	3	
1918	PUMP 1C, RETURN ACTIVATED SLUDGE (RAS) RASP1C	3	
1919	PUMP 1D, RETURN ACTIVATED SLUDGE (RAS) RASP1D	3	
1920	PUMP 1E, RETURN ACTIVATED SLUDGE (RAS) RASP1E	3	
1921	PUMP 1F, RETURN ACTIVATED SLUDGE (RAS) RASP1F	3	
1929	METER 11, FLOW, SECONDARY SLUDGE 1119	3	
1930	METER 12, FLOW, SECONDARY SLUDGE 1120	3	
1931	METER 13, FLOW, SECONDARY SLUDGE 1121	3	
1933	PANEL, CONTROL, INFLUENT PUMP 1	3	
1934	PANEL, CONTROL, INFLUENT PUMP 2	3	
1935	PANEL, CONTROL, INFLUENT PUMP 3	3	
1936	PANEL, CONTROL, INFLUENT PUMP 4	3	
1937	PANEL, CONTROL, INFLUENT PUMP 5	4	Needs wiring upgrade
1938	PANEL, CONTROL, INFLUENT PUMP 6	2	
1943	MCC, EXISTING DAF FEEDER BREAKER BUS A	2	
1944	MCC, GATE ACTUATOR, EGTV-1 FEEDER BREAKER	2	
1945	MCC, GATE ACTUATOR, EGTV-2 FEEDER BREAKER	2	
1946	MCC, T-12G FEEDER BREAKER	2	
1947	MCC, DAF 1B, ARMS SWITCH	2	
1948	MCC, MAIN BREAKER DAF 1B	2	

1949	MCC, EXISTING DAF FEEDER BREAKER BUS B	2	
1950	MCC, GATE ACTUATOR EGTV 3, FEEDER BREAKER	2	
1951	MCC, POLELIGHT, FEEDER BREAKER	2	
1952	MCC, SUMP PUMP, FEEDER BREAKER	2	
1953	MCC, GATE ACTUATOR EGTV 4, FEEDER BREAKER	2	
1954	MCC, T-12F3, FEEDER BREAKER	2	
1958	MCC, WET WELL PUMP 2	2	
1959	MCC, WET WELL PUMP 1	2	
1960	SYSTEM, SECURITY, DAF ELECTRICAL ROOM	2	
1961	TRANSFORMER, 12KV-460/277V DAF-T-7A, EQ BASIN	3	
1966	MCC, SSC SSC-MCC	2	
1967	LIGHTING, BUILDING, ADMIN MAINT	3	
1968	LIGHTING, BELT FILTER PRESS BUILDINGS	3	
1969	LIGHTING, HEADWORKS	3	
1970	LIGHTING, MAINTENANCE BUILDING	3	
2013	LIGHTING, GRIT AREA	3	
2040	GATE 3, OUTLET, TANK 2, RAPID MIX, PST 00401-G-SLIDE-GATE3	4	Hard to operate
2041	GATE 3, OUTLET, TANK 3, RAPID MIX, PST 00401-G-SLIDE-GATE3	4	Hard to operate
2042	GATE 3, OUTLET, TANK 4, RAPID MIX, PST 00401-G-SLIDE-GATE3	3	Hard to operate
2043	GATE 3, OUTLET, TANK 5, RAPID MIX, PST 00401-G-SLIDE-GATE3	3	Hard to operate
2044	CABINET, NETWORK WIRING	2	
2045	MCC BUCKET, MIXER 1, ZONE A, ANAEROBIC (TANK 1) ASTMX 1A	2	
2046	MCC BUCKET, MIXER 1, ZONE C, ANAEROBIC (TANK 1) ASTMX 1C	2	
2047	MCC BUCKET, MIXER 1, ZONE E, ANAEROBIC (TANK 1) ASTMX 1E	2	
2048	MCC BUCKET, MIXER 2, ZONE B, ANAEROBIC (TANK 2) ASTMX 2B	2	
2049	MCC BUCKET, MIXER 2, ZONE D, ANAEROBIC (TANK 2) ASTMX 2D	2	
2050	MCC BUCKET, MIXER 2, ZONE F, ANAEROBIC (TANK 2) ASTMX 2F	2	
2051	MCC BUCKET, MIXER 3, ZONE A, ANAEROBIC (TANK 3) ASTMX 3A	2	
2052	MCC BUCKET, MIXER 3, ZONE C, ANAEROBIC (TANK 3) ASTMX 3C	2	
2053	MCC BUCKET, MIXER 3, ZONE E, ANAEROBIC (TANK 3) ASTMX 3E	2	

2054	MCC BUCKET, MIXER 4, ZONE B, ANAEROBIC (TANK 4) ASTMX 4B	2	
2055	MCC BUCKET, MIXER 4, ZONE D, ANAEROBIC (TANK 4) ASTMX 4D	2	
2056	MCC BUCKET, MIXER 4, ZONE F, ANAEROBIC (TANK 4) ASTMX 4F	2	
2057	MCC BUCKET, SST1, NPW2P1	2	
2058	MCC BUCKET, SST1, NPW2P2	2	
2060	MCC BUCKET, MIXER 5, ZONE A, ANAEROBIC (TANK 5) ASTMX 5A	2	
2061	MCC BUCKET, MIXER 5, ZONE C, ANAEROBIC (TANK 5) ASTMX 5C	2	
2062	MCC BUCKET, MIXER 5, ZONE E, ANAEROBIC (TANK 5) ASTMX 5E	2	
2063	MCC BUCKET, MIXER 6, ZONE B, ANAEROBIC (TANK 6) ASTMX 6B	2	
2064	MCC BUCKET, MIXER 6, ZONE D, ANAEROBIC (TANK 6) ASTMX 6D	2	
2065	MCC BUCKET, MIXER 6, ZONE F, ANAEROBIC (TANK 6) ASTMX 6F	2	
2066	MCC BUCKET, MIXER 7, ZONE A, ANAEROBIC (TANK 7) ASTMX 7A	2	
2067	MCC BUCKET, MIXER 7, ZONE C, ANAEROBIC (TANK 7) ASTMX 7C	2	
2068	MCC BUCKET, MIXER 7, ZONE E, ANAEROBIC (TANK 7) ASTMX 7E	2	
2069	MCC, BUCKET, MSB ATS - TSP 20 - 1	2	
2070	MCC, BUCKET, MSB ATS - TSP 20-2	2	
2071	MCC BUCKET, SST1, ATS-150A	2	
2072	MCC BUCKET, SST1, BEG1/NPW2P4	2	
2073	MCC BUCKET SST1, CDWP2	2	
2085	MCC, BUCKET, NAOCL, DPP2/TC2	2	
2086	MCC, BUCKET, NAOCL, DPP2A FEEDER	2	
2087	MCC BUCKET, SST1, EFFLUENT DISTRIBUTION STRUCTURE	2	
2088	MCC, BUCKET, SST1, EFFLUENT METERING STRUCTURE	2	
2089	MCC, BUCKET, NAOCL, HTFC1	2	
2090	MCC, BUCKET, NAOCL, HTFC2	2	
2093	MCC, BUCKET, SST1, LCP-AWS/TAP12A	2	
2094	MCC BUCKET, ASTN1, MAIN BREAKER A	2	
2095	MCC, BUCKET, MSB, MAIN BREAKER A	2	
2096	MCC, BUCKET, SST1, MAIN BREAKER A	2	
2097	MCC, BUCKET, ASTN1, MAIN BREAKER B	2	

2098	MCC, BUCKET, MSB, MAIN BREAKER B	2	
2099	MCC, BUCKET, NAOCL, MAIN BREAKER B	2	
2100	MCC, BUCKET, MSB, MCC-DAF BUS A/ FEEDERS ACB	2	
2101	MCC, BUCKET, MSB, MCC-DAF BUS B/ FEEDERS ACB	2	
2102	MCC, BUCKET, MSB, MCC-NAOCL/ BUS A	2	
2103	MCC, BUCKET, MSB, MCC-NAOCL/ BUS B	2	
2104	MCC, BUCKET, SST1, MINI POWER ZONE	2	
2105	MCC, BUCKET, MSB, MINI POWER ZONE	2	
2110	MCC BUCKET, SST1, NPW2P3	2	
2111	MCC, BUCKET, NAOCL, NPWP1	2	
2112	MCC, BUCKET, NAOCL, NPWP2	2	
2113	MCC, BUCKET, NAOCL, NPWP3	2	
2114	MCC, BUCKET, NAOCL, NPWP4	2	
2115	MCC, BUCKET, NAOCL, PCDWP	2	
2116	MCC, BUCKET, NAOCL, PCLP1	2	
2117	MCC BUCKET, SST1, PDBWP	2	
2118	MCC BUCKET, SST1, PE8G1	2	
2119	MCC, BUCKET, NAOCL, PEBDP	2	
2120	MCC, BUCKET, NAOCL, PEG VALVE	2	
2121	MCC BUCKET, SST1, PLERSP	2	
2122	MCC BUCKET, NAOCL, RASCLP	2	
2123	MCC BUCKET, SST1, RASP1A	2	
2124	MCC BUCKET, SST1, RASP1B	2	
2126	MCC BUCKET, SST1, RASP1D	2	
2127	MCC BUCKET, SST1, RASP1E	2	
2128	MCC BUCKET, SST1, RASP1F	2	
2129	MCC BUCKET, SST1, SSC11	2	
2130	MCC BUCKET, SST1, SEG1/WASP1B	2	
2131	MCC BUCKET, SST1, SGEF1A	2	
2132	MCC BUCKET, SST1, SGEF1B	2	
2133	MCC, BUCKET, NAOCL, SHSP	2	
2134	MCC BUCKET, SST1 SPARE/NPW2P5	2	
2135	MCC, BUCKET, NAOCL, SPARE/CV1347	2	
2136	MCC BUCKET, SST1, SSC1	2	
2137	MCC BUCKET, SST1, SSC10	2	
2138	MCC BUCKET, SST1, SSC12	2	
2139	MCC BUCKET, SST1, SSC13	2	
2140	MCC BUCKET, SST1, SSC2	2	

2141	MCC BUCKET, SST1, SSC3	2	
2142	MCC BUCKET, SST1, SSC4	2	
2143	MCC BUCKET, SST1, SSC5	2	
2144	MCC BUCKET, SST1, SSC6	2	
2145	MCC BUCKET, SST1, SSC7	2	
2146	MCC BUCKET, SST1, SSC8	2	
2147	MCC BUCKET, SST1, SSC9	2	
2148	MCC BUCKET, SST1, SSKP1A	2	
2149	MCC BUCKET, SST1, SSKP1B	2	
2150	MCC BUCKET, SST1, SSTDP1	2	
2151	MCC BUCKET, SST1, SSTSP1/WASP1A	2	
2152	MCC BUCKET, SST1, SSTSP2/TSP12	2	
2153	MCC BUCKET, SST1, SSTSP3/TSP12	2	
2154	MCC BUCKET, ASTN1, TIE BREAKER	2	
2155	MCC, BUCKET, NAOCL, TIE BREAKER	2	
2156	MCC BUCKET, SST1, TIE BREAKER	2	
2157	MCC, BUCKET, MSB, TIE BREAKER	2	
2158	MCC BUCKET, SST1, TLC16	2	
2159	MCC, BUCKET, NAOCL, TM2/TL2	2	
2160	MCC, BUCKET, MSB, TSC-TSL8	2	
2161	MCC, BUCKET, MSB, TSC/TSL8	2	
2162	MCC BUCKET, SST1, TSP12A	2	
2163	MCC, BUCKET, MSB, TSP14/FEEDER ACB-BUS A	2	
2164	MCC, BUCKET, MSB, TSP14/FEEDER ACB-BUS B	2	
2165	SWITCH, TRANSFER (ATS), MCC, SST1, AST-TSP12A	2	
2166	SWITCH, TRANSFER (ATS), AST- TSP12B	2	
2167	SWITCH, TRANSFER (ATS), AST- TSP14	2	
2170	PANEL, CONTROL, WASP1B	2	
2177	PIPING, EQ BASIN 1	2	
2178	PIPING, EQ BASIN 2	2	
2180	MCC, BUCKET, ASTDP1	2	
2181	MCC, BUCKET, ASTGEF1	2	
2182	MCC, BUCKET, ASTGEF2	2	
2183	MCC, BUCKET, ASTSP1	2	
2184	MCC, BUCKET, ASTSP2	2	
2185	MCC, BUCKET, ASTSP3	2	
2186	MCC, BUCKET, ASTSP5	2	
2187	MCC, BUCKET, BFP1	2	

2188	MCC, BUCKET, BFP2	2	
2189	MCC, BUCKET, BFP3	2	
2190	MCC, BUCKET, BFP4	2	
2191	MCC, BUCKET, BFPC1A -BFPC1B / TLC1	2	
2192	MCC, BUCKET, BFPC2A -BFPC2B / TLC2	2	
2193	MCC, BUCKET, CNV1	2	
2194	MCC, BUCKET, CNV2	2	
2195	MCC, BUCKET, CONTROL ROOM AC / TM6	2	
2196	MCC, BUCKET, DAC1	2	
2197	MCC, BUCKET, DAC2	2	
2198	MCC, BUCKET, DPM1	2	
2199	MCC, BUCKET, DPP1 / TSC1	2	
2200	MCC, BUCKET, DPP2	2	
2201	MCC, BUCKET, DPP2	2	
2202	MCC, BUCKET, DPP5	2	
2203	MCC, BUCKET, DPP7	2	
2204	MCC, BUCKET, DSC1	2	
2205	MCC, BUCKET, DSC2	2	
2206	MCC, BUCKET, DSP1 / TM9	2	
2207	MCC, BUCKET, EF1	2	
2208	MCC, BUCKET, EF2	2	
2209	MCC, BUCKET, EF3	2	
2210	MCC, BUCKET, EF4	2	
2211	MCC, BUCKET, EF5	2	
2212	MCC, BUCKET, EF6	2	
2213	MCC, BUCKET, EF7	2	
2214	MCC, USST, Bucket, Air Compressor	2	
2215	MCC-DAF, Bucket, DSC1	2	
2216	MCC-DAF, Bucket,DSC2	2	
2217	MCC-DAF, Bucket,DSP1 / TM9	2	
2218	MCC-HWE, Bucket,EF1	2	
2219	MCC-HWE, Bucket,EF2	2	
2220	MCC-HWE, Bucket,EF3	2	
2221	MCC-SP, Bucket,EF4	2	
2222	MCC-SP, Bucket,EF5	2	
2223	MCC-SP, Bucket,EF6	2	
2224	MCC-SP, Bucket,EF7	2	
2225	MCC-DAFT1B, Bucket,EGTV-34 / Sump Pump	2	
2226	MCC-DAFT1A, Bucket,EQ Tank-1 Mixer-1	2	
2227	MCC-DAFT1A, Bucket,EQ Tank-1 Mixer-2	2	
2228	MCC-DAFT1A, Bucket,EQ Tank-1 Mixer-3	2	

2229	MCC-DAFT1B, Bucket,EQ Tank-2 Mixer-4	2	
2230	MCC-DAFT1B, Bucket,EQ Tank-2 Mixer-5	2	
2231	MCC-DAFT1B, Bucket,EQ Tank-2 Mixer-6	2	
2232	MCC-DAFT1A, Bucket, Exist MCC DAF	2	
2233	MCC-DAFT1B, Bucket, Exist MCC DAF	2	
2234	MCC-PSTE-2, Bucket, Ferric Skid	2	
2235	MCC-DAFT1A, Bucket, Gate Actuator EGTV-1 / EGTV-2	2	
2236	MCC-PSTE-A, Bucket,GB1	2	
2237	MCC-PSTE-B, Bucket,GB2	2	
2238	MCC-HWE, Bucket,GC1	2	
2239	MCC-HWE, Bucket,GC2	2	
2240	MCC-HWE, Bucket,GDO / CNVIP	2	
2241	MCC-PSTE-A, Bucket,GP1	2	
2242	MCC-PSTE-B, Bucket,GP2	2	
2243	MCC-PSTE-A, Bucket,GP3	2	
2244	MCC-PSTE-B, Bucket,GP4	2	
2245	MCC-PSTE-A, Bucket,GP5	2	
2246	MCC-PSTE-B, Bucket,GP6	2	
2247	MCC-PSTE-A, Bucket, Grit Gallery Air Compressor	2	
2248	MCC-SP, Bucket,HU1	2	
2249	MCC-SP, Bucket,HU2	2	
2250	MCC-SP, Bucket,HU3	2	
2251	MCC-SP, Bucket,HU4	2	
2252	MCC-SPPB, Bucket,HVAC / HWH	2	
2253	MCC-ASTN2, Bucket,IMLRP1	2	
2254	MCC-ASTN2, Bucket,IMLRP2	2	
2255	MCC-ASTN2, Bucket,IMLRP3	2	
2256	MCC-ASTN2, Bucket,IMLRP4	2	
2257	MCC-ASTN2, Bucket,IMLRP5	2	
2258	MCC-ASTN2, Bucket,IMLRP6	2	
2259	MCC-ASTN2, Bucket,IMLRP7	2	
2260	MCC-ASTN2, Bucket,IMLRP8	2	
2261	MCC-ASTN2, Bucket,IMLRP9	2	
2262	MCC-PSTE-2, Bucket,Incoming Feed	2	
2263	MCC-SP, Bucket,LTC1	2	
2264	MCC-SP, Bucket,LTC2	2	
2265	MCC-DAFT1A, Bucket,Main Breaker	2	
2266	MCC-DAFT1B, Bucket,Main Breaker	2	
2267	MCC-DAF, Bucket,Main Breaker "A"	2	
2268	MCC-HWE, Bucket,Main Breaker "A"	2	

2269	MCC-SP, Bucket,Main Breaker "A"	2	
2270	MCC-SPPB, Bucket,Main Breaker "A"	2	
2272	MCC-ASTN2, Bucket,Main Breaker "A"	2	
2273	MCC-PSTE-A, Bucket,Main Breaker "A"	2	
2274	MCC-USST, Bucket,Main Breaker "A"	2	
2275	MCC-DAF, Bucket,Main Breaker "B"	2	
2276	MCC-HWE, Bucket,Main Breaker "B"	2	
2277	MCC-SP, Bucket,Main Breaker "B"	2	
2278	MCC-SPPB, Bucket,Main Breaker "B"	2	
2279	MCC-ASTN2, Bucket,Main Breaker "B"	2	
2280	MCC-USST, Bucket,Main Breaker "B"	2	
2281	MCC-PSTE-B, Bucket,Main Breaker "B"	2	
2282	MCC-PSTE-A, Bucket,MCC-PSTE1	2	
2283	MCC-PSTE-B, Bucket,MCC-PSTE-2	2	
2284	MCC-SPPB, Bucket,Mini Power Zone	2	
2285	MCC-SPPB, Bucket,NaOCI Sump Pump	2	
2286	MCC-ASTN2, Bucket,NBSAEF1	2	
2287	MCC-ASTN2, Bucket,NBSAEF2	2	
2288	MCC-ASTN2, Bucket,NBSAEF3	2	
2289	MCC-ASTN2, Bucket,NBSAEF4	2	
2290	MCC-HWE, Bucket,OREF1	2	
2291	MCC-HWE, Bucket,OREF2	2	
2292	MCC-PSTE-A, Bucket,OREF3	2	
2293	MCC-PSTE-B, Bucket,OREF4	2	
2294	MCC-SPPB, Bucket,OREF5	2	
2295	MCC-SPPB, Bucket,OREF6	2	
2296	MCC-SP, Bucket,OREF7	2	
2297	MCC-SP, Bucket,OREF8	2	
2298	MCC-SP, Bucket,OREF9	2	
2299	MCC-HWE, Bucket,ORMP1	2	
2300	MCC-SPPB, Bucket,ORMP10	2	
2301	MCC-SPPB, Bucket,ORMP11	2	
2302	MCC-SPPB, Bucket,ORMP12	2	
2303	MCC-SP, Bucket,ORMP13	2	
2304	MCC-SP, Bucket,ORMP14	2	
2305	MCC-SP, Bucket,ORMP15	2	
2306	MCC-SP, Bucket,ORMP18	2	
2307	MCC-HWE, Bucket,ORMP2	2	
2308	MCC-HWE, Bucket,ORMP3	2	

2309	MCC-HWE, Bucket,ORMP4	2	
2310	MCC-PSTE-A, Bucket,ORMP5	2	
2311	MCC-PSTE-B, Bucket,ORMP6	2	
2312	MCC-PSTE-A, Bucket,ORMP7	2	
2313	MCC-PSTE-B, Bucket,ORMP8	2	
2314	MCC-SPPB, Bucket,ORMP9	2	
2315	MCC-HWE, Bucket,ORRP1	2	
2316	MCC-SP, Bucket,ORRP10	2	
2317	MCC-HWE, Bucket,ORRP2	2	
2318	MCC-PSTE-A, Bucket,ORRP3	2	
2319	MCC-PSTE-B, Bucket,ORRP4	2	
2320	MCC-SPPB, Bucket,ORRP5	2	
2321	MCC-SPPB, Bucket,ORRP6	2	
2322	MCC-SP, Bucket,ORRP7	2	
2323	MCC-SP, Bucket,ORRP8	2	
2324	MCC-SP, Bucket,ORRP9	2	
2325	MCC-PSTE-A, Bucket,ORSP3 / PSKG	2	
2326	MCC-ASTN2, Bucket,PAB1 Demister	2	
2327	MCC-ASTN2, Bucket,PAB1-LOP	2	
2328	MCC-ASTN2, Bucket,PAB2-Demister	2	
2329	MCC-ASTN2, Bucket,PAB2-Lube Oil	2	
2330	MCC-ASTN2, Bucket,PAB3	2	
2331	MCC-ASTN2, Bucket,PAB3-LOP	2	
2332	MCC-ASTN2, Bucket,PABV1 / Spare	2	
2333	MCC-ASTN2, Bucket,PAIV2-Blowoff Valve	2	
2334	MCC-ASTN2, Bucket,PAIV2-Isolation Valve	2	
2335	MCC-ASTN2, Bucket,PAIV3 / PABV3	2	
2336	MCC-PSTE-B, Bucket,PCAB2	2	
2337	MCC-PSTE-A, Bucket,PCBSF1	2	
2338	MCC-PSTE-B, Bucket,PCBSF2	2	
2339	MCC-PSTE-1, Bucket,PFAP1	2	
2340	MCC-PSTE-1, Bucket,PFAP2	2	
2341	MCC-PSTE-2, Bucket,PFAP3	2	
2342	MCC-PSTE-2, Bucket,PFAP4	2	
2343	MCC-PSTE-1, Bucket,PFAP5	2	
2344	MCC-PSTE-2, Bucket,PFMT2	2	
2345	MCC-PSTE-1, Bucket,PFTP1	2	
2346	MCC-PSTE-2, Bucket,PFTP2	2	
2347	MCC-PSTE-A, Bucket,PGEF1	2	
2348	MCC-PSTE-B, Bucket,PGEF2	2	
2349	MCC-SP, Bucket,PM1	2	
2350	MCC-SP, Bucket,PM2	2	

2351	MCC-PSTE-1, Bucket,PMFT1	2	
2352	MCC-DAFT1B, Bucket,Pole Lights / EGTV-3	2	
2353	MCC-PSTE-1, Bucket,PPMT1	2	
2354	MCC-PSTE-2, Bucket,PPMT2	2	
2355	MCC-PSTE-A, Bucket,PSAB1	2	
2356	MCC-PSTE-A, Bucket,PSC2	2	
2357	MCC-PSTE-B, Bucket,PSC3	2	
2358	MCC-PSTE-B, Bucket,PSC4	2	
2359	MCC-PSTE-A, Bucket,PSC5	2	
2360	MCC-PSTE-A, Bucket,PSCI	2	
2361	MCC-PSTE-B, Bucket,PSG1 / ORSP4	2	
2362	MCC-PSTE-A, Bucket,PSKP1	2	
2363	MCC-PSTE-B, Bucket,PSKP2	2	
2364	MCC-PSTE-A, Bucket,PSP1	2	
2365	MCC-PSTE-B, Bucket,PSP2	2	
2367	MCC-PSTE-A, Bucket,PSP3	2	
2368	MCC-PSTE-A, Bucket,RMP1	2	
2369	MCC-PSTE-A, Bucket,RMP2	2	
2370	MCC-PSTE-B, Bucket,RMP3	2	
2371	MCC-PSTE-B, Bucket,RMP4	2	
2372	MCC-SP, Bucket,ROMP17	2	
2373	MCC-PSTE-A, Bucket,RPM5	2	
2374	MCC-HWE, Bucket,SBPW1 / SWTW1	2	
2375	MCC-HWE, Bucket,SBPW2 / SBTW2	2	
2376	MCC-ASTN2, Bucket,SCAB1	2	
2377	MCC-ASTN2, Bucket,SCAB2	2	
2378	MCC-ASTN2, Bucket,SCAB3	2	
2379	MCC-HWE, Bucket,SCN1	2	
2380	MCC-HWE, Bucket,SCN2	2	
2381	MCC-HWE, Bucket,SCN3	2	
2382	MCC-SP, Bucket,SDCF1	2	
2383	MCC-SP, Bucket,SDCF2	2	
2384	MCC-SP, Bucket,SDCS1	2	
2385	MCC-SP, Bucket,SDCS2	2	
2386	MCC-HWE, Bucket,SF1	2	
2387	MCC-SP, Bucket,SF2	2	
2388	MCC-SP, Bucket,SF3	2	
2389	MCC-SP, Bucket,SF4	2	
2390	MCC-SP, Bucket,SF5	2	
2391	MCC-SP, Bucket,SLM2	2	
2392	MCC-SP, Bucket,SMA2	2	
2393	MCC-USST, Bucket,SMP1A	2	
2394	MCC-USST, Bucket,SMP1B	2	
2395	MCC-USST, Bucket,SMP1C	2	

2396	MCC-USST, Bucket,SMP2A	2	
2397	MCC-USST, Bucket,SMP2B	2	
2398	MCC-USST, Bucket,SMP2C	2	
2399	MCC-SPPB, Bucket,Spare 1	2	
2400	MCC-SPPB, Bucket,Spare 2	2	
2401	MCC-ASTN2, Bucket,Spare / PAIV1	2	
2402	MCC-SP, Bucket,Spare / Poly Storage	2	
2403	MCC-SP, Bucket,Spare / SLM1	2	
2404	MCC-SP, Bucket,Spare / Sludge Grinder	2	
2405	MCC-HWE, Bucket,Sump Pump	2	
2406	MCC-HWE, Bucket,Sump Pump	2	
2407	MCC-SP, Bucket,SVF1	2	
2408	MCC-DAFT1B, Bucket,T-12F3	2	
2409	MCC-DAFT1A, Bucket,T-12G	2	
2410	MCC-SPPB, Bucket,TC6 / Security Gate	2	
2411	MCC-SP, Bucket,SVF2	2	
2412	MCC-DAF, Bucket,TC9 / Spare	2	
2413	MCC-DAF, Bucket,Tie Breaker	2	
2414	MCC-DAFT1A, Bucket,Tie Breaker	2	
2415	MCC-HWE, Bucket,Tie Breaker	2	
2416	MCC-SP, Bucket,Tie Breaker	2	
2417	MCC-SPPB, Bucket,Tie Breaker	2	
2418	MCC-ASTN2, Bucket,Tie Breaker	2	
2419	MCC-PSTE-A, Bucket,Tie Breaker	2	
2420	MCC-USST, Bucket,Tie Breaker	2	
2421	MCC-PSTE-A, Bucket,TL1 / Spare	2	
2422	MCC-DAF, Bucket,TL9 / HVC1	2	
2423	MCC-SP, Bucket,TM5	2	
2424	MCC-PSTE-B, Bucket,TSC1	2	
2425	MCC-HWE, Bucket,TSC4 / CNV2P	2	
2426	MCC-SP, Bucket,TSC5	2	
2427	MCC-SP, Bucket,TSC5 / Spare	2	
2428	MCC-SP, Bucket,TSL / Spare	2	
2429	MCC-SPPB, Bucket,TSL6	2	
2430	MCC-SPPB, Bucket,TSL6	2	
2431	MCC-ASTN2, Bucket,TSP11	2	
2432	MCC-ASTN2, Bucket,TSP11-ATS	2	
2433	MCC-DAF, Bucket,TWASP1	2	
2434	MCC-DAF, Bucket,TWASP2	2	
2435	MCC-PSTE-1, Bucket,USFAP1	2	
2436	MCC-PSTE-2, Bucket,USFAP2	2	
2437	MCC-SP, Bucket,Wash Water Booster	2	
2438	MCC-SP, Bucket,Wash Water Booster Pump	2	

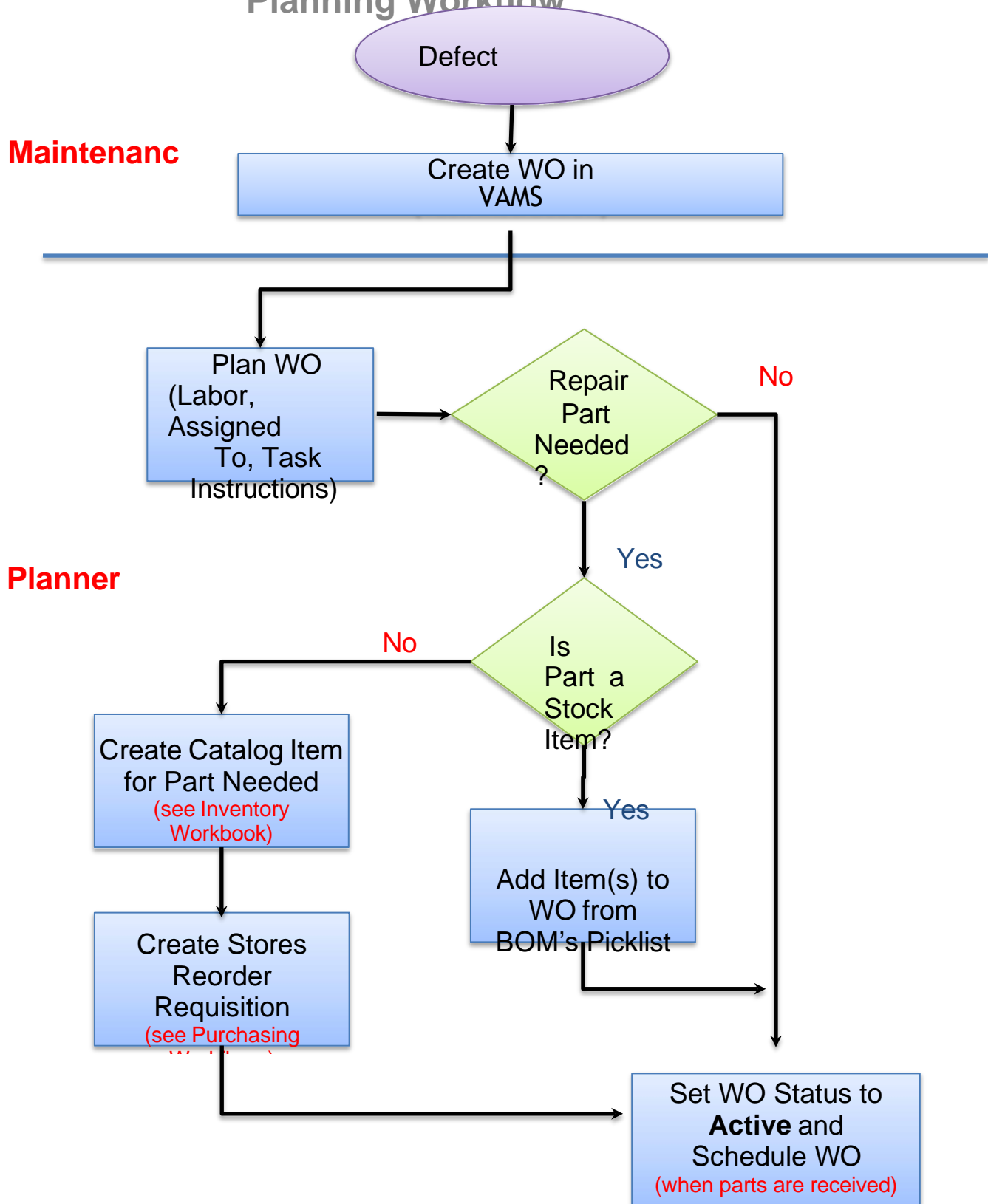
2439	MCC-SP, Bucket,Wash Water Booster Pump-3	2	
2440	MCC-SP, Bucket,Wash Water Booster Pump-4	2	
2441	MCC-PSTE-2, Bucket,Water CHAMP#1	2	
2442	MCC-PSTE-1, Bucket,Water CHAMP#2 / TM2	2	
2443	MCC-DAFT1A, Bucket,Wet Well Pump-1	2	
2444	MCC-DAFT1B, Bucket,Wet Well Pump-2	2	
2445	MCC-HWE, Bucket,WH-Sampler	2	
2446	MCC (MAIN AND BUS ONLY), A & B, MCC-GC	2	
2447	VFD, BFP1, MISC. PANELS,ATS,TX,SWB	2	Package submitted for upgrade
2448	VFD, BFP2, MISC. PANELS,ATS,TX,SWB	2	Package submitted for upgrade
2449	VFD, BFP3, MISC. PANELS,ATS,TX,SWB	2	Package submitted for upgrade
2450	VFD, BFP4, MISC. PANELS,ATS,TX,SWB	2	Package submitted for upgrade
2451	VFD, BFPC1A & B, MISC. PANELS,ATS,TX,SWB	2	
2452	VFD, BFPC2A & B, MISC. PANELS,ATS,TX,SWB	2	
2453	BREAKER, SFP1, 8-SLUDGE FEED PUMP/DRIVE GALLERY	2	
2454	BREAKER, SFP2, 8-SLUDGE FEED PUMP/DRIVE GALLERY	2	
2455	BREAKER, SFP3, 8-SLUDGE FEED PUMP/DRIVE GALLERY	2	
2456	BREAKER, SFP4, 8-SLUDGE FEED PUMP/DRIVE GALLERY	2	
2457	SWITCH, ATS, TSC1, MISC. PANLES,ATS,TX	2	
2458	SWITCH, ATS, TSC4, MISC. PANELS,ATS,TX,SWB	2	
2459	SWITCH, ATS, TSC5, MISC. PANELS,ATS,TX,SWB	2	
2460	SWITCH, ATS, TSL5, MISC. PANELS,ATS,TX,SWB	2	
2461	SWITCH, ATS, TSL6, MISC. PANELS,TX, ATS	2	
2533	PANELBOARD, DPC1, 1-MISC. PANLES,ATS,TX	2	
2534	PANELBOARD, DOL2, 1-MISC. PANELS	2	
2535	PANELBOARD, DPC12A, 4-EAST GALLERY	2	
2536	PANELBOARD, DPC2, 1-MISC. PANELS	2	
2537	PANELBOARD, DPC4, 1-MISC. PANELS,ATS,TX,SWB	2	

