



STATE OF NEVADA

Department of Conservation & Natural Resources

DIVISION OF ENVIRONMENTAL PROTECTION

Brian Sandoval, Governor

Leo M. Drozdoff, P.E., Director

Colleen Cripps, Ph.D., Administrator

FACTSHEET (pursuant to NAC 445A.236)

Permittee Name: KEMET BLUE POWDER CORP
16 BRUCE WAY
MOUND HOUSE, NV - 89706

Permit Number: NS2007510

Location: KEMET BLUE POWDER CORP, LYON
16 BRUCE WAY, MOUND HOUSE, NV - 89706
LATITUDE: 39.233333, LONGITUDE: -119.653889
TOWNSHIP: T16N, RANGE: R21E, SECTION: S20

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Outfall City	Outfall State	Outfall Zip	Outfall County	Latitude	Longitude	Receiving Water
001	EVAPORATION POND	External Outfall		MOUND HOUSE	NV	89706	LYON	39.234444	-119.653611	ZERO DISCHARGE
002	LEAK DETECTION SUMP	Internal Outfall		MOUND HOUSE	NV	89706	LYON	39.234444	-119.653611	ZERO DISCHARGE
003	TRUCK FILL	External Outfall		MOUND HOUSE	NV	89706	LYON	39.234444	-119.653611	ZERO DISCHARGE

General:

KEMET Blue Powder Corporation (KEMET) produces capacitor-grade refined tantalum powder using the sodium reduction process. During this process, tantalum ore and elemental sodium are combined with molten potassium chloride and potassium fluoride salts in a heated reactor. When the reaction is complete, personnel use pneumatic tools to break the outer shell of waste salts from the encapsulated tantalum. The resulting product is then processed by crushing and rinsing with water that has been treated by Reverse Osmosis (RO). The rinsed tantalum powder is further processed by reaction with hydrochloric, nitric and hydrofluoric acids prior to a final rinse with RO treated water. The RO waste stream, tantalum powder rinse water, and the neutralized waste acid stream are treated by evaporation to produce distilled water that is reused in the manufacturing process. Wastewater from the initial rinsing process, as well as the brine solution remaining in the evaporators, is discharged to a 0.3-acre, 60-mil HDPE double-lined and leak detected evaporation pond located on the north side of KEMET's manufacturing facility. Excess process water not lost to evaporation is trucked under agreement to the Lockwood Regional Landfill (LRL) for dust control purposes within the landfill footprint. LRL has agreed to accept up to four million gallons of wastewater from KEMET per year.

Discharge Characteristics:

An NDEP Profile I analysis of the impounded wastewater performed on December 13, 2012, showed elevated concentrations of chloride (6,600 mg/L), fluoride (2,400 mg/L), nