DOCKETED	
Docket Number:	01-AFC-06C
Project Title:	Magnolia Power Project-Compliance
TN #:	231032
Document Title:	Magnolia Power Project 2018 Report
Description:	N/A
Filer:	Joe Douglas
Organization:	California Energy Commission
Submitter Role:	Energy Commission
Submission Date:	12/10/2019 9:17:58 AM
Docketed Date:	12/10/2019



February 15, 2019

California Energy Commission 1516 Ninth Street, MS-2000 Sacramento, CA 95814

Attn: Joseph Douglas, Compliance Project Manager

Subject: Magnolia Power Project 2018 Annual Compliance Report

Dear Mr. Douglas:

This transmittal contains the 2018 Magnolia Power Project (MPP) Annual Compliance Report submitted in compliance with condition COM-8 of the California Energy Commission Decision (Order No. 03-0305-02). MPP operating status and other required information is listed below:

COM-8.1 <u>Updated Compliance Matrix</u> – Per condition COM-6 and COM-8, satisfied conditions have been deleted from the matrix. Because the only remaining items are the required annual updates, the due date column has been replaced with a "notes" column.

TECHNICAL AREA	CEC CONDITION	VERIFICATION ACTION	Notes	REPORT SECTION
HAZARDOUS MATERIALS MANAGEMENT	HAZ-1	The project owner shall provide to the Compliance Project Manager (CPM), in the Annual Compliance Report, a list of hazardous materials contained at the facility in reportable quantities		Attachment A
RECLAIMED WATER AVAILABILITY	S&W-5	Burbank Water Reclamation Plant (BWRP) Standard Report- The project owner shall calculate the 12, 36, and 60- month moving average BWRP failure rates on a monthly basis and shall include them in the Annual Compliance Report.		Attachment B Item S&W-5 listed below

2018 Compliance Matrix

TECHNICAL AREA	CEC CONDITION	VERIFICATION ACTION	Notes	REPORT SECTION
RECLAIMED WATER AVAILABILITY	S&W-5	BWRP Threshold Failure Report- The project owner shall submit to the CPM a threshold exceedance notification letter within 30 days of the end of the month in which the failure rate threshold for the 12, 36, or 60- month moving average has been exceeded.	No threshold exceedance has occurred	N/A
WATER	S&W-6	The project owner shall provide a report on the servicing, testing and calibration of water metering devices and operation in the Annual Compliance Report		Attachment C
WATER	S&W-6	The project owner shall submit the required water use summary to the CPM for review and approval as part of the Annual Compliance Report for the life of the project.		Attachment D
VISUAL - COLOR TREATMENTS (PAINT)	VIS-1	The project owner shall provide a status report regarding treatment maintenance in the Annual Compliance Report for the life of the project.		Attachment E
VISUAL - LIGHTING	VIS-3	The project owner shall report any complaints about permanent lighting and provide documentation of resolution in the Annual Compliance Report for that year.	No lighting complaints received	N/A
VISUAL - LANDSCAPING	VIS-4	The project owner shall report landscape maintenance activities, including replacement of dead vegetation, for the previous year of operation in the Annual Compliance Report for the life of the project.		Attachment E

TECHNICAL AREA	CEC CONDITION	VERIFICATION ACTION	Notes	REPORT SECTION
WASTE MANAGEMENT	WASTE-4	In the Annual Compliance Reports, the project owner shall document the actual waste management methods used during the year		Item WASTE -4 listed below

S&W-5 – The average failure rate for 2018 exceeded five percent because a sewage pump station that feeds the Burbank Water Reclamation Plant (BWRP) was placed out of service due to pump failures. The BWRP has been at 50% reduced flow since the pump failures. In order to bring the average failure rate to below five percent annually, several actions have been taken:

- The City of Burbank (COB) is working with the pump manufacturer to replace the pumps.
- BWP has implemented operational efficiencies, such as time of use changes, to reduce demand on the BWRP

The average failure rate for 2018 was calculated based on the hours of when groundwater pumping was used to supplement the water supply at MPP.