2538	PANELBOARD, DPC5, 1-MISC. PANELS,ATS,TX,SWB	2	
2539	PANELBOARD, DPC6, 1-MISC. PANELS,TX, ATS	2	
2540	PANELBOARD, DPC7, 6-TRUCKERS DRIVEWAY	2	
2541	PANELBOARD, DPC8, 1-MISC. PANELS,ATS,TX	2	
2542	PANELBOARD, DPC9, 1-MISC. PANELS,TX	2	
2544	MCC (MAIN AND BUS ONLY), LIFT PUMP #1 VFD, MCC-HS	2	
2545	MCC (MAIN AND BUS ONLY), LIFT PUMP #2 VFD, MCC-HS	2	
2546	MCC (MAIN AND BUS ONLY), LIFT PUMP #3 VFD, MCC-HS	2	
2547	MCC (MAIN AND BUS ONLY), LIFT PUMP #4 VFD, MCC-HS	2	
2548	MCC (MAIN AND BUS ONLY), LIFT PUMP-1 VFD, MCC-GC	2	
2549	MCC (MAIN AND BUS ONLY), LIFT PUMP-2 VFD, MCC-GC	2	
2550	MCC (MAIN AND BUS ONLY), LIFT PUMP-3 VFD, MCC-GC	2	
2551	MCC (MAIN AND BUS ONLY), LIFT PUMP-4 VFD, MCC-GC	2	
2552	MCC (MAIN AND BUS ONLY), LOW ODR, MCC-HS	2	
2553	MCC (MAIN AND BUS ONLY), LOW ODR, MCC-HS	2	
2554	MCC (MAIN AND BUS ONLY), MAIN LUGS, 2-MCC-PSTE-1	2	
2555	MCC (MAIN AND BUS ONLY), ROOF AC, MCC-HS	2	
2556	MCC (MAIN AND BUS ONLY), T-PP- HS, MCC-HS	2	
2557	MCC (MAIN AND BUS ONLY), TX-PP- CC / DUPLEX PUMP, MCC-GC	2	
2558	MCC (MAIN AND BUS ONLY), DUPLEX SUMP PUMP, MCC-HS	2	
2559	MCC (MAIN AND BUS ONLY), INCOMING MAIN BREAKER, MCC-HS	2	
2560	MCC (MAIN AND BUS ONLY), INCOMING MAIN LUGS, MCC-HS	2	
2561	MCC (MAIN AND BUS ONLY), INCOMING MAIN BREAKER, MCC-GC	2	
2562	MCC (MAIN AND BUS ONLY), INCOMING MAIN LUGS, MCC-GC	2	
2563	MCC (MAIN AND BUS ONLY), ISOLATIOIN VALVE / WELL WATER PUMP, MCC-GC	2	
2571	SWITCH, STARTER, PAB1, 1-MISC. PANELS,TX,ATS	2	

2575	PANEL, DISCONNECT NONFUSED, SDCS1, 7-CONVEYORS/PUG MILL	2	
2648	PUMP 6, RECIRCULATION, ORUSS 02262-ORRP6	2	
2649	METER, FLOW, MAGNETIC, 48", PEB 00626-FLOW-PEBM2	2	
2650	PUMP 5, INFLUENT 00215-IP5B	4	High vibration
2651	PUMP 1, INFLUENT 00211-IP1B	5	Out of service
2652	PUMP 3, INFLUENT 00213-IP3B	5	Out of service, new pump to be installed in Q1 2024
2653	PUMP 4, INFLUENT 00214-IP4B	4	In need of refurbishment
2660	MCC-SPPB, Bucket,Control Room AC/TM6	2	
2661	MCC, MSB, BUCKET,HVAC-1	2	
2662	MCC, MSB, BUCKET,HVAC-2	2	
2663	MCC, GC,BUCKET, LCP/ODR	2	
2664	MCC,CONTROL CABINET,MISC.PANELS,TX,ATS,NPW 2P5	2	
2665	MCC BUCKET, SST1, SGSF1A	2	
2666	MCC STARTER, MISC.PANELS,TX,ATS,WASP1A	2	
2667	MCC BUCKET, MIXER 7, ZONE E, ANAEROBIC (TANK 7) ASTMX 7F	2	
2668	MCC, BUCKET, NAOCL, MAIN BREAKER A	2	
2669	TRANSFORMER, 12KV-460/277V DAF-T-7B, EQ BASIN	3	

Condition Assessment WO

Creation: PdM Testing Results - Planning Workflow





IBWC SOUTHBAY INTERNATIONAL WASTEWATER TREATMENT PLANT SAN DIEGO, CA

RISK ASSESSMENT

January 30, 2024

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Attachments:

1. Criticality Analysis Report
2. Condition Assessment Report 2023



Section 1- INTRODUCTION TO THE RISK ASSESSMENT PROCESS

As directed by USIBWC contract 19IBWC20C0003, Veolia conducted a risk assessment of the South Bay International Wastewater Treatment Plant (SBIWTP) in accordance with OMB Circular A-123. The OMB Circular's stated purpose is to provide "guidance to Federal managers on improving the accountability and effectiveness of Federal programs and operations by establishing, assessing, correcting, and reporting on internal control...to ensure that Federal programs operate and Federal resources are used efficiently and effectively to achieve desired objectives. Programs must operate and resources must be used consistent with agency missions, in compliance with laws and regulations, and with minimal potential for waste, fraud, and mismanagement." Veolia's focus remains on the effectiveness and efficiency of operations while ensuring compliance with applicable laws and regulations. Veolia considers planning and budgeting to mitigate risks as an essential part of the effectiveness of our operations of the SBIWTP. The focus of Veolia's Risk Assessment herein is to provide USIBWC with a summary of known risks and or liabilities for continuity of safe and compliant operations. Some of the risks identified have been shown to be mitigated through human intervention in accordance with developed procedures while others require corrective maintenance actions or plant modification consideration.

The following Veolia employees conducted this assessment:

Mark Wippler	- Plant Superintendent
Calvin Carnegie	- Senior Director, Technical & Performance -Municipal Water West Region
Aaditya Raman	- Vice President Operations, Southwest Region
Roger Bolton	- Asset Management

The risk review process involved both onsite and offsite activities to review material status and history, spare parts inventory, process status and history, and operating procedures.

The Asset Management team conducted a comprehensive Criticality Risk Assessment and a completion Condition Assessment of all managed assets. Processes and systems with high risk profiles are highlighted in the sections below as are assets in poorer condition. An asset risk calculation is provided and those assets considered in the high risk profile category with high criticality and in poor condition are highlighted and action plans identified. Attached are the complete documents for the Criticality Analysis Report and Condition Assessment that supported these findings.



A systematic relative criticality analysis review was completed for the International Boundary Water Commission in December 2020. This process prioritizes and ranks assets using a standardized scale accounting for consequence and likelihood of worst case failure scenarios. Key components used for evaluating and cataloging risk include the System Criticality Analysis review and the Asset Condition Assessment review.

The criticality analysis review was completed in a workshop with local plant staff and the company's Asset Management team. Systems were evaluated and defined with the hierarchy structure developed and assigned to each asset in the Computerized Maintenance Management System (CMMS). Worst case failure scenarios were set for each system considering consequence and likelihood of failure details. For each scenario, key criteria were evaluated using the following *Level of Service* categories: Safety, Capacity, Environmental/Water Quality, Operating Cost, Stakeholder Impact, and Collateral Impact. Based on the severity of the failure, consequences were assigned rankings of Unacceptable, Major, Undesirable, or Minor risk for each of the Level of Service categories. After final priorities are established, each system is ranked relative to other connecting or related systems in terms of Criticality. Systems and/or assets with higher Level of Service impacts are rated at a higher Criticality. Each system and asset is assigned a criticality ranking of 1, 2, 3, or 4 as defined below:

- 1 – Minor Failure Effects
- 2 – Undesirable Failure Effects
- 3 – Major Failure Effects
- 4 – Unacceptable Failure Effects

These ranking results are entered into the CMMS for each asset. Criticality ranking can then be used during the maintenance management, maintenance budgeting, and capital planning processes. By utilizing the Criticality rankings in these processes, the asset investment strategy is prioritized in terms of Level of Service impacts for repair and replacement decisions and timelines.

Updates to the criticality analysis are conducted annually.

System Criticality Analysis Results

The complete Criticality Analysis Report for 2022 is attached in the appendices to this report and contains the detailed analysis results including failure scenarios and consequences of failure. For the purposes of the risk assessment report higher risk systems will be evaluated, i.e. systems that rank a level 3 as having major potential failure effects and systems that rank a level 4 as having unacceptable failure effects.



Table 1 - Systems with Criticality Ranking 3 (Major) and 5 (Unacceptable) Consequences

Description	System Hierarchy	Criticality
Treatment Plant	STP00	
Preliminary Treatment Process	STP00PRE00	
Bar Screen System	STP00PRE00SCR00	3
Headworks Junction System	STP00PRE00TSP01	4
Grit Removal System	STP00PRE00GRT00	3
Biological Treatment Process	STP00BCB00	
Process Aeration Blower System	STP00BCB00AER01	4
Intermediate Mixed Liquor Recycle Pumping System	STP00BCB00PMP01	4
Aeration Basin Drainage Pumping System	STP00BCB00PMP02	4
RAS (Return Activated Sludge) Pumping System	STP00BCB00PMP03	4
WAS (Waste Activated Sludge) Pumping System	STP00BCB00PMP04	4
Secondary Scum Pumping System	STP00BCB00PMP05	4
Secondary Drainage Pumping System	STP00BCB00PMP06	4
Non-Potable Water Pump Station No. 2 System	STP00BCB00PMP07	4
Secondary Clarification System	STP00BCB00STL02	3
Aeration Basin Influent Channel System	STP00BCB00TSP01	3
EQ Basin Process	STP00EQS00	
Power & Controls System	STP00EQS00ELE00	4
Pumping System	STP00EQS00PMP00	4
Tank System	STP00EQS00STR00	4
Filtration Process	STP00FLT00	
Headworks Odor Control System	STP00FLT00DRC01	4
PST (Primary Settling Tank) Odor Control System	STP00FLT00DRC02	4



SP (Solids Processing) Odor Control System	STP00FLT00DRC03	4
USST (Unstabilized Sludge Storage Tank) Odor Control System	STP00FLT00DRC04	4
Liquid Sludge Treatment Process	STP00SLL00	
DAF (Dissolved Air Flotation) System	STP00SLL00DAF00	3
DAF (Dissolved Air Flotation) Pressurization Pumping System	STP00SLL00PMP01	4
TWAS (Thickened Waste Activated Sludge) Pumping System	STP00SLL00PMP02	4
Chemical Treatment Process	STP00CHM00	
Old Generator Fuel Tank System	STP00CHM00CHF01	3
New Generator Fuel Tank System	STP00CHM00CHF02	3
Sludge Dewatering Polymer Dosing System	STP00CHM00CHF19	3
SP (Solids Processing) Sulfuric Acid Dosing System	STP00CHM00CHF14	3
Lime Dosing System	STP00CHM00CHF18	4
JB-1 Ferric Chloride Dosing System	STP00CHM00CHF03	3
Cake Sludge Treatment Process	STP00SLC00	
Belt Filter Press Conveyance System	STP00SLC00TSP01	4
Truck Loading System	STP00SLC00TSP02	4
Belt Filter Press System	STP00SLC00BTF00	4
Belt Filter Press Pumping System	STP00SLC00PM01	4
Power System Process	STP00PWR00	
Motor Control Center System	STP00PWR00ELE00	3
Standby Generators System	STP00PWR00GNR00	4
Main Utility Switchgear System	STP00PWR00TNS00	4



Information Systems Process	STP00CST00	
PLC and Remote I/O System	STP00CST00CTR00	4
Fire Safety Monitoring System	STP00CST00MNT01	3
SCADA and Network System	STP00CST00SCA00	3
Support Systems Process	STP00SPS00	
Safety Equipment System	STP00SPS00SAF00	3
Stormwater Collection Stations	TC TCS00	
Gravity Mains System Process	TCS00GMN00	
Canyon Collectors System	TCS00GMN00TSP00	4
Waste Water Collection Stations	SC SCS00	
Pump Station Process	SCS00PST01	
Goat Canyon Electrical & Controls System	SCS00PST01ELE00	4
Goat Canyon Odor Control System	SCS00PST01FLT00	3
Goat Canyon Pumping System	SCS00PST01PMP01	3
Goat Canyon Well Water Pumping System	SCS00PST01PMP02	3
Pump Station Process	SCS00PST02	
Hollister Electrical & Controls System	SCS00PST02ELE00	4
Hollister Odor Control System	SCS00PST02FLT00	3
Hollister Pumping System	SCS00PST02PMP01	3



Section 2- Asset Condition Assessment Review

It is important to understand the current operating condition of the asset towards meeting *Level of Service* expectations to achieve more accurate maintenance and capital planning. Annual condition assessments are being completed for all assets. The condition assessment is intended to be a “snapshot” of the condition of an asset. A ranking number is assigned to the asset based on a deficiency scoring where 1 is new and 4 is failed.

The basic approach for performing the condition assessment entails the use of three major steps which

Are:

- 1) Data Preparation – Extracting or compiling the asset registry from the CMMS and adding it to the condition assessment tool.
- 2) Assessment – A process and set of tools by which field evaluation of assets can be accomplished and the results recorded, based on ranking standards. Where available performance testing is completed. Each asset is ranked in multiple areas such as performance, appearance, vibration, reliability, safety, etc.
- 3) Review – When the ranking is complete, using filtering to review the final scores and make replacement recommendations.