WASTE-4 – The hazardous waste management methods used throughout the compliance year include:

- H039 Other recovery or reclamation for reuse including acid regeneration, organics recovery, etc.
- H132 Landfill or surface impoundment that will be closed as landfill (to include prior treatment and/or stabilization)
- H141 The site receiving this waste stored/bulked and transferred the waste with no treatment or recovery, fuel blending, or disposal at that receiving site

COM-8.2 <u>Operating Status and Significant Changes</u> – There was no significant changes to the operating status of MPP during the reporting year. MPP was taken offline as follows:

- March 9, 2018 to March 12, 2018 to perform a combustion turbine (CT) water wash
- June 15, 2018 to June 18, 2018 to perform a CT water wash
- August 10, 2018 to August 14, 2018 because the steam turbine (ST) tripped due to an electrical short, extended by main stop valve (MSV) failure
- August 14, 2014 to August 16, 2018 the plant was available, but not placed online. A CT water wash was performed
- November 16, 2018 to November 19, 2018 to perform a CT water wash
- December 1, 2018 to December 2, 2018 the plant tripped due to an electrical distribution system failure

COM-8.3 <u>Documents Required by Specific Conditions</u> – These documents are listed in the above compliance matrix or in section 6 (filings/permits) and are included in this transmittal.

COM-8.4 <u>Cumulative Listing of All Post-Certification Changes Approved by the Energy</u> <u>Commission</u> – On August 15, 2017, The Energy Commission adopted Order Number 17-0809-3 (Docket Number 01-AFC-06C), Approving Petition to Amend – Change in Startup and Shutdown Operation, Staff Analysis on Petition to Amend, and Errata.

COM-8.5 <u>Explanation of any Submittal Deadlines that were missed</u> – No submittal deadlines required by COM-8 or COM-6 of the California Energy Commission Decision (Order No. 03-0305-02) were missed.

COM-8.6 List of Filings and Permits Issued this year – The Los Angeles County Certified Unified Program Agency Administered by the Los Angeles County Fire Department issued the Annual Unified Program Facility Permit for MPP on September 27, 2018. The South Coast Air Quality Management District (SCAQMD) issued a revised Title Page, Table of Contents, and Section D of the RECLAIM/Title V Facility Permit for MPP on April 13, 2018. This permit revision reflected the clarifying language added to the permit conditions for turbine testing and measured SCR parameters and the removal of the requirement for a risk management plan. The State of California Department of Industrial Relations, Division of Occupational Safety & Health, Pressure Vessel Unit issued the Permit to Operate Steam Boiler (MPP HRSG) on November 16, 2018.

COM-8.7 <u>Projection of Next Year Project Compliance Activities</u> – Projected compliance activities for 2018 are consistent with previous years and include:

- **1.** Requirements in accordance with the Title V Permit, and all other SCAQMD requirements
- **2.** Requirements in accordance with the General Permit for Storm Water Discharges Associated with Industrial Activities (Order NPDES No. CAS000001)
- **3.** Requirements in accordance with the California Air Resources Board (ARB) and Environmental Protection Agency (EPA) rules and regulations
- 4. Requirements in accordance with the City of Burbank Waste Discharge Permit
- 5. Requirements in accordance with the Annual Unified Program Facility Permit

COM-8.8 <u>Compliance File Additions</u> – The on-site compliance file was updated to include all required monitoring, reporting and recordkeeping in compliance with this Decision and all other regulatory permits that govern the operation of MPP.

COM-8.9 Evaluation of the On-Site Contingency Plan for Unplanned Facility Closure – There has been no updates to the plan. The insurance coverage for MPP is in effect and the facility is inspected annually for insurance purposes. Both turbines and generators are covered by a General Electric Parts and Services Agreement. This agreement is good for 112,000 hours of operation and MPP has operated about 96,781 hours as of January 30, 2019.

COM-8.10 <u>Listing of Complaints, Notices of Violation, Official Warnings and Citations</u>– There were no complaints, notices of violation, official warnings or citations received during the reporting period.

If you have any questions, please contact me at <u>csreyes@burbankca.gov</u> or at (818) 238-3510.