The summary condition score is an integer value on a scale from 1 to 4. The scale is generally as follows:

- 1 – Like New Condition
- 2 – Good Condition, Later in Aging
- 3 – Indications of Wear, Degradation, or Decrease in Performance
- 4 – Failed or Imminently Failing

Higher numerical values represent worst case conditions based on deficiency scoring. Evidence of defects, excessive wear, or aging warrants higher value condition scores. If an asset is in an advanced state of wear or aging, an “end-of-life” can be predicted. For the remaining assets – those in a condition not indicating near term failure – one can “calibrate” the mean expected lifetimes and better predict probable mean lifetimes for the assets. While this predicted end-of-life rating may not be reliable for any one asset, the statistical aggregate provides for a good budgetary planning means and for any given asset, it provides an indicator gauge to help prevent the early onset of failure probabilities. Applying this process to each asset ensures that maintenance management and capital decisions meet the Level of Service business objectives.

Asset Condition Assessment Results

The complete Condition Assessment Report for 2022 is attached in the appendices to this report and contains the detailed analysis results including the scoring for all assets. For the purposes of the risk assessment report poorer condition assets will be evaluated, i.e. assets that rank a level 3 as having indications of wear, degradation, or decrease in performance and assets that rank a level 4 as having failed or are imminently failing



**Table 2 - Preliminary Process Assets with Condition Ranking
(Degradation) and (Imminently Failing)Consequences**

Asset ID	<u>Preliminary Process</u> <u>Asset Condition Score 3-4</u>	Actual Performance Score	Maintenance History and Inspection Score	Leak Score	Temperature - Thermography Score	Vibration Spectral Data Score	Average Condition Score
1047	SOFT START, PUMP 1, INFLUENT 00211-SS-IP1D		4				4
1060	DRIVE, ADJUSTABLE SPEED, PUMP 5, INFLUENT 00215-ASD-IP5C		4				4
1068	FLOW METER, 60" MAG, PUMP STATION, INFLUENT 00220-FLOW-IPS		4				4
1087	SCREEN 3, BAR, MECHANICAL, HW 00130-SCN3		4				4
1095	GATE, SLUICE, 96", JB-1 00100-GATE-JB1-96		4				4
1097	STRUCTURE, JB-1 00050-JB1-BUILDING		4				4
1098	WELL, WET, JB-1 00100-WELL-JB1		4				4
1904	PUMP 6, INFLUENT 00216-IP6B		4				4

2651	PUMP 1, INFLUENT 00211-IP1B		4				4
2652	PUMP 3, INFLUENT 00213-IP3B		4				4
1020	CLASSIFIER/SEPARATOR 1, GRIT 00341-GC1		3				3
1021	CLASSIFIER/SEPARATOR 2, GRIT 00342-GC2		3				3
1022	CLASSIFIER/SEPARATOR 3, GRIT 00343-GC3		3				3
1040	GATE, SCUM, WELL 1, WET, INFLUENT, HW, 36" 00195-G-SLIDE-SCUM1		3				3
1041	GATE, SCUM, WELL 2, WET, INFLUENT, HW, 36" 00195-G-SLIDE-SCUM2		3				3
1070	SCREEN, BAR, MANUAL, CHANNEL 1, HW 00109-M-SCREEN-CH1		3				3
1071	SCREEN, BAR, MANUAL, CHANNEL 6, HW 00109-M-SCREEN-CH6		3				3
1099	GATE 1, SLIDE, INLET, CHANNEL 1, HW 00109-G-SLIDE-CH1-IN		3				3
1100	GATE 6, SLIDE, OUTLET, CHANNEL 1, HW 00109-G-SLIDE-CH1-OUT		3				3
1101	GATE 2, SLIDE, INLET, CHANNEL 2, HW 00109-G-SLIDE-CH2-IN		3				3
1102	GATE 6, SLIDE, OUTLET, CHANNEL 2, HW 00109-G-SLIDE-CH2-OUT		3				3
1103	GATE 3, SLIDE, INLET, CHANNEL 3, HW 00109-G-SLIDE-CH3-IN		3				3

1104	GATE 6, SLIDE, OUTLET, CHANNEL 3, HW 00109-G-SLIDE-CH3-OUT		3				3
1105	GATE 4, SLIDE, INLET, CHANNEL 4, HW 00109-G-SLIDE-CH4-IN		3				3
1106	GATE 6, SLIDE, OUTLET, CHANNEL 4, HW 00109-G-SLIDE-CH4-OUT		3				3
1107	GATE 5, SLIDE, INLET, CHANNEL 5, HW 00109-G-SLIDE-CH5-IN		3				3
1108	GATE 6, SLIDE, OUTLET, CHANNEL 5, HW 00109-G-SLIDE-CH5-OUT		3				3
1109	GATE 6, SLIDE, INLET, CHANNEL 6, HW 00109-G-SLIDE-CH6-IN		3				3
1110	GATE 6, SLIDE, OUTLET, CHANNEL 6, HW 00109-G-SLIDE-CH6-OUT		3				3
1113	GATE, INLET, CHANNEL, PUMP 1, INFLUENT, HW 00211-G-SLIDE-GATE1		3				3
1114	GATE, INLET, CHANNEL, PUMP 2, INFLUENT, HW 00212-G-SLIDE-GATE2		3				3
1115	GATE, INLET, CHANNEL, PUMP 3, INFLUENT, HW 00213-G-SLIDE-GATE3		3				3
1681	PIPING, GRIT REMOVAL 00300-PG		3				3
1682	VALVES, GRIT REMOVAL 00300-VG		3				3
1683	PIPING, GRIT BLOWER 00300-GB-PG		3				3
1684	VALVES, GRIT BLOWER 00300-GB-VG		3				3
1686	VALVES, PUMP, INFLUENT 00200-VG		3				3
2650	PUMP 5, INFLUENT 00215-IP5B		3				3
2653	PUMP 4, INFLUENT 00214-IP4B		3				3



Table 3 - Biological Process Assets with Condition Ranking 3 (Degradation) and 4 (Imminently Failing) Consequences

Asset ID	Asset Description	Actual Performance Score	Maintenance History and Inspection Score	Leak Score	Temperature - Thermography Score	Vibration Spectral Data Score	Average Condition Score
<div>Biological Treatment Process</div> <div>Asset Condition Score 3-4</div>							
119	BLOWER 3, AIR, PROCESS PAB3		4				4
137	PUMP 1, MIXED LIQUOR, INTERMEDIATE IMLRP1		4				4
138	PUMP 2, MIXED LIQUOR, INTERMEDIATE IMLRP2		4				4
143	PUMP 7, MIXED LIQUOR, INTERMEDIATE IMLRP7		4				4
183	PUMP 1B, WASTE ACTIVATED SLUDGE (WAS) WASP1B		4				4
1306	PUMP 2, NPW2P NPW2P-2		4				4
1309	VFD, PUMP 3, NPW2P NPW2P-3-VFD		4				4
1311	PUMP 4, JOCKEY, NPW2P NPW2P-4		4				4
139	PUMP 3, MIXED LIQUOR, INTERMEDIATE IMLRP3		3				3
140	PUMP 4, MIXED LIQUOR, INTERMEDIATE IMLRP4		3				3
141	PUMP 5, MIXED LIQUOR, INTERMEDIATE IMLRP5		3				3
142	PUMP 6, MIXED LIQUOR, INTERMEDIATE IMLRP6		3				3
181	PUMP 1A, WASTE ACTIVATED SLUDGE (WAS) WASP1A		3				3
182	VFD, PUMP 1A, WASTE ACTIVATED SLUDGE (WAS) WASP1AVFD		3				3
184	VFD, PUMP 1B, WASTE ACTIVATED SLUDGE (WAS) WASP1BVFD		3				3
195	TANK 1, SLUDGE, ACTIVATED AST1		3				3



196	DIFFUSERS, TANK 1, ACTIVATED SLUDGE AST1-DG		3				3
197	TANK 2, SLUDGE, ACTIVATED AST2		3				3
198	DIFFUSERS, TANK 2, ACTIVATED SLUDGE AST2-DG		3				3
199	TANK 3, SLUDGE, ACTIVATED AST3		3				3
200	DIFFUSERS, TANK 3, ACTIVATED SLUDGE AST3-DG		3				3
201	TANK 4, SLUDGE, ACTIVATED AST4		3				3
202	DIFFUSERS, TANK 4, ACTIVATED SLUDGE AST4-DG		3				3
203	TANK 5, SLUDGE, ACTIVATED AST5		3				3
204	DIFFUSERS, TANK 5, ACTIVATED SLUDGE AST5-DG		3				3
205	TANK 6, SLUDGE, ACTIVATED AST6		3				3
206	DIFFUSERS, TANK 6, ACTIVATED SLUDGE AST6-DG		3				3
207	TANK 7, SLUDGE, ACTIVATED AST7		3				3
208	DIFFUSERS, TANK 7, ACTIVATED SLUDGE AST7-DG		3				3
209	MIXER 1, ZONE A, ANAEROBIC (TANK 1) ASTMX 1A		3				3
210	MIXER 2, ZONE A, ANAEROBIC (TANK 2) ASTMX 2A		3				3
211	MIXER 3, ZONE A, ANAEROBIC (TANK 3) ASTMX 3A		3				3
212	MIXER 4, ZONE A, ANAEROBIC (TANK 4) ASTMX 4A		3				3
213	MIXER 5, ZONE A, ANAEROBIC (TANK 5) ASTMX 5A		3				3
214	MIXER 6, ZONE A, ANAEROBIC (TANK 6) ASTMX 6A		3				3
215	MIXER 7, ZONE A, ANAEROBIC (TANK 7) ASTMX 7A		3				3
216	MIXER 1, ZONE B, ANAEROBIC (TANK 1) ASTMX 1B		3				3
217	MIXER 2, ZONE B, ANAEROBIC (TANK 2) ASTMX 2B		3				3
218	MIXER 3, ZONE B, ANAEROBIC (TANK 3) ASTMX 3B		3				3



219	MIXER 4, ZONE B, ANAEROBIC (TANK 4) ASTMX 4B		3				3
220	MIXER 5, ZONE B, ANAEROBIC (TANK 5) ASTMX 5B		3				3
221	MIXER 6, ZONE B, ANAEROBIC (TANK 6) ASTMX 6B		3				3
222	MIXER 7, ZONE B, ANAEROBIC (TANK 7) ASTMX 7B		3				3
223	MIXER 1, ZONE C, ANAEROBIC (TANK 1) ASTMX 1C		3				3
224	MIXER 2, ZONE C, ANAEROBIC (TANK 2) ASTMX 2C		3				3
225	MIXER 3, ZONE C, ANAEROBIC (TANK 3) ASTMX 3C		3				3
226	MIXER 4, ZONE C, ANAEROBIC (TANK 4) ASTMX 4C		3				3
227	MIXER 5, ZONE C, ANAEROBIC (TANK 5) ASTMX 5C		3				3
228	MIXER 6, ZONE C, ANAEROBIC (TANK 6) ASTMX 6C		3				3
229	MIXER 7, ZONE C, ANAEROBIC (TANK 7) ASTMX 7C		3				3
230	MIXER 1, ZONE D, ANAEROBIC (TANK 1) ASTMX 1D		3				3
231	MIXER 2, ZONE D, ANAEROBIC (TANK 2) ASTMX 2D		3				3
232	MIXER 3, ZONE D, ANAEROBIC (TANK 3) ASTMX 3D		3				3
233	MIXER 4, ZONE D, ANAEROBIC (TANK 4) ASTMX 4D		3				3
234	MIXER 5, ZONE D, ANAEROBIC (TANK 5) ASTMX 5D		3				3
235	MIXER 6, ZONE D, ANAEROBIC (TANK 6) ASTMX 6D		3				3
236	MIXER 7, ZONE D, ANAEROBIC (TANK 7) ASTMX 7D		3				3
237	MIXER 1, ZONE E, ANAEROBIC (TANK 1) ASTMX 1E		3				3
238	MIXER 2, ZONE E, ANAEROBIC (TANK 2) ASTMX 2E		3				3
239	MIXER 3, ZONE E, ANAEROBIC (TANK 3) ASTMX 3E		3				3
240	MIXER 4, ZONE E, ANAEROBIC (TANK 4) ASTMX 4E		3				3



241	MIXER 5, ZONE E, ANAEROBIC (TANK 5) ASTMX 5E		3				3
242	MIXER 6, ZONE E, ANAEROBIC (TANK 6) ASTMX 6E		3				3
243	MIXER 7, ZONE E, ANAEROBIC (TANK 7) ASTMX 7E		3				3
244	MIXER 1, ZONE F, ANAEROBIC (TANK 1) ASTMX 1F		3				3
245	MIXER 2, ZONE F, ANAEROBIC (TANK 2) ASTMX 2F		3				3
246	MIXER 3, ZONE F, ANAEROBIC (TANK 3) ASTMX 3F		3				3
247	MIXER 4, ZONE F, ANAEROBIC (TANK 4) ASTMX 4F		3				3
248	MIXER 5, ZONE F, ANAEROBIC (TANK 5) ASTMX 5F		3				3
249	MIXER 6, ZONE F, ANAEROBIC (TANK 6) ASTMX 6F		3				3
250	MIXER 7, ZONE F, ANAEROBIC (TANK 7) ASTMX 7F		3				3
251	PIPING, AST ASTPG		3				3
327	AIR HANDLING UNIT 1, SST-LCC-1, SECONDARY SEDIMENTATION AREA SST-LCC-1 HVC-1		3				3
328	AIR HANDLING UNIT 2, SST-LCC-1, SECONDARY SEDIMENTATION AREA SST-LCC-1 HVC-2		3				3
1304	PUMP 1, NPW2P NPW2P-1		3				3
1305	VFD, PUMP 1, NPW2P NPW2P-1-VFD		3				3
1315	STRAINER, NPW2P, SOUTH NPW-STR-S		3				3



Table 4 - Filtration Process Assets with Condition Ranking 3 (Degradation) and 4 (Imminently Failing) Consequences

Asset ID	Filtration Process Asset Condition Score 3 - 4 Asset Description	Actual Performance Score	Maintenance History and Inspection Score	Leak Score	Temperature - Thermography Score	Vibration Spectral Data Score	Average Condition Score
897	FAN 1, EXHAUST, ORHW 00352-OREF1		3				3
899	FAN 2, EXHAUST, ORHW 00353-OREF2		3				3
908	PUMP 1, RECIRCULATION, ORHW 00361-ORRP1B		3				3
910	PUMP 2, RECIRCULATION, ORHW 00362-ORRP2B		3				3
917	FAN 3, EXHAUST, ORPST 00652-OREF3		3				3
919	FAN 4, EXHAUST, ORPST 00653-OREF4		3				3
928	PUMP 3, RECIRCULATION, ORPST 00661-ORRP3		3				3
937	FAN 7, EXHAUST, ORSP 03702-OREF7		3				3
939	FAN 8, EXHAUST, ORSP 03703-OREF8		3				3
941	FAN 9, EXHAUST, ORSP 03704-OREF9		3				3
945	PUMP 10, RECIRCULATION, ORSP 03722-ORRP10		3				3
947	PUMP 7, RECIRCULATION, ORSP 03711-ORRP7		3				3
949	PUMP 8, RECIRCULATION, ORSP 03712-ORRP8		3				3
951	PUMP 9, RECIRCULATION, ORSP 03721-ORRP9		3				3

964	PUMP 5, RECIRCULATION, ORUSS 02261-ORRP5		3				3
973	FAN 5, EXHAUST, ORUSS 02252-OREF5		3				3
975	FAN 6, EXHAUST, ORUSS 02253-OREF6		3				3
1673	PIPING/DUCTING, ORHW 00350-PG		3				3
1674	VALVES, DUCTING, ORHW 00350-VG		3				3
1675	PIPING/DUCTING, ORPST 00660-PG		3				3
1676	VALVES, DUCTING, ORPST 00660-VG		3				3
1677	PIPING/DUCTING, ORSP 03700-PG		3				3
1678	VALVES, DUCTING, ORSP 03700-VG		3				3
1679	PIPING/DUCTING, ORUSS 02250-PG		3				3
1680	VALVES, DUCTING, ORUSS 02250-VG		3				3



Table 5 - Chemical Process Assets with Condition Ranking 3 (Degradation) and 4 (Imminently Failing) Consequences

Asset ID	<u>Chemical Treatment Process</u> Asset Condition Score 3 - 4	Actual Performance Score	Maintenance History and Inspection Score	Leak Score	Temperature - Thermography Score	Vibration Spectral Data Score	Average Condition Score
622	STATION, FILL, FUEL TANK, DIESEL, 10K GAL 04220-DIESEL-TANK-FILL		3				3
623	TANK 1, DAY, GENERATOR 1, DIESEL ENGINE 04202-DAYTANK1		3				3
625	TANK 1, OVERFLOW, GENERATOR 1, DIESEL ENGINE 04202-OVF-TANK1		3				3
632	TANK, STORAGE, FUEL, DIESEL 00109-FUEL-STORAGE		3				3
635	TANK, STORAGE, FUEL, 10,000 GAL, GENERATOR 1 04220-DIESEL-TANK-10K		3				3
643	TANK 1, BULK STORAGE, FERRIC CHLORIDE, PST 00581-PFBT1		3				3
644	TANK 2, BULK STORAGE, FERRIC CHLORIDE, PST 00582-PFBT2		3				3
719	TANK, STORAGE, SULFURIC ACID, ORSP 03735-ORSAT1		3				3

767	SILO 1, STORAGE, LIME 02810-LSS1		3				3
768	SILO 2, STORAGE, LIME 02811-LSS2		3				3
773	SCREW 1, TRANSFER, LIME 02830-LTC1		3				3
774	SCREW 2, TRANSFER, LIME 02831-LTC2		3				3
775	FEEDER 1, VOLUMETERIC, LIME 02820-LVF1		3				3
776	FEEDER 2, VOLUMETERIC, LIME 02821-LVF2		3				3
1643	PIPING, FUEL, GENERATORS 04202-PG		3				3
1644	VALVES, FUEL, GENERATORS 04202-VG		3				3
1665	PIPING, SULFURIC ACID, ORSP 03735-PG		3				3
1666	VALVES, SULFURIC ACID, ORSP 03735-VG		3				3



Table 6 - Cake Sludge Process Assets with Condition Ranking 3 (Degradation) and 4 (Imminently Failing) Consequences

Asset ID	<u>Cake Sludge Process</u> Asset Condition Score 3 -4	Actual Performance Score	Maintenance History and Inspection Score	Leak Score	Temperature - Thermography Score	Vibration Spectral Data Score	Average Condition Score
1423	PRESS 2, BELT PRESS (BFP) 02696-BFP2		4				4
1429	PRESS 4, BELT PRESS (BFP) 02698-BFP4		4				4
1480	CONVEYOR 1A, BELT PRESS (BFP) 02715-BFPC1A		3				3
1481	CONVEYOR 1B, BELT PRESS (BFP) 02715-BFPC1B		3				3
1482	CONVEYOR 2A, BELT PRESS (BFP) 02716-BFPC2A		3				3
1483	CONVEYOR 2B, BELT PRESS (BFP) 02716-BFPC2B		3				3
1486	CONVEYOR 1, TRUCK LOADING 02850 TLC1		3				3
1695	PIPING, FEED, SLUDGE, BELT PRESS (BFP) 02635-PG		4				4
1696	VALVES, FEED, SLUDGE, BELT PRESS (BFP) 02635-VG		4				4



Table 7 - Power Systems Process Assets with Condition Ranking 3 (Degradation) and 4 (Imminently Failing) Consequences

Asset ID	<u>Power System Process</u> Asset Condition Score 3 - 4 Asset Description	Actual Performance Score	Maintenance History and Inspection Score	Leak Score	Temperature - Thermography Score	Vibration Spectral Data Score	Average Condition Score
1156	GENERATOR 1, DIESEL, STANDBY 04210-GEN1		3				3

Table 8 - Information Systems Process Assets with Condition Ranking 3 (Degradation) and 4 (Imminently Failing) Consequences

Asset ID	<u>Information Systems Process</u> Asset Condition Score 3 - 4 Asset Description	Actual Performance Score	Maintenance History and Inspection Score	Leak Score	Temperature - Thermography Score	Vibration Spectral Data Score	Average Condition Score
1090	PLC 1, JB-1 00100-PLC-JB1		4				4
1937	PANEL, CONTROL, INFLUENT PUMP 5		3				3



Table 9 - Goat Canyon Pump Station Process Assets with Condition Ranking 3 (Degradation) and 4 (Imminently Failing) Consequence

Asset ID	<u>Goat Canyon Pump Station</u> <u>Process</u> Asset Condition Score 3 - 4	Actual Performance Score	Maintenance History and Inspection Score	Leak Score	Temperature - Thermography Score	Vibration Spectral Data Score	Average Condition Score
1	PUMP 1A, SUMP, GCPS 04116-SUMP1A		4				4
43	PUMP 4, SUBMERSIBLE, GCPS 04106-P4		4				4
12	RACK, REMOTE I/O, PLC, GCPS 04100-RPLC1-GCPS (includes Adaptors)		3				3
13	PLC 1, GCPS 04100-PLC1-GCPS		3				3
14	PLC 2, GCPS 04100-PLC2-GCPS		3				3
38	VFD, PUMP 1, SUBMERSIBLE, GCPS 04103-ASD-P1		3				3
40	VFD, PUMP 2, SUBMERSIBLE, GCPS 04104-ASD-P2		3				3
42	VFD, PUMP 3, SUBMERSIBLE, GCPS 04105-ASD-P3		3				3
44	VFD, PUMP 4, SUBMERSIBLE, GCPS 04106-ASD-P4		3				3



Table 10 - Hollister Pump Station Process Assets with Condition Ranking 3 (Degradation) and 4 (Imminently Failing) Consequences

Asset ID	<u>Hollister Pump Station Process</u> Asset Condition Score 3 - 4 Asset Description	Actual Performance Score	Maintenance History and Inspection Score	Leak Score	Temperature - Thermography Score	Vibration Spectral Data Score	Average Condition Score
87	PUMP 1, SUBMERSIBLE, HPS 04303-P1		4				4
50	BUILDING/STRUCTURE, HPS 04300-HPS-BLDG		3				3
62	RACK, REMOTE I/O, PLC, HPS 04300-RPLC1-HPS (includes Adaptors)		3				3
65	PLC 1, HPS 04300-PLC1-HPS		3				3
66	PLC 2, HPS 04300-PLC2-HPS		3				3
97	TANK 1, SURGE, HPS 04308-SA1		3				3
98	TANK 2, SURGE, HPS 04309-SA2		3				3



Table 11 - Canyon Collectors System Assets with Condition Ranking 3 (Degradation) and 4 (Imminently Failing) Consequences

Asset ID	<u>Canyon Collectors System</u> Asset Condition Score 3 - 4	Actual Performance Score	Maintenance History and Inspection Score	Leak Score	Temperature - Thermography Score	Vibration Spectral Data Score	Average Condition Score
1592	METER, FLOW, MAGNETIC, 30", CANYON COLLECTOR 01515-FLOW- CCM2		3				3



Section 3- Risk Evaluation

This philosophy of risk management is at the core of asset management. Risks are primarily related to the consequences (criticality) associated with the failure occurring on any process equipment (that may, for instance, adversely impact health & safety, the environment or any financial results), and to the likelihood of failure occurrence (condition). Veolia has developed an overall Risk Score by multiplying the asset criticality score by the asset condition score. When criticality and condition are expressed as numbers, it is common to express the risk index as the product of both figures.

Figure 1 - The Risk Matrix as defined by the Asset Criticality Score multiplied by Asset Condition Score

		Condition			
		4	3	2	1
Criticality	4	16	12	8	4
	3	12	9	6	3
	2	8	6	4	2
	1	4	3	2	1

Asset Risk Evaluation Results

For the purposes of the risk assessment report poorer condition assets in higher criticality systems will be identified and reviewed. This evaluation included assets with a Criticality score that rank a level 3 as having major potential failure effects and systems that rank a level 4 as having unacceptable failure effects and assets with a Condition score that rank a level 3 as having indications of wear, degradation, or decrease in performance and assets that rank a level 4 as having failed or are imminently failing.



Table 12 - Preliminary Process Assets with a High Risk Ranking Score

ASSET ID	<u>Preliminary Process</u> ASSET RISK SCORE 9-16	CRITICALITY SCORE	CONDITION SCORE	RISK SCORE
1095	GATE, SLUICE, 96", JB-1 00100-GATE-JB1-96	4	4	16
1097	STRUCTURE, JB-1 00050-JB1-BUILDING	4	4	16
1098	WELL, WET, JB-1 00100-WELL-JB1	4	4	16
1087	SCREEN 3, BAR, MECHANICAL, HW 00130-SCN3	3	4	12
1686	VALVES, PUMP, INFLUENT 00200-VG	4	3	12
1020	CLASSIFIER/SEPARATOR 1, GRIT 00341-GC1	3	3	9
1021	CLASSIFIER/SEPARATOR 2, GRIT 00342-GC2	3	3	9
1022	CLASSIFIER/SEPARATOR 3, GRIT 00343-GC3	3	3	9
1070	SCREEN, BAR, MANUAL, CHANNEL 1, HW 00109-M-SCREEN-CH1	3	3	9
1071	SCREEN, BAR, MANUAL, CHANNEL 6, HW 00109-M-SCREEN-CH6	3	3	9
1681	PIPING, GRIT REMOVAL 00300-PG	3	3	9
1682	VALVES, GRIT REMOVAL 00300-VG	3	3	9
1683	PIPING, GRIT BLOWER 00300-GB-PG	3	3	9
1684	VALVES, GRIT BLOWER 00300-GB-VG	3	3	9



HIGH RISK: 1095 - GATE, SLUICE, 96", JB-1 00100-GATE-JB1-96

- a. Impact: 96" Valve is fixed in place after raising to 56" open, preventing flow control and isolation to the plant. The result of this failure is NPDES permit compliance issues.
- b. Likelihood: Failed
- c. Overall Risk Score: 16
- d. Current Action: Operational inspection in daily rounds. Also, there are Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: Capital Project under development
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential reporting to the Federal Government.
- j. Monitoring Update: N/A

HIGH RISK: 1097 - STRUCTURE, JB-1 00050-JB1-BUILDING

- a. Impact: Minor, as it's unlikely that the structure would fail. Any failure would be structural and the impact could be severe. A detailed inspection of the structure will be conducted as part of the Capital Project to replace the isolation valves.
- b. Likelihood: Unlikely
- c. Overall Risk Score: 16
- d. Current Action: Operational inspection in daily rounds.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds inspection.
- f. Resources Needed: 1 Operator
- g. External Partners: None, unless a failure occurred with the structure. Then a contractor would be needed.
- h. Risk Response: As soon as possible
- i. Reporting Requirements: Potential reporting to the Federal Government.
- j. Monitoring Update: N/A

HIGH RISK: 1098 - WELL, WET, JB-1 00100-WELL-JB1

- a. Impact: Minor, as it's unlikely that the structure would fail. Any failure would be structural and the impact could be severe. A detailed inspection of the structure will be conducted as part of the Capital Project to replace the isolation valves.
- b. Likelihood: Unlikely
- c. Overall Risk Score: 16
- d. Current Action: 96" gate raised to reduce head pressure and surcharging.
- e. Mitigation: Rehabilitation as necessary during construction.
- f. Resources Needed: Construction funding and final design
- g. External Partners: Filanc Construction and Veolia
- h. Risk Response: As soon as possible
- i. Reporting Requirements: Potential reporting to the Federal Government.
- j. Monitoring Update: N/A



HIGH RISK: 1087 - SCREEN 3, BAR, MECHANICAL, HW 00130-SCN3

- a. Impact: There are 3 redundant units with 2 required to be in service at all times. The result of this unit failing is the loss of a standby unit in the event of another failure.
- b. Likelihood: Failed
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds. Also, there are Weekly, Monthly, Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: Currently under repair.
- g. External Partners: SD Welding
- h. Risk Response: In progress
- i. Reporting Requirements: Potential reporting to the Federal Government.
- j. Monitoring Update: N/A

HIGH RISK: 1686 - VALVES, PUMP, INFLUENT 00200-VG

- a. Impact: Failure of the valves would prevent the ability to isolate the line for pump replacement. The result of this failure is NPDES permit compliance issues.
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds. Also, there are Weekly, Monthly, Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: Capital Project underdevelopment
- g. External Partners: None
- h. Risk Response: Near future
- i. Reporting Requirements: Potential reporting to the Federal Government.
- j. Monitoring Update: N/A



HIGH RISK: 1020 - CLASSIFIER/SEPARATOR 1, GRIT 00341-GC1

- a. Impact: There are 3 redundant units with 2 required to be in service at all times. The result of this unit failing is the loss of a standby unit in the event of another failure.
- b. Likelihood: Probable
- c. Overall Risk Score: 9
- d. Current Action: Operational inspection in daily rounds. Also, there are Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: Capital Project under development.
- g. External Partners: None
- h. Risk Response: Near future
- i. Reporting Requirements: Potential reporting to the Federal Government.
- j. Monitoring Update: N/A

HIGH RISK: 1021 - CLASSIFIER/SEPARATOR 2, GRIT, 00342-GC2

- a. Impact: There are 3 redundant units with 2 required to be in service at all times. The result of this unit failing is the loss of a standby unit in the event of another failure.
- b. Likelihood: Probable
- c. Overall Risk Score: 9
- d. Current Action: Operational inspection in daily rounds. Also, there are Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: Capital Project under development.
- g. External Partners: None
- h. Risk Response: Near future
- i. Reporting Requirements: Potential reporting to the Federal Government.
- j. Monitoring Update: N/A

HIGH RISK: 1022 - CLASSIFIER/SEPARATOR 3, GRIT, 00343-GC3

- a. Impact: There are 3 redundant units with 2 required to be in service at all times. The result of this unit failing is the loss of a standby unit in the event of another failure.
- b. Likelihood: Probable
- c. Overall Risk Score: 9
- d. Current Action: Operational inspection in daily rounds. Also, there are Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: Capital Project under development.
- g. External Partners: None
- h. Risk Response: Near future
- i. Reporting Requirements: Potential reporting to the Federal Government.
- j. Monitoring Update: N/A



HIGH RISK: 1070 - SCREEN, BAR, MANUAL, CHANNEL 1, HW 00109-M-SCREEN-CH1

- a. Impact: Minor, as it's unlikely that the structure would fail. Any failure would be structural and the impact could be severe. A detailed inspection of the structure will be conducted as part of the plant expansion.
- b. Likelihood: unlikely
- c. Overall Risk Score: 9
- d. Current Action: Operational inspection in daily rounds.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational round inspection.
- f. Resources Needed: 1 Operator
- g. External Partners: None, unless a failure occurred with the structure.
- h. Risk Response: As soon as possible
- i. Reporting Requirements: Potential reporting to the Federal Government.
- j. Monitoring Update: N/A

HIGH RISK: 1071 - SCREEN, BAR, MANUAL, CHANNEL 6, HW 00109-M-SCREEN-CH6

- a. Impact: Minor, as it's unlikely that the structure would fail. Any failure would be structural and the impact could be severe. A detailed inspection of the structure will be conducted as part of the plant expansion.
- b. Likelihood: unlikely
- c. Overall Risk Score: 9
- d. Current Action: Operational inspection in daily rounds.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational round inspection.
- f. Resources Needed: 1 Operator
- g. External Partners: None, unless a failure occurred with the structure.
- h. Risk Response: As soon as possible
- i. Reporting Requirements: Potential reporting to the Federal Government.
- j. Monitoring Update: N/A

HIGH RISK: 1681 - PIPING, GRIT REMOVAL, 00300-PG

- a. Impact: Failure of this piping would disable the grit removal system sending grit to downstream processes and problems with those systems. The result of this failure is NPDES permit compliance issues.
- b. Likelihood: Probable
- c. Overall Risk Score: 9
- d. Current Action: Operational inspection in daily rounds. Also, there are Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
Temporary piping installed.
- f. Resources Needed: Capital Project underdevelopment
- g. External Partners: None
- h. Risk Response: Immediate



HIGH RISK: 1682 - VALVES, GRIT REMOVAL 00300-VG

- a. Impact: Failure of this valve would disable the grit removal system sending grit to downstream processes and problems with those systems. The result of this failure is NPDES permit compliance issues.
- b. Likelihood: Probable
- c. Overall Risk Score: 9
- d. Current Action: Operational inspection in daily rounds. Also, there are Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: Capital Project Underdevelopment
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential reporting to the Federal Government.
- j. Monitoring Update: N/A