Sincerely,

Claudia Reyes Claudia Reyes, Senior Environmental Engineer

Burbank Water and Power

Enclosures

ATTACHMENT A HAZARDOUS MATERIALS MANAGEMENT

MPP HAZARDOUS MATERIALS MANAGEMENT Hazardous Materials Use and Storage

Material Name	Purpose	2018 Average Use/Day	2018 Maximum Storage	Storage Type
NOx CO Mixture	CEMS calibration	As Needed	577.6 Cubic feet	Bottle
NOx	CEMS calibration	As Needed	748.8 Cubic feet	Bottle
Oxygen Nitrogen Mixture	CEMS calibration	As Needed	288.8 Cubic feet	Bottle
СО	CEMS calibration	As Needed	144.4 Cubic feet	Bottle
Ammonia Gas	CEMS calibration	As Needed	146.2 Cubic feet	Bottle
CO N2 Mixture	CEMS calibration	As Needed	144.4 Cubic feet	Bottle
Nitrogen	Purge Boilers	As Needed	2760 Cubic feet	Bottle
Novec 1230	Fire Suppression	As Needed	4640 Cubic feet	Bottle
Shell Morlina S4 B220	Vapor Compressor Lubricating Oil	0.5 Quarts	380 Gallons	Drum
Shell Morlina S4 B150	Fuel Gas Compressor Lubricating Oil	0.5 Quarts	330 Gallons	Drum
Shell Turbo T32	Turbine Oil	As Needed	6865 Gallons	Drum/Process Equipment
Shell Turbo T68	Crystallizer Pump Lubricating Oil	As Needed	200 Gallons	Drum
Shell Turbo T Oil 100	Turbine Oil	As Needed	110 Gallons	Drum
Shell Turbo DR46	Lubricating Oil	As Needed	165 Gallons	Drum
Shell Oil 150	Lubricating Oil	As Needed	165 Gallons	Drum
S2 V32	Hydraulic Oil	As Needed	55 Gallons	Drum
Turbine Oil 500	Synthetic lubricating oil	As Needed	260 Gallons	Drum
Shell Tullus V 68	Lubricating Oil	As Needed	85 Gallons	Drum
S3 BA460	Lubricating Oil	As Needed	90 Gallons	Drum
Shell Morlina S4 R680	Lubricating Oil	As Needed	35 Gallons	Drum
Shell Omala S2 G 100	Lubricating Oil	As Needed	35 Gallons	Drum
BL1794	Boiler Water Treatment	1 Gallons	400 Gallons	Plastic Container
BL1260	Scavenge Oxygen	As Needed	30 Gallons	Plastic Container
Hydrogen	Generator	591 Cubic feet	85104 Cubic feet	Bottle
Nitrogen	Extra Storage for Purge Boilers	As Needed	28368 Cubic feet	Bottle
CL 240	Flash Tank Antifoam	10 Gallons	300 Gallons	Plastic Container
CL-4500	Cooling Tower Dispersant	10 Gallons	300 Gallons	Plastic Container
CL 206	Clearing Reverse Osmosis	1 Gallons	55 Gallons	Plastic Container
RL 9007	RO Treatment/Antiscale	2 Gallons	60 Gallons	Plastic Container
BL 124	Boiler Water Treatment	2 Gallons	60 Gallons	Plastic Container
P813E	Polymer	4 Gallons	70 Gallons	Plastic Container
P873L	Coagulator	10 Gallons	540 Gallons	Plastic Container
P817E	Clarifier Polymer	3 Gallons	660 Gallons	Plastic Container
RL 9007	Reverse Osmosis Antiscalent	2 Gallons	45 Gallons	Plastic Container
BL1794	Boiler Water Treatment	Storage Gallons	300 Gallons	Plastic Container
CL-4500	Dispersant	Storage Gallons	300 Gallons	Plastic Container
P873L	Water Clarifier Coagulant	10 Gallons	300 Gallons	Plastic Container
CL 240	Antifoam Boiler Water Treatment	Storage Gallons	300 Gallons	Plastic Container
BL 124 Sodium Hydroxide,	ZLD water treatment	Storage Gallons 240 Gallons	90 Gallons 6000 Gallons	Plastic Container Tank
50% Sodium Hypochlorite, 12.5%	Biocide or water treatment	200 Gallons	6300 Gallons	Tank
Sulfuric Acid, 93%	ZLD water treatment	200 Gallons	10000 Gallons	Tank
Soda Ash	ZLD water treatment	1.7 tons	20-40 Tons	Silo
Transformer Dielectric Oil	Insulator	As Needed	25,020 Gallons	Transformers
Ammonium Hydroxide	NOx Emission Controls	1860 lbs/day	12000 Gallons	Above Ground Tank
Argon	Welding, Cutting	As Needed	2160 Cubic Feet	Bottle
Argon-Carbon Dioxide Mix 75/25	Welding, Cutting	As Needed	2352 Cubic Feet	Bottle

MPP HAZARDOUS MATERIALS MANAGEMENT Hazardous Materials Use and Storage

Material Name	Purpose	2018 Average Use/Day	2018 Maximum Storage	Storage Type
Carbon Dioxide, liquid	Fire Suppression	As Needed	6 Tons	Tank
FO150	Defoamer	As Needed	50 Gallons	Pails
RL 1500	Reverse Membrane Cleaner	As Needed	165 Gallons	Drum
RL2016	Reverse Osmosis and Resin Cleaner	As Needed	55 Gallons	Drum
RL 1700	Reverse Osmosis Cleaner	As Needed	55 Gallons	Drum
RL 5000	Reverse Osmosis Cleaner	As Needed	55 Gallons	Drum
BL 1302	25% Caustic	As Needed	40 Gallons	Pails
Shell Turbo S4x 32	Steam Tubine Generator Hydraulic Oil	As Needed	300 Gallons	Drum

ATTACHMENT B RECLAIMED WATER AVAILABILITY

Burbank Water Reclamation Plant Standard Report

MPP I	Reclaimed Water Failure Rate as of December 2018	e Table
	Failure Rates, Rolling Average	
12 Month	36 month	60 month
7.270%	2.488%	1.551%
	Annual Monthly Failures	
January	February	March
0.000%	0.050%	0.000%
April	May	June
1.528%	0.000%	0.046%
July	August	September
20.282%	14.987%	14.435%
October	November	December
13.790%	1.102%	19.933%

ATTACHMENT C WATER METERS

This meter measures the amount of RO water sent to MPP

Turbine flow	w meter
Sea Meters	6
4"	
Reclaimed	
3070962	
R0-1	R00145
Left of Perr	meate tank
	Sea Meters 4" Reclaimed 3070962 R0-1



Date Check		Status	Initials
	Read		
5/11/2016	89724.72	ok	BH
2/7/2017	442813.4	ok	BH
6/15/2017	836833.5	ok	JB
9/15/2017	905761.3	ok	BH
12/8/2017	45188	ok	BH
5/1/2018	0	ok	BH

Date Check		Status	Initials
8/1/2018 11/5/2018	399393.4 479925	ok ok	JB BH

This meter supplies backup potable water to the skid.

Type:	EVO Q4
MFG:	Elster Amco
Size:	4"
Water:	Potable make up
Serial #	13073748
Record #	72117 Was 67165
Location:	Approx. 20' west of R00079 on railing

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Date Chec	k	Status	Initials
	Read		
1/26/2015	New 0.0	OK	JB & BH
4/7/2015	11950) ok	BH
2/11/2016	18158	3 ok	BH
5/11/2016	18158	3 ok	BH
2/7/2017	18158	3 ok	BH
6/15/2017	18158	3 ok	JB

Date Check	Status		Initials
9/15/2017	18158	ok	BH
12/8/2017	18158	OK	BH
5/1/2018	18158	ok	BH
8/1/2018	18158	ok	JB
11/5/2018	18158	ok	Bh

This meter supplies reclaimed water to the skid.

Type:	Propeller
MFG:	Mc Crometer
Size:	6"
Water:	Reclaimed
Serial #	02-03782-6
Record #	R00079
Location:	On backside of skid on railing



Date Check	<	Status	Initials
	Read		
5/11/2016	736752	ok	BH
2/7/2017	799324	ok	BH
6/15/2017	825439	ok	JB
9/15/2017	851117	ok	BH
12/8/2017	872444	OK	BH
5/1/2018	910050	ok	BH

Date Check		Status	Initials
8/1/2018	932341	ok	JB
11/5/2018	956622	ok	BH

This meter for potable water from well site 15 at GAC.

Type:	Mag Meter	
MFG:	Krone	
Size:	12"	
Water:	Potable	
Serial #	C01 1541	
Record #	N/A	67163
Location:	Gac Well Site	15

Well 15 has been abandon and meter removed permenantly.

Closing read 366899 - JB



This meter for potable water from well site 7 at GAC.