HIGH RISK: 1683 - PIPING, GRIT BLOWER 00300-GB-PG

- a. Impact: Failure of this piping would disable the grit blower system sending air to grit chamber diffusers and problems with those systems.
- b. Likelihood: Probable
- c. Overall Risk Score: 9
- d. Current Action: Operational inspection in daily rounds. Also, there are Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: Capital Project Underdevelopment
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential reporting to the Federal Government.
- j. Monitoring Update: N/A

HIGH RISK: 1684 - VALVES, GRIT BLOWER 00300-GB-VG

- a. Impact: Minor, if the valves failed it may affect the ability to isolate the line to perform maintenance and repair.
- b. Likelihood: Probable
- c. Overall Risk Score: 9
- d. Current Action: Operational inspection in daily rounds. Also, there are Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: Capital Project Underdevelopment



Table 13 - Biological Process Assets with a High Risk Ranking Score

ASSET ID	<u>Biological Treatment Process</u> ASSET RISK SCORE 9-16	CRITICALITY SCORE	CONDITION SCORE	RISK SCORE
119	BLOWER 3, AIR, PROCESS PAB3	4	4	16
183	PUMP 1B, WASTE ACTIVATED SLUDGE (WAS) WASP1B	4	4	16
1306	PUMP 2, NPW2P NPW2P-2	4	4	16
1309	VFD, PUMP 3, NPW2P NPW2P-3-VFD	4	4	16
1311	PUMP 4, JOCKEY, NPW2P NPW2P-4	4	4	16
137	PUMP 1, MIXED LIQUOR, INTERMEDIATE IMLRP1	3	4	12
138	PUMP 2, MIXED LIQUOR, INTERMEDIATE IMLRP2	3	4	12
143	PUMP 7, MIXED LIQUOR, INTERMEDIATE IMLRP7	3	4	12
181	PUMP 1A, WASTE ACTIVATED SLUDGE (WAS) WASP1A	4	3	12
182	VFD, PUMP 1A, WASTE ACTIVATED SLUDGE (WAS) WASP1AVFD	4	3	12
184	VFD, PUMP 1B, WASTE ACTIVATED SLUDGE (WAS) WASP1BVFD	4	3	12
251	PIPING, AST ASTPG	4	3	12
1304	PUMP 1, NPW2P NPW2P-1	4	3	12
1305	VFD, PUMP 1, NPW2P NPW2P-1-VFD	4	3	12
139	PUMP 3, MIXED LIQUOR, INTERMEDIATE IMLRP3	3	3	9
140	PUMP 4, MIXED LIQUOR, INTERMEDIATE IMLRP4	3	3	9
141	PUMP 5, MIXED LIQUOR, INTERMEDIATE IMLRP5	3	3	9
142	PUMP 6, MIXED LIQUOR, INTERMEDIATE IMLRP6	3	3	9
196	DIFFUSERS, TANK 1, ACTIVATED SLUDGE AST1-DG	3	3	9
198	DIFFUSERS, TANK 2, ACTIVATED SLUDGE AST2-DG	3	3	9



HIGH RISK: 119 - BLOWER 3, AIR, PROCESS PAB3

- a. Impact: There are 3 redundant units. The result of this unit failing is the loss of a standby unit in the event of another failure.
- b. Likelihood: Failed
- c. Overall Risk Score: 16
- d. Current Action: Operational inspection in daily rounds. Also, there are Monthly, Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: Contractor to investigate and repair.
- g. External Partners: Electrical Contractor
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A

HIGH RISK: 183 - PUMP 1B, WASTE ACTIVATED SLUDGE (WAS) WASP1B

- a. Impact: There are 2 redundant units with 1 required to be in service at all times. The Result Of This unit failing is the loss of a standby unit in the event of a failure.
- b. Likelihood: Failed
- c. Overall Risk Score: 16
- d. Current Action: Operational inspection in daily rounds. Also, there are Monthly, Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: Capital Project Underdevelopment.
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A

HIGH RISK: 1306 - PUMP 2, NPW2P NPW2P-2

- a. Impact: The result of this unit failing is the loss of a standby unit in the event of another failure and also the ability to provide enough non-potable water throughout the plant.
- b. Likelihood: Failed
- c. Overall Risk Score: 16
- d. Current Action: Operational inspection in daily rounds. Also, there are Monthly, Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: Capital Project Underdevelopment.
- g. External Partners: None
- h. Risk Response: Immediate



HIGH RISK: 1309 - VFD, PUMP 3, NPW2P NPW2P-3-VFD

- a. Impact: The result of this unit failing is the loss of a standby unit in the event of another failure and also the ability to provide enough non-potable water throughout the plant.
- b. Likelihood: Failed
- c. Overall Risk Score: 16
- d. Current Action: Operational inspection in daily rounds. Also, there are Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: Capital Project Underdevelopment.
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A

HIGH RISK: 1311 - PUMP 4, JOCKEY, NPW2P NPW2P-4

- a. Impact: The result of this unit failing is the loss of a standby unit in the event of another failure and also the ability to provide enough non-potable water throughout the plant.
- b. Likelihood: Failed
- c. Overall Risk Score: 16
- d. Current Action: Operational inspection in daily rounds. Also, there are Monthly, Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: Capital Project Underdevelopment.
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A

HIGH RISK: 137 - PUMP 1, MIXED LIQUOR, INTERMEDIATE IMLRP1

- a. Impact: Both pumps are required to be run at all times. Potential major impact due to probability of failure. Process strategy is available with limited ability to mitigate the impact.
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds. Also, there are two distinct Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electronic Technician.
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A



HIGH RISK: 138 - PUMP 2, MIXED LIQUOR, INTERMEDIATE IMLRP2

- a. Impact: Both pumps are required to be run at all times. Potential major impact due to probability of failure. Process strategy is available with limited ability to mitigate the impact.
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds. Also, there are two distinct Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electronic Technician.
- g. External Partners: None
- h. Risk Response: Immediate

HIGH RISK: 143 - PUMP 7, MIXED LIQUOR, INTERMEDIATE IMLRP7

- a. Impact: Both pumps are required to be run at all times. Potential major impact due to probability of failure. Process strategy is available with limited ability to mitigate the impact.
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds. Also, there are two distinct Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electronic Technician.
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A

HIGH RISK: 181 - PUMP 1A, WASTE ACTIVATED SLUDGE (WAS) WASP1A

- a. Impact: There are 2 redundant units with 1 required to be in service at all times. The Result of This unit failing is the loss of a standby unit in the event of a failure.
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds. Also, there are Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: Capital Project Underdevelopment.
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential reporting to the Federal Government.
- j. Monitoring Update: N/A



HIGH RISK: 182 - VFD, PUMP 1A, WASTE ACTIVATED SLUDGE (WAS) WASP1AVFD

- a. Impact: There are 2 redundant units with 1 required to be in service at all times. The Result of This unit failing is the loss of a standby unit in the event of a failure.
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds. Also, there are Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: Capital Project Underdevelopment.
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential reporting to the Federal Government.
- j. Monitoring Update: N/A

HIGH RISK: 184 - VFD, PUMP 1B, WASTE ACTIVATED SLUDGE (WAS) WASP1BVFD

- a. Impact: There are 2 redundant units with 1 required to be in service at all times. The Result of This unit failing is the loss of a standby unit in the event of a failure.
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds. Also, there are Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: Capital Project Underdevelopment.
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential reporting to the Federal Government.
- j. Monitoring Update: N/A

HIGH RISK: 251 - PIPING, AST ASTPG

- a. Impact: Failure of this piping would disable the Aeration tank to provide oxygen to bacteria for treating and stabilizing the wastewater. The result of this failure is NPDES permit compliance issues.
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds. Also, there are Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: Part of plant expansion



HIGH RISK: 1304 - PUMP 1, NPW2P NPW2P-1

- a. Impact: The result of this unit failing is the loss of a standby unit in the event of another failure and also the ability to provide enough non-potable water throughout the plant.
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds. Also, there are Monthly, Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: Capital Project Underdevelopment.
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A

HIGH RISK: 1305 - VFD, PUMP 1, NPW2P NPW2P-1-VFD

- a. Impact: The result of this unit failing is the loss of a standby unit in the event of another failure and also the ability to provide enough non-potable water throughout the plant.
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds. Also, there are Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: Capital Project Underdevelopment.
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A

HIGH RISK: 139 - PUMP 3, MIXED LIQUOR, INTERMEDIATE IMLRP3

- a. Impact: Both pumps are required to be run at all times. Potential major impact due to probability of failure. Process strategy is available with limited ability to mitigate the impact.
- b. Likelihood: Probable
- c. Overall Risk Score: 9
- d. Current Action: Operational inspection in daily rounds. Also, there are two



HIGH RISK: 140 - PUMP 4, MIXED LIQUOR, INTERMEDIATE IMLRP4

- a. Impact: Both pumps are required to be run at all times. Potential major impact due to probability of failure. Process strategy is available with limited ability to mitigate the impact.
- b. Likelihood: Probable
- c. Overall Risk Score:9
- d. Current Action: Operational inspection in daily rounds. Also, there are two distinct Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electronic Technician.
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A

HIGH RISK: 141 - PUMP 5, MIXED LIQUOR, INTERMEDIATE IMLRP5

- a. Impact: Both pumps are required to be run at all times. Potential major impact due to probability of failure. Process strategy is available with limited ability to mitigate the impact.
- b. Likelihood: Probable
- c. Overall Risk Score:9
- d. Current Action: Operational inspection in daily rounds. Also, there are two distinct Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electronic Technician.
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A

HIGH RISK: 142 - PUMP 6, MIXED LIQUOR, INTERMEDIATE IMLRP6

- a. Impact: Both pumps are required to be run at all times. Potential major impact due to probability of failure. Process strategy is available with limited ability to mitigate the impact.
- b. Likelihood: Probable
- c. Overall Risk Score:9
- d. Current Action: Operational inspection in daily rounds. Also, there are two distinct Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electronic Technician.
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A



HIGH RISK: 142 - PUMP 6, MIXED LIQUOR, INTERMEDIATE IMLRP6

- a. Impact: Both pumps are required to be run at all times. Potential major impact due to probability of failure. Process strategy is available with limited ability to mitigate the impact.
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds. Also, there are two distinct Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electronic Technician.
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A

HIGH RISK: 139 - PUMP 3, MIXED LIQUOR, INTERMEDIATE IMLRP3

- a. Impact: Both pumps are required to be run at all times. Potential major impact due to probability of failure. Process strategy is available with limited ability to mitigate the impact.
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds. Also, there are two distinct Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electronic Technician.
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A

HIGH RISK: 140 - PUMP 4, MIXED LIQUOR, INTERMEDIATE IMLRP4

- a. Impact: Both pumps are required to be run at all times. Potential major impact due to probability of failure. Process strategy is available with limited ability to mitigate the impact.
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds. Also, there are two distinct Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electronic Technician.
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A



HIGH RISK: 196 - DIFFUSERS, TANK 1, ACTIVATED SLUDGE AST1-DG

- a. Impact: Failure of diffusers will prevent air from being distributed into the aeration tank to dissolve oxygen into the wastewater and limit the mixing capability
- b. Likelihood: Probable
- c. Overall Risk Score: 9
- d. Current Action: Operational inspection in daily rounds. Also, there are Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: Future Capital Project.
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A

HIGH RISK: 198 - DIFFUSERS, TANK 2, ACTIVATED SLUDGE AST2-DG

- a. Impact: Failure of diffusers will prevent air from being distributed into the aeration tank to dissolve oxygen into the wastewater and limit the mixing capability
- b. Likelihood: Probable
- c. Overall Risk Score: 9
- d. Current Action: Operational inspection in daily rounds. Also, there are Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: Future Capital Project.
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A



Table 14 - Filtration Process Assets with a High Risk Ranking Score

ASSET ID	<u>Filtration Process</u> ASSET RISK SCORE 9-16	CRITICALITY SCORE	CONDITION SCORE	RISK SCORE
897	FAN 1, EXHAUST, ORHW 00352-OREF1	4	3	12
899	FAN 2, EXHAUST, ORHW 00353-OREF2	4	3	12
908	PUMP 1, RECIRCULATION, ORHW 00361-ORRP1B	4	3	12
910	PUMP 2, RECIRCULATION, ORHW 00362-ORRP2B	4	3	12
917	FAN 3, EXHAUST, ORPST 00652-OREF3	4	3	12
919	FAN 4, EXHAUST, ORPST 00653-OREF4	4	3	12
928	PUMP 3, RECIRCULATION, ORPST 00661-ORRP3	4	3	12
937	FAN 7, EXHAUST, ORSP 03702-OREF7	4	3	12
939	FAN 8, EXHAUST, ORSP 03703-OREF8	4	3	12
941	FAN 9, EXHAUST, ORSP 03704-OREF9	4	3	12
945	PUMP 10, RECIRCULATION, ORSP 03722-ORRP10	4	3	12
947	PUMP 7, RECIRCULATION, ORSP 03711-ORRP7	4	3	12
949	PUMP 8, RECIRCULATION, ORSP 03712-ORRP8	4	3	12
951	PUMP 9, RECIRCULATION, ORSP 03721-ORRP9	4	3	12
964	PUMP 5, RECIRCULATION, ORUSS 02261-ORRP5	4	3	12
973	FAN 5, EXHAUST, ORUSS 02252-OREF5	4	3	12
975	FAN 6, EXHAUST, ORUSS 02253-OREF6	4	3	12
1673	PIPING/DUCTING, ORHW 00350-PG	4	3	12
1674	VALVES, DUCTING, ORHW 00350-VG	4	3	12
1675	PIPING/DUCTING, ORPST 00660-PG	4	3	12
1676	VALVES, DUCTING, ORPST 00660-VG	4	3	12

1677	PIPING/DUCTING, ORSP 03700-PG	4	3	12
1678	VALVES, DUCTING, ORSP 03700-VG	4	3	12
1679	PIPING/DUCTING, ORUSS 02250-PG	4	3	12
1680	VALVES, DUCTING, ORUSS 02250-VG	4	3	12

HIGH RISK: 897 - FAN 1, EXHAUST, ORHW 00352-OREF1

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds. Also, there are Monthly, Semi- annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: As soon as possible
- i. Reporting Requirements: Potential SCAQMD permit violation
- j. Monitoring Update: N/A

HIGH RISK: 899 - FAN 2, EXHAUST, ORHW 00353-OREF2

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds. Also, there are Monthly, Semi- annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: As soon as possible
- i. Reporting Requirements: Potential SCAQMD permit violation
- j. Monitoring Update: N/A



HIGH RISK: 908 - PUMP 1, RECIRCULATION, ORHW 00361-ORRP1B

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds. Also, there are Monthly, Semi- Annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: As soon as possible
- i. Reporting Requirements: Potential SCAQMD permit violation
- j. Monitoring Update: N/A

HIGH RISK: 910 - PUMP 2, RECIRCULATION, ORHW 00362-ORRP2B

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds. Also, there are Monthly, Semi- Annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: As soon as possible
- i. Reporting Requirements: Potential SCAQMD permit violation
- j. Monitoring Update: N/A

HIGH RISK: 917 - FAN 3, EXHAUST, ORPST 00652-OREF3

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds. Also, there are Monthly, Semi- annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: As soon as possible
- i. Reporting Requirements: Potential SCAQMD permit violation
- j. Monitoring Update: N/A



HIGH RISK: 919 - FAN 4, EXHAUST, ORPST 00653-OREF4

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds. Also, there are Monthly, Semi- annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: As soon as possible
- i. Reporting Requirements: Potential SCAQMD permit violation
- j. Monitoring Update: N/A

HIGH RISK: 928 - PUMP 3, RECIRCULATION, ORPST 00661-ORRP3

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds. Also, there are Monthly, Semi- annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: As soon as possible
- i. Reporting Requirements: Potential SCAQMD permit violation
- j. Monitoring Update: N/A

HIGH RISK: 937 - FAN 7, EXHAUST, ORSP 03702-OREF7

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds. Also, there are also Monthly, Semi- annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Potential SCAQMD permit violation
- j. Monitoring Update: N/A