Type:	Mag Meter	
MFG:	Krone	
Size:	12"	
Water:	Potable	
Serial #	C10 1489	
Record #	N/A	67164
Location:	Gac Well Site	7



Date Check	<	Status	Initials
	Read		
5/11/2016	1704430	ok	BH
2/7/2017	8874554	ok	BH
6/15/2017	8874564	ok	JB
9/15/2017	8874589	ok	BH
12/8/2017	8874594	OK	BH
5/1/2018	34913	ok	BH

Date Check		Status	Initials
8/1/2018	272516		JB
		ok	JD
11/5/2018	761103	OK	BH

This meter supplies potable water to Tank 53.

Type:	Mag Meter	WMX 104-600
MFG:	Sea Metrics	
Size:	6"	
Water:	Potable	
Serial #	52015000756	
Record #	P-5	
Location:	Next to 14" At	Cooling Tower



Date Check		Status	Initials
	Read	•	
12/9/2015	115	ok	BH
5/11/2016	115	ok	BH
2/7/2017	115	ok	BH
6/15/2017	115	ok	JB
9/15/2017	115	ok	BH
12/8/2017	115	OK I	BH

Date Check Status		Status	Initials
5/1/2018	115	ok	BH
8/1/2018	115	ok	JB
11/5/2018	115	ok	BH
· · ·			
			<u>+</u>

This meter supplies reclaimed water feeding tank 53.

Туре:	Mag Meter
MFG:	ABB
Size:	14"
Water:	Reclaimed
Serial #	3k220000100193
Record #	Old # R00140 / New # R00378
Location:	Above ground by cooling tower



Date Check		Status	Initials
	Read		
2/7/2017	216557425	ok	bh
6/15/2017	227376940	ok	JB
9/15/2017	293057201	ok	BH
12/8/2017	249441995	OK	BH
2/21/2018	255719167	Meter R	leplaced
5/1/2018	6934162	ok	BH

Date Chec	K	Status	Initials
8/1/2018	599794955	ak	JB
		ok	JD
11/5/2018	3437799	ok	BH

This meter supplies back up potable water for MPP cooling tower.

Type:	Propeller
MFG:	Mc Crometer
Size:	12"
Water:	Potable
Serial #	04-05631-12
Record #	54428
Location:	On side of MPP cooling tower



Date Check		Status	Initials
	Read		
5/11/2016	85	OK	BH
2/7/2017	85	OK	BH
6/15/2017	85	OK	JB
9/15/2017	85	ok	BH
12/8/2017	85	OK	BH
5/1/2018	85	OK	BH

Date Check	9/78-507-618-65-679-679-7848	Status	Initials
	Read		
8/1/2018	85	OK	JB
11/5/2018	85	OK	BH

ATTACHMENT D WATER USE SUMMARY

RECYCLED WATER USAGE BWP CAMPUS FY 17-18 & 18-19

HVAC Meter # R00094 Admin Bldg Submeter BWP 0.44 0.08 0.20 0.06 0.03 0.01 0.01	Meter # R00378 MPP Cooling Towers SCPPA 92.49 85.85 93.75 92.03 90.53 59.24 58.43 53.58	Meter # R00078 Olive Cooling Towers BWP 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	Meter # R00079 R.O. Unit BWP 19.82 19.25 19.38 18.65 18.04 14.46 19.70	Total of 3 Industrial Meters 112.31 105.10 113.12 110.67 108.58 73.70
Admin Bldg Submeter BWP 0.44 0.08 0.20 0.06 0.03 0.01 0.01 0.01 0.01 0.01	MPP Cooling Towers SCPPA 92.49 85.85 93.75 92.03 90.53 59.24 58.43	Olive Cooling Towers BWP 0.00 0.00 0.00 0.00 0.00 0.00 0.00	R.O. Unit BWP 19.82 19.25 19.38 18.65 18.04 14.46	Industrial Meters 112.31 105.10 113.12 110.67 108.58
Submeter BWP 0.44 0.08 0.20 0.06 0.03 0.01 0.01 0.01 0.01	Towers SCPPA 92.49 85.85 93.75 92.03 90.53 59.24 58.43	Towers BWP 0.00 0.00 0.00 0.00 0.00 0.00 0.00	BWP 19.82 19.25 19.38 18.65 18.04 14.46	Industrial Meters 112.31 105.10 113.12 110.67 108.58
BWP 0.44 0.08 0.20 0.06 0.03 0.01 0.01 0.01 0.01	SCPPA 92.49 85.85 93.75 92.03 90.53 59.24 58.43	BWP 0.00 0.00 0.00 0.00 0.00 0.00	BWP 19.82 19.25 19.38 18.65 18.04 14.46	Meters 112.31 105.10 113.12 110.67 108.58
0.44 0.08 0.20 0.06 0.03 0.01 0.01 0.01 0.01	92.49 85.85 93.75 92.03 90.53 59.24 58.43	0.00 0.00 0.00 0.00 0.00 0.00 0.00	19.82 19.25 19.38 18.65 18.04 14.46	112.31 105.10 113.12 110.67 108.58
0.08 0.20 0.06 0.03 0.01 0.01 0.01 0.01	85.85 93.75 92.03 90.53 59.24 58.43	0.00 0.00 0.00 0.00 0.00	19.25 19.38 18.65 18.04 14.46	105.10 113.12 110.67 108.58
0.08 0.20 0.06 0.03 0.01 0.01 0.01 0.01	85.85 93.75 92.03 90.53 59.24 58.43	0.00 0.00 0.00 0.00 0.00	19.25 19.38 18.65 18.04 14.46	105.10 113.12 110.67 108.58
0.20 0.06 0.03 0.01 0.01 0.01 0.01	93.75 92.03 90.53 59.24 58.43	0.00 0.00 0.00 0.00	19.38 18.65 18.04 14.46	113.12 110.67 108.58
0.06 0.03 0.01 0.01 0.01 0.01	92.03 90.53 59.24 58.43	0.00 0.00 0.00	18.65 18.04 14.46	110.67 108.58
0.03 0.01 0.01 0.01 0.01	90.53 59.24 58.43	0.00 0.00	18.04 14.46	108.58
0.01 0.01 0.01 0.01	59.24 58.43	0.00	14.46	
0.01 0.01 0.01	58.43			72 70
0.01 0.01		0.00	10 70	
0.01	53 58			78.13
		0.00	20.66	74.24
				86.52
				92.00
				91.15
0.05	74.99	0.00	16.95	91.93
				1,137.47
			•	495,480
0.3	300.0	0.0	70.7	370.6
				<u> </u>
0.44	00.04	0.00	47.00	00.44
				86.14
-				53.03
				65.53
				78.89
				88.34
0.00	24.81	0.00	29.13	53.94
				0.00 0.00
				0.00 0.00
				0.00 0.00
				0.00
0.36	301 77	0.00	124 11	425.88
				185,513
			40.4	138.8
		0.01 68.31 0.03 76.55 0.03 74.87 0.05 74.99 0.95 920.61 413 401,018 0.3 300.0 0 0.11 0.12 35.83 0.06 47.23 0.04 61.57 0.02 63.99 0.00 24.81 0.36 301.77 157 131,450	0.01 68.31 0.00 0.03 76.55 0.00 0.03 74.87 0.00 0.05 74.99 0.00 0.95 920.61 0.00 413 401,018 0 0.3 300.0 0.0 0.11 68.34 0.00 0.12 35.83 0.00 0.06 47.23 0.00 0.02 63.99 0.00 0.00 24.81 0.00 0.00 24.81 0.00 0.36 301.77 0.00 157 131,450 0	0.01 68.31 0.00 18.21 0.03 76.55 0.00 15.45 0.03 74.87 0.00 16.29 0.05 74.99 0.00 16.95 0.95 920.61 0.00 216.85 413 401,018 0 94,462 0.3 300.0 0.0 70.7 0.11 68.34 0.00 17.80 0.12 35.83 0.00 17.20 0.06 47.23 0.00 18.30 0.02 63.99 0.00 24.35 0.00 24.81 0.00 29.13 0.36 301.77 0.00 124.11 157 131,450 0 54,063

Notes: 1) All monthly values in acre-feet.