HIGH RISK: 939 - FAN 8, EXHAUST, ORSP 03703-OREF8

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds. Also, there are also Monthly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Potential SCAQMD permit violation
- j. Monitoring Update: N/A

HIGH RISK: 941 - FAN 9, EXHAUST, ORSP 03704-OREF9

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds. Also, there are also Monthly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Potential SCAQMD permit violation
- j. Monitoring Update: N/A

HIGH RISK: 945 - PUMP 10, RECIRCULATION, ORSP 03722-ORRP10

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds. Also, there are Monthly, Semi- Annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: As soon as possible
- i. Reporting Requirements: Potential SCAQMD permit violation
- j. Monitoring Update: N/A



HIGH RISK: 947 - PUMP 7, RECIRCULATION, ORSP 03711-ORRP7

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds. Also, there are Monthly, Semi- Annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: As soon as possible
- i. Reporting Requirements: Potential SCAQMD permit violation
- j. Monitoring Update: N/A

HIGH RISK: 949 - PUMP 8, RECIRCULATION, ORSP 03712-ORRP8

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds. Also, there are Monthly, Semi- Annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: As soon as possible
- i. Reporting Requirements: Potential SCAQMD permit violation
- j. Monitoring Update: N/A

HIGH RISK: 951 - PUMP 9, RECIRCULATION, ORSP 03721-ORRP9

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds. Also, there are Monthly, Semi- Annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: As soon as possible
- i. Reporting Requirements: Potential SCAQMD permit violation



HIGH RISK: 964 - PUMP 5, RECIRCULATION, ORUSS02261-ORRP5

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds. Also, there are also Monthly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Potential SCAQMD permit violation
- j. Monitoring Update: N/A

HIGH RISK: 973 - FAN 5, EXHAUST, ORUSS 02252-OREF5

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds. Also, there are also Monthly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Potential SCAQMD permit violation
- j. Monitoring Update: N/A

HIGH RISK: 975 - FAN 6, EXHAUST, ORUSS 02253-OREF6

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds. Also, there are also Monthly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Potential SCAQMD permit violation
- j. Monitoring Update: N/A



HIGH RISK: 1673 - PIPING/DUCTING, ORHW 00350-PG

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds
- f. Resources Needed: 1 Operator
- g. External Partners: None
- h. Risk Response: As soon as possible
- i. Reporting Requirements: Potential SCAQMD permit violation
- j. Monitoring Update: N/A

HIGH RISK: 1674 - VALVES, DUCTING, ORHW 00350-VG

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds
- f. Resources Needed: 1 Operator
- g. External Partners: None
- h. Risk Response: As soon as possible
- i. Reporting Requirements: Potential SCAQMD permit violation
- j. Monitoring Update: N/A

HIGH RISK: 1675 - PIPING/DUCTING, ORPST 00660-PG

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds
- f. Resources Needed: 1 Operator
- g. External Partners: None
- h. Risk Response: As soon as possible
- i. Reporting Requirements: Potential SCAQMD permit violation
- j. Monitoring Update: N/A



HIGH RISK: 1676 - VALVES, DUCTING, ORPST 00660-VG

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds
- f. Resources Needed: 1 Operator
- g. External Partners: None
- h. Risk Response: As soon as possible
- i. Reporting Requirements: Potential SCAQMD permit violation
- j. Monitoring Update: N/A

HIGH RISK: 1677 - PIPING/DUCTING, ORSP 03700-PG

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds
- f. Resources Needed: 1 Operator
- g. External Partners: None
- h. Risk Response: As soon as possible
- i. Reporting Requirements: Potential SCAQMD permit violation
- j. Monitoring Update: N/A

HIGH RISK: 1678 - VALVES, DUCTING, ORSP 03700-VG

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds
- f. Resources Needed: 1 Operator
- g. External Partners: None
- h. Risk Response: As soon as possible
- i. Reporting Requirements: Potential SCAQMD permit violation
- j. Monitoring Update: N/A



HIGH RISK: 1679 - PIPING/DUCTING, ORUSS 02250-PG

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds
- f. Resources Needed: 1 Operator
- g. External Partners: None
- h. Risk Response: As soon as possible
- i. Reporting Requirements: Potential SCAQMD permit violation
- j. Monitoring Update: N/A

HIGH RISK: 1680 - VALVES, DUCTING, ORUSS 02250-VG

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds
- f. Resources Needed: 1 Operator
- g. External Partners: None
- h. Risk Response: As soon as possible
- i. Reporting Requirements: Potential SCAQMD permit violation
- j. Monitoring Update: N/A



Table 15- Chemical Process Assets with a High Risk Ranking Score

ASSET ID	<u>Chemical Treatment Process</u> ASSET RISK SCORE 9-16	CRITICALITY SCORE	CONDITION SCORE	RISK SCORE
767	SILO 1, STORAGE, LIME 02810-LSS1	4	3	12
768	SILO 2, STORAGE, LIME 02811-LSS2	4	3	12
773	SCREW 1, TRANSFER, LIME 02830-LTC1	4	3	12
774	SCREW 2, TRANSFER, LIME 02831-LTC2	4	3	12
775	FEEDER 1, VOLUMETERIC, LIME 02820-LVF1	4	3	12
776	FEEDER 2, VOLUMETERIC, LIME 02821-LVF2	4	3	12
622	STATION, FILL, FUEL TANK, DIESEL, 10K GAL 04220-DIESEL-TANK-FILL	3	3	9
623	TANK 1, DAY, GENERATOR 1, DIESEL ENGINE 04202-DAYTANK1	3	3	9
625	TANK 1, OVERFLOW, GENERATOR 1, DIESEL ENGINE 04202-OVF-TANK1	3	3	9
632	TANK, STORAGE, FUEL, DIESEL00109-FUEL- STORAGE	3	3	9
635	TANK, STORAGE, FUEL, 10,000 GAL, GENERATOR 1 04220-DIESEL-TANK-10K	3	3	9
643	TANK 1, BULK STORAGE, FERRIC CHLORIDE, PST 00581-PFBT1	3	3	9
644	TANK 2, BULK STORAGE, FERRIC CHLORIDE, PST 00582-PFBT2	3	3	9
719	TANK, STORAGE, SULFURIC ACID, ORSP 03735-ORSAT1	3	3	9
1643	PIPING, FUEL, GENERATORS 04202-PG	3	3	9
1644	VALVES, FUEL, GENERATORS 04202-VG	3	3	9
1665	PIPING, SULFURIC ACID, ORSP 03735-PG	3	3	9
1666	VALVES, SULFURIC ACID, ORSP 03735-VG	3	3	9



HIGH RISK: 767 - SILO 1, STORAGE, LIME, 02810-LSS1

- a. Impact: Loss of sludge cake disinfection capability
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds. Also, there are also Monthly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Notification of Regional Board
- j. Monitoring Update: N/A

HIGH RISK: 768 - SILO 2, LIME, 02811-LSS2

- a. Impact: Loss of sludge cake disinfection capability
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds. Also, there are also Monthly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Notification of Regional Board
- j. Monitoring Update: N/A

HIGH RISK: 773 - SCREW 1, TRANSFER, LIME 02830-LTC1

- a. Impact: Loss of sludge cake disinfection capability
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds. Also, there are also Monthly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Notification of Regional Board
- j. Monitoring Update: N/A



HIGH RISK: 774 - SCREW 2, TRANSFER, LIME, 02831-LTC2

- a. Impact: Loss of sludge cake disinfection capability
- b. Likelihood: Probable
- c. Overall Risk Score: 16
- d. Current Action: Operational inspection in daily rounds. Also, there are also Monthly, Semi- annual and Annual PM's in the CMMS.
- d. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- e. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- f. External Partners: None
- g. Risk Response: Immediately
- h. Reporting Requirements: Notification of Regional Board
- i. Monitoring Update: N/A

HIGH RISK: 775 - FEEDER 1, VOLUMETRIC, LIME 02820-LVF1

- a. Impact: Loss of sludge cake disinfection capability
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds. Also, there are also Monthly, Semi- annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Notification of Regional Board
- j. Monitoring Update: N/A

HIGH RISK: 776 - FEEDER 2, VOLUMETRIC, LIME 02821-LVF2

- a. Impact: Loss of sludge cake disinfection capability
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds. Also, there are also Monthly, Semi- annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Notification of Regional Board



HIGH RISK: 622 - STATION, FILL, FUEL TANK, DIESEL, 10K GAL 04220-DIESEL-TANK-FILL

- a. Impact: The result of this failure is NPDES permit compliance issues.
- b. Likelihood: Probable
- c. Overall Risk Score: 9
- d. Current Action: Operational inspection in daily rounds.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds
- f. Resources Needed: 1 Operator and 1 Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A

HIGH RISK: 623 - TANK 1, DAY, GENERATOR 1, DIESEL ENGINE 04202-DAYTANK1

- a. Impact: The result of this failure is NPDES permit compliance issues.
- b. Likelihood: Probable
- c. Overall Risk Score: 9
- d. Current Action: Operational inspection in daily rounds. Also, there are Monthly, Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A

HIGH RISK: 625 - TANK 1, OVERFLOW, GENERATOR 1, DIESEL ENGINE 04202-OVF-TANK1

- a. Impact: The result of this failure is NPDES permit compliance issues.
- b. Likelihood: Probable
- c. Overall Risk Score: 9
- d. Current Action: Operational inspection in daily rounds. Also, there are Monthly, Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A



HIGH RISK: 625 - TANK 1, OVERFLOW, GENERATOR 1, DIESEL ENGINE 04202-OVF-TANK1

- a. Impact: The result of this failure is NPDES permit compliance issues.
- b. Likelihood: Probable
- c. Overall Risk Score: 9
- d. Current Action: Operational inspection in daily rounds. Also, there are Monthly, Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A

HIGH RISK: 632 - TANK, STORAGE, FUEL, DIESEL 00109-FUEL-STORAGE

- a. Impact: The result of this failure is NPDES permit compliance issues.
- b. Likelihood: Probable
- c. Overall Risk Score: 9
- d. Current Action: Operational inspection in daily rounds. Also, there are Weekly, Monthly, Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A

HIGH RISK: 635 - TANK, STORAGE, FUEL, 10,000 GAL, GENERATOR 1 04220-DIESEL-TANK-10K

- a. Impact: The result of this failure is NPDES permit compliance issues.
- b. Likelihood: Probable
- c. Overall Risk Score: 9
- d. Current Action: Operational inspection in daily rounds. Also, there are Weekly, Monthly, Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A



HIGH RISK: 643 - TANK 1, BULK STORAGE, FERRIC CHLORIDE, PST 00581-PFBT1

- a. Impact: Influence on effectiveness of solids processing odor control.
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Potential permit violation
- j. Monitoring Update: N/A

HIGH RISK: 644 - TANK 2, BULK STORAGE, FERRIC CHLORIDE, PST 00582-PFBT2

- a. Impact: Influence on effectiveness of solids processing odor control.
- b. Likelihood: Probable
- c. Overall Risk Score:9
- d. Current Action: Operational inspection in daily rounds.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Potential permit violation
- j. Monitoring Update: N/A

HIGH RISK: 719 - TANK, STORAGE, SULFURIC ACID, ORSP 03735-ORSAT1

- a. Impact: Influence on effectiveness of solids processing odor control.
- b. Likelihood: Probable
- c. Overall Risk Score:9
- d. Current Action: Operational inspection in daily rounds.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Potential permit violation
- j. Monitoring Update: N/A



HIGH RISK: 1643 - PIPING, FUEL, GENERATORS 04202-PG

- a. Impact: The result of this failure is NPDES permit compliance issues.
- b. Likelihood: Probable
- c. Overall Risk Score: 9
- d. Current Action: Operational inspection in daily rounds
- e. Mitigation: Creation of corrective action work orders if defects are found during operational round inspection
- f. Resources Needed: 1 Operator and 1 Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A

HIGH RISK: 1644 - VALVES, FUEL, GENERATORS 04202-VG

- a. Impact: The result of this failure is NPDES permit compliance issues.
- b. Likelihood: Probable
- c. Overall Risk Score: 9
- d. Current Action: Operational inspection in daily rounds
- e. Mitigation: Creation of corrective action work orders if defects are found during operational round inspection
- f. Resources Needed: 1 Operator and 1 Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A

HIGH RISK: 1665 - PIPING, SULFURIC ACID, ORSP 03735-PG

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score: 9
- d. Current Action: Operational inspection in daily rounds. Also, there are also Monthly, Semi- annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Potential SCAQMD permit violation
- j. Monitoring Update: N/A



HIGH RISK: 1666 - VALVES, SULFURIC ACID, ORSP 03735-VG

- a. Impact: Potential SCAQMD permit violation
- b. Likelihood: Probable
- c. Overall Risk Score:9
- d. Current Action: Operational inspection in daily rounds. Also, there are also Monthly, Semi- annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Potential SCAQMD permit violation
- j. Monitoring Update: N/A

Table 16 - Cake Sludge Process Assets with a High Risk Ranking Score

ASSET ID	<u>Cake Sludge Process</u> ASSET RISK SCORE 9-16	CRITICALITY SCORE	CONDITION SCORE	RISK SCORE
1423	PRESS 2, BELT PRESS (BFP) 02696-BFP2	4	4	16
1429	PRESS 4, BELT PRESS (BFP) 02698-BFP4	4	4	16
1480	CONVEYOR 1A, BELT PRESS (BFP) 02715-BFPC1A	4	3	12
1481	CONVEYOR 1B, BELT PRESS (BFP) 02715-BFPC1B	4	3	12
1482	CONVEYOR 2A, BELT PRESS (BFP) 02716-BFPC2A	4	3	12
1483	CONVEYOR 2B, BELT PRESS (BFP) 02716-BFPC2B	4	3	12
1486	CONVEYOR 1, TRUCK LOADING 02850-TLC1	4	3	12
1695	PIPING, FEED, SLUDGE, BELT PRESS (BFP) 02635-PG	3	4	12
1696	VALVES, FEED, SLUDGE, BELT PRESS (BFP) 02635-VG	3	4	12



HIGH RISK: 1423 - PRESS 2, BELT PRESS (BFP) 02696-BFP2

- a. Impact: Inability to process sufficient amount of sludge out of the plant for maintenance of processes and violation of effluent limitations
- b. Likelihood: Probable
- c. Overall Risk Score:16
- d. Current Action: Operational inspection in daily rounds. Also, there are also Monthly, Semi- annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Potential effluent NPDES permit violation
- j. Monitoring Update: N/A

HIGH RISK: 1429 - PRESS 4, BELT PRESS (BFP) 02698-BFP4

- a. Impact: Inability to process sufficient amount of sludge out of the plant for maintenance of processes and violation of effluent limitations
- b. Likelihood: Probable
- c. Overall Risk Score:16
- d. Current Action: Operational inspection in daily rounds. Also, there are also Monthly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Potential effluent NPDES permit violation
- j. Monitoring Update: N/A

HIGH RISK: 1480 - CONVEYOR 1A, BELT PRESS (BFP) 02715-BFPC1A

- a. Impact: Inability to process sufficient amount of sludge out of the plant for maintenance of processes and violation of effluent limitations
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds. Also, there are also Monthly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Potential effluent NPDES permit violation
- j. Monitoring Update: N/A



HIGH RISK: 1481 - CONVEYOR 1B, BELT PRESS (BFP) 02715-BFPC1B

- a. Impact: Inability to process sufficient amount of sludge out of the plant for maintenance of processes and violation of effluent limitations
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds. Also, there are also Monthly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Potential effluent NPDES permit violation
- j. Monitoring Update: N/A

HIGH RISK: 1482 - CONVEYOR 2A, BELT PRESS (BFP) 02716-BFPC2A

- a. Impact: Inability to process sufficient amount of sludge out of the plant for maintenance of processes and violation of effluent limitations
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds. Also, there are also Monthly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Potential effluent NPDES permit violation
- j. Monitoring Update: N/A

HIGH RISK: 1483 - CONVEYOR 2B, BELT PRESS (BFP) 02716-BFPC2B

- a. Impact: Inability to process sufficient amount of sludge out of the plant for maintenance of processes and violation of effluent limitations
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds. Also, there are also Monthly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Potential effluent NPDES permit violation
- j. Monitoring Update: N/A