MPP Potable Water Use 2018

Reclaim Water Tank Potable

Month	Gallons
January	-
February	-
March	-
April	-
Мау	-
June	-
July	-
August	-
September	-
October	-
November	-
December	-
Total	-

Magnolia Service Building Potable

Month	Gallons
January	7,735
February	8,036
March	9,173
April	8,596
May	8,968
June	8,866
July	9,126
August	9,598
September	8,028
October	9,131
November	8,617
December	7,662
Total	103,534

Total Gallons/Year

Reverse Osmosis System

Month	Gallons
January	-
February	-
March	-
April	-
May	-
June	-
July	-
August	-
September	-
October	-
November	-
December	-
Total	-

Balance of Plant Potable

Month	Gallons
January	486,050
February	472,549
March	570,365
April	503,344
May	536,578
June	854,747
July	1,383,015
August	1,279,566
September	1,047,873
October	1,194,908
November	890,472
December	457,828
Total	9,677,295

MPP Groundwater Use 2018

Well 7

Month	Gallons
January	4,493,500.00
February	4,147,000.00
March	-
April	-
May	-
June	-
July	10,259,061.00
August	7,362,346.00
September	6,838,713.00
October	6,722,171.00
November	504,000.00
December	9,790,822.00
Total	50,117,613.00

ATTACHMENT E VISUAL

a) Condition of the surfaces of all the structures and building at the end of the reporting period (provide photos).

The overall condition of the Magnolia Power Project (MPP) surfaces are good. Burbank Water and Power (BWP) Maintenance continually performs inspections and monitors the surface conditions. Below are several pictures throughout MPP during the compliance year (2018).





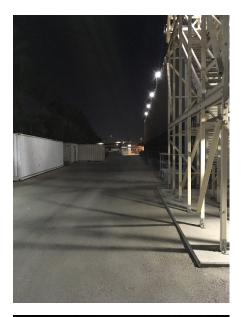




b) Maintenance activities that occurred during the reporting year.

During the compliance year, the ambient lighting at MPP was replaced. The original lights had reached the end of their useful life and had degraded over time. Rather than replacing with like and kind, BWP elected to upgrade to LED fixtures. Pre-approval from the CEC for the change in lights was received in April of 2018. The installation began in May 2018 and was completed by October 2018. The following areas received replacement lights (pictures attached below):

- a. Combustion Turbine area
- b. Steam Turbine building interior
- c. HRSG stairwells and top platforms
- d. ZLD area
- e. Transformer area









Also, during the 2018 reporting year BWP maintenance procured and installed a replacement sulfuric acid tank. The tank was fabricated with an upgraded material that is corrosion resistant. The original carbon steel tank was approaching the maximum allowable corrosion specifications based on ultra sonic measuments of the wall thickness. The tank was hydrostaticly tested onsite and verified by the Burbank Fire Department, prior to installation. Installation took place on February 21, 2018 (Pictures attached below).



Hydrostatic Testing



During Installation



Post Installation

c) The schedule of maintenance activities for the next year (2019).

BWP does not have major plans to repaint specific areas or equipment until 2021, during a planned outage. BWP Maintenance will continue to perform routine inspections and monitor the condition of surfaces throughout MPP. Any areas in need of repainting will be addressed at the time of inspection, or will be performed during a scheduled plant outage.

VIS-4: Itemize the maintenance activities and provide photos.

The maintenance activities performed in the BWP campus include areas owned solely by BWP in addition to areas that are part of MPP.

BWP has hired a consultant to provide the following service for the BWP campus:

- General Horticulture consultation services to evaluate the irrigation, fertilization, pest and disease control methods being used by BWP
- Direct proper landscape maintenance
- Re-landscape and planting implementation
- Monitor biweekly or monthly the planting activities of new planting to ensure proper planting techniques and maintenance are implemented.

In addition, BWP has an agreement with a contractor for the landscape maintenance services for the BWP campus. The contractor is to perform landscape maintenance activities including, but not limited to, the following:

- Weeding and cultivating
- Irrigation and sprinkler system maintenance
- Maintaining irrigation system and landscape drawings
- Watering
- Trimming, pruning and training
- Mowing, trimming and edging
- Fertilizing
- Litter removal
- Brush clearance
- Treatment and control of diseases
- Inspect, pest and varmint control
- Applying herbicides
- Staking and guying
- Fountain and hardscape repair
- Clean-up
- Uniforms

Landscape 110 W. Magnolia Blvd. (Front)



Landscape – MPP (East Side of Campus – Burbank Channel)



Landscape – MPP (East Side of Campus)