HIGH RISK: 1486 - CONVEYOR 1, TRUCK LOADING 02850-TLC1

- a. Impact: Inability to process sufficient amount of sludge out of the plant for maintenance of processes and violation of effluent limitations
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds. Also, there are also Monthly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Potential effluent NPDES permit violation
- j. Monitoring Update: N/A

HIGH RISK: 1695 - PIPING, FEED, SLUDGE, BELT PRESS (BFP) 02635-PG

- a. Impact: Inability to process sufficient amount of sludge out of the plant for maintenance of processes and violation of effluent limitations
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds. Also, there are also Monthly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: Capital project underdevelopment.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Potential effluent NPDES permit violation
- j. Monitoring Update: N/A

HIGH RISK: 1696 - VALVES, FEED, SLUDGE, BELT PRESS (BFP) 02635-VG

- a. Impact: Inability to process sufficient amount of sludge out of the plant for maintenance of processes and violation of effluent limitations
- b. Likelihood: Probable
- c. Overall Risk Score:9
- d. Current Action: Operational inspection in daily rounds. Also, there are also Monthly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: Capital project underdevelopment.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Potential effluent NPDES permit violation
- j. Monitoring Update: N/A



Table 17 - Power System Process Assets with a High Risk Ranking Score

ASSET ID	<u>Power System Process</u> ASSET RISK SCORE 9-16	CRITICALITY SCORE	CONDITION SCORE	RISK SCORE
1156	GENERATOR 1, DIESEL, STANDBY 04210-GEN1	4	3	12

HIGH RISK: 1156 - GENERATOR 1, DIESEL, STANDBY 04210-GEN1

- a. Impact: The result of this failure is NPDES permit compliance issues.
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds. Also, there are Weekly, Monthly, Quarterly, Semi-annual and Annual PM's in the CMMS.
- e. Mitigation: PM's (shown above). Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A



Table 18 - Information System Process Assets with a High Risk Ranking Score

ASSET ID	<u>Information Systems Process</u>	CRITICALITY SCORE	CONDITION SCORE	RISK SCORE
	ASSET RISK SCORE 9 - 16			
1090	PLC 1, JB-1 00100-PLC-JB1	4	4	16
1937	PANEL, CONTROL, INFLUENT PUMP 5	4	3	12

HIGH RISK: 1090 - PLC 1, JB-1 00100-PLC-JB1

- a. Impact: Loss of SCADA interface to JB-1
- b. Likelihood: Probable
- c. Overall Risk Score:16
- d. Current Action: Operational inspection in daily rounds
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM
- f. Resources Needed: 1 SCADA Technician and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Potential reporting to Federal Government
- j. Monitoring Update: N/A

HIGH RISK: 1937 - PANEL, CONTROL, INFLUENT PUMP 5

- a. Impact: Loss of SCADA interface to pump status
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electrical/Mechanical Technician
- g. External Partners: None
- h. Risk Response: Immediately
- i. Reporting Requirements: Potential NPDES permit violation
- j. Monitoring Update: N/A



Table 19 - Goat Canyon Pump Station Process Assets with a High Risk Ranking Score

ASSET ID	<u>Goat Canyon Pump Station Process</u> ASSET RISK SCORE 9 - 16	CRITICALITY SCORE	CONDITION SCORE	RISK SCORE
12	RACK, REMOTE I/O, PLC, GCPS 04100-RPLC1-GCPS (includes Adaptors)	4	3	12
13	PLC 1, GCPS 04100-PLC1-GCPS	4	3	12
14	PLC 2, GCPS 04100-PLC2-GCPS	4	3	12
43	PUMP 4, SUBMERSIBLE, GCPS 04106-P4	3	4	12
38	VFD, PUMP 1, SUBMERSIBLE, GCPS 04103-ASD-P1	3	3	9
40	VFD, PUMP 2, SUBMERSIBLE, GCPS 04104-ASD-P2	3	3	9
42	VFD, PUMP 3, SUBMERSIBLE, GCPS 04105-ASD-P3	3	3	9
44	VFD, PUMP 4, SUBMERSIBLE, GCPS 04106-ASD-P4	3	3	9

HIGH RISK: 12 - RACK, REMOTE I/O, PLC, GCPS 04100-RPLC1-GCPS (includes Adaptors)

- a. Impact: Loss of SCADA interface to pump status. . If PLC fails then no automation of the Pump Station will occur and operations will have to manually operate the Pump Station.
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: PLC's and input output modules are slated to be replaced, hardware on hand.
- e. Mitigation: If equipment failed, the newer equivalent hardware would be used. However the delay is in replacing communication from old to new equipment which has not been done. Replacement equipment would operate the equipment but there would be no remote monitoring or control of the area until the communication problem was addressed/upgraded accordingly.
- f. Resources Needed: 1 SCADA System Analyst and possibly 1 Instrumentation Technician.
- g. External Partners: SCADA Contractor
- h. Risk Response: Immediately
- i. Reporting Requirements: Reporting Status Update to IBWC – Potential for NPDES violation if no automation is available when the PLC fails.
- j. Monitoring Update: N/A



HIGH RISK: 13 - PLC 1, GCPS 04100-PLC1-GCPS

- a. Impact: Primary PLC failure would cause the secondary PLC to assume Primary functions and control the Goat Canyon Equipment. If both PLC's are failed then no automation of the Pump Station will occur and operations will have to manually operate the Pump Station.
- b. Likelihood: Very probable as PLC's are over 20 years old.
- c. Overall Risk Score:12
- d. Current Action: PLC's and input output modules are slated to be replace, hardware on hand.
- e. Mitigation: If equipment failed and no 1 for 1 replacement is available, the newer equivalent hardware would be used. However the delay is in replacing communication from old to new equipment which has not been done. Replacement equipment would operate the equipment but there would be no remote monitoring or control of the area until the communication problem was addressed/upgraded accordingly.
- f. Resources Needed: 1 SCADA System Analyst and possibly 1 Instrumentation Technician.
- g. External Partners: SCADA Contractor
- h. Risk Response: Immediately
- i. Reporting Requirements: Reporting Status Update to IBWC – Potential for NPDES violation if no automation is available when both PLC's are failed.
- j. Monitoring Update: N/A

HIGH RISK: 14 - PLC 2, GCPS 04100-PLC2-GCPS

- a. Impact: Primary PLC failure would cause the secondary PLC to assume Primary functions and control the Goat Canyon Equipment. If both PLC's are failed then no automation of the Pump Station will occur and operations will have to manually operate the Pump Station.
- b. Likelihood: Very probable as PLC's are over 20 years old.
- c. Overall Risk Score:12
- d. Current Action: PLC's and input output modules are slated to be replace, hardware on hand.
- e. Mitigation: If equipment failed and no 1 for 1 replacement is available, the newer equivalent hardware would be used. However the delay is in replacing communication from old to new equipment which has not been done. Replacement equipment would operate the equipment but there would be no remote monitoring or control of the area until the communication problem was addressed/upgraded accordingly.
- f. Resources Needed: 1 SCADA System Analyst and possibly 1 Instrumentation Technician.
- g. External Partners: SCADA Contractor
- h. Risk Response: Immediately
- i. Reporting Requirements: Reporting Status Update to IBWC – Potential for NPDES violation if no automation is available when both PLC's are failed.
- j. Monitoring Update: N/A



HIGH RISK: 43 - PUMP 4, SUBMERSIBLE, GCPS 04106-P4

- a. Impact: This system has redundant pumps but loss of the standby pump could cause severe consequences upon loss of the pump. Potential major impact due to Probability of failure.
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: Operational inspection in daily rounds. Also, there are two distinct Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electronic Technician.
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A

HIGH RISK: 38 - VFD, PUMP 1, SUBMERSIBLE, GCPS 04103-ASD-P1

- a. Impact: This system has redundant pumps but loss of the VFD could cause severe consequences upon loss of the VFD. Potential major impact due to probability of failure.
- b. Likelihood: Probable
- c. Overall Risk Score: 9
- d. Current Action: Operational inspection in daily rounds. Also, there are two distinct Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electronic Technician.
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A

HIGH RISK: 40 - VFD, PUMP 2, SUBMERSIBLE, GCPS 04104-ASD-P2

- a. Impact: This system has redundant pumps but loss of the VFD could cause severe consequences upon loss of the VFD. Potential major impact due to probability of failure.
- b. Likelihood: Probable
- c. Overall Risk Score: 9
- d. Current Action: Operational inspection in daily rounds. Also, there are two distinct Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electronic Technician.
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A



HIGH RISK: 42 - VFD, PUMP 3, SUBMERSIBLE, GCPS 04105-ASD-P3

- a. Impact: This system has redundant pumps but loss of the VFD could cause severe consequences upon loss of the VFD. Potential major impact due to probability of failure.
- b. Likelihood: Probable
- c. Overall Risk Score:9
- d. Current Action: Operational inspection in daily rounds. Also, there are two distinct Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electronic Technician.
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A

HIGH RISK: 44 - VFD, PUMP 4, SUBMERSIBLE, GCPS 04106-ASD-P4

- a. Impact: This system has redundant pumps but loss of the VFD could cause severe consequences upon loss of the VFD. Potential major impact due to probability of failure.
- b. Likelihood: Probable
- c. Overall Risk Score:9
- d. Current Action: Operational inspection in daily rounds. Also, there are two distinct Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electronic Technician.
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A



Table 20 - Hollister Pump Station Process Assets with a High Risk Ranking Score

ASSET ID	<u>Hollister Pump Station Process</u> ASSET RISK SCORE 9-16	CRITICALITY SCORE	CONDITION SCORE	RISK SCORE
62	RACK, REMOTE I/O, PLC, HPS 04300-RPLC1-HPS (includes Adaptors)	4	4	16
65	PLC 1, HPS 04300-PLC1-HPS	4	4	16
66	PLC 2, HPS 04300-PLC2-HPS	4	4	16
87	PUMP 1, SUBMERSIBLE, HPS 04303-P1	3	4	12
97	TANK 1, SURGE, HPS 04308-SA1	3	4	12
98	TANK 2, SURGE, HPS 04309-SA2	3	4	12

HIGH RISK: 62 - RACK, REMOTE I/O, PLC, HPS 04300-RPLC1-HPS (includes Adaptors)

- a. Impact: Loss of SCADA interface to pump status. If PLC fails then no automation of the Pump Station will occur and operations will have to manually operate the Pump Station.
- b. Likelihood: Probable
- c. Overall Risk Score: 16
- d. Current Action: PLC's and input output modules are slated to be replaced, hardware on hand.
- e. Mitigation: If equipment failed, the newer equivalent hardware would be used. However the delay is in replacing communication from old to new equipment which has not been done. Replacement equipment would operate the equipment but there would be no remote monitoring or control of the area until the communication problem was addressed/upgraded accordingly.
- f. Resources Needed: 1 SCADA System Analyst and possibly 1 Instrumentation Technician.
- g. External Partners: SCADA Contractor
- h. Risk Response: Immediately
- i. Reporting Requirements: Reporting Status Update to IBWC – Potential for NPDES violation if no automation is available when the PLC fails.
- j. Monitoring Update: N/A



HIGH RISK: 65 - PLC 1, HPS 04300-PLC1-HPS

- a. Impact: Primary PLC failure would cause the secondary PLC to assume Primary functions and control the Hollister Equipment. If both PLC's are failed then no automation of the Pump Station will occur and operations will have to manually operate the Pump Station.
- b. Likelihood: Very probable as PLC's are over 20 years old.
- c. Overall Risk Score:16
- d. Current Action: PLC's and input output modules are slated to be replace, hardware on hand.
- e. Mitigation: If equipment failed and no 1 for 1 replacement is available, the newer equivalent hardware would be used. However the delay is in replacing communication from old to new equipment which has not been done. Replacement equipment would operate the equipment but there would be no remote monitoring or control of the area until the communication problem was addressed/upgraded accordingly.
- f. Resources Needed: 1 SCADA System Analyst and possibly 1 Instrumentation Technician.
- g. External Partners: SCADA Contractor
- h. Risk Response: Immediately
- i. Reporting Requirements: Reporting Status Update to IBWC – Potential for NPDES violation if no automation is available when both PLC's are failed.
- j. Monitoring Update: N/A

HIGH RISK: 66 - PLC 2, HPS 04300-PLC2-HPS

- a. Impact: Primary PLC failure would cause the secondary PLC to assume Primary functions and control the Hollister Equipment. If both PLC's are failed then no automation of the Pump Station will occur and operations will have to manually operate the Pump Station.
- b. Likelihood: Very probable as PLC's are over 20 years old.
- c. Overall Risk Score:16
- d. Current Action: PLC's and input output modules are slated to be replace, hardware on hand.
- e. Mitigation: If equipment failed and no 1 for 1 replacement is available, the newer equivalent hardware would be used. However the delay is in replacing communication from old to new equipment which has not been done. Replacement equipment would operate the equipment but there would be no remote monitoring or control of the area until the communication problem was addressed/upgraded accordingly.
- f. Resources Needed: 1 SCADA System Analyst and possibly 1 Instrumentation Technician.
- g. External Partners: SCADA Contractor
- h. Risk Response: Immediately
- i. Reporting Requirements: Reporting Status Update to IBWC – Potential for NPDES violation if no automation is available when both PLC's are failed.
- j. Monitoring Update: N/A



HIGH RISK: 87 - PUMP 1, SUBMERSIBLE, HPS 04303-P1

- a. Impact: This system has redundant pumps but loss of the standby pump could cause severe consequences upon loss of the pump. Potential major impact due to probability of failure.
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds. Also, there are two distinct Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electronic Technician.
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A

HIGH RISK: 97 - TANK 1, SURGE, HPS 04308-SA1

- a. Impact: This system has redundant pumps but loss of the surge tank could allow damage to the equipment and piping system to cause severe consequences upon loss of the tank.
- b. Likelihood: Probable
- c. Overall Risk Score:12
- d. Current Action: Operational inspection in daily rounds. Also, there are two distinct Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electronic Technician.
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A

HIGH RISK: 98 - TANK 2, SURGE, HPS 04309-SA2

- a. Impact: This system has redundant pumps but loss of the surge tank could allow damage to the equipment and piping system to cause severe consequences upon loss of the tank.
- b. Likelihood: Probable
- c. Overall Risk Score:912
- d. Current Action: Operational inspection in daily rounds. Also, there are two distinct Annual PM's in the CMMS.
- e. Mitigation: Creation of corrective action work orders if defects are found during operational rounds or PM.
- f. Resources Needed: 1 Operator and 1 Electronic Technician.
- g. External Partners: None
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A



Table 21 - Canyon Collectors System Assets with a High Risk Ranking Score

ASSET ID	<u>Canyon Collectors System</u> ASSET RISK SCORE 9 - 16	CRITICALITY SCORE	CONDITION SCORE	RISK SCORE
1592	METER, FLOW, MAGNETIC, 30", CANYON COLLECTOR 01515-FLOW-CCM2	4	3	12

HIGH RISK: 1592 - METER, FLOW, MAGNETIC, 30", CANYON COLLECTOR 01515-FLOW-CCM2

- a. Impact: Failure of this meter would disable the ability to measure fugitive wastewater flows captured at the Goat Canyon and Smuggler's Gulch Diversion Structures.
- b. Likelihood: Probable
- c. Overall Risk Score: 12
- d. Current Action: New Flow meter is onsite and ready for installation.
- e. Mitigation: In the event of a failure, the new flow meter will be installed.
- f. Resources Needed: 1 Instrumentation Technician.
- g. External Partners: Contractor for installation
- h. Risk Response: Immediate
- i. Reporting Requirements: Potential to the Client
- j. Monitoring Update: N/A

Appendix A - Condition Monitoring Techniques

- 1) **Performance Score:** Performance is scoring based on the function of the asset, comparing the current performance vs. the designed performance.
- 2) **Inspection Score:** Inspection is a visual inspection score typically performed during a PM. It doesn't take into account performance or internal wear.
- 3) **Leak Score:** Asset is observed in operation and score is based on leak severity. Leaking seal water, excessive packing, oil, and grease leaks, etc.
- 4) **Temperature-Thermography Score:** Thermography (Infra-red) scanning picks up loose, oxidized or corroded connections, or malfunctions of the component.
- 5) **Vibration-Spectral Data Score:** Vibration analysis picks up frequencies lower than human perception, which show fatigue, wear, imbalance, misalignment, mechanical looseness, turbulence, etc...

END OF RISK ASSESSMENT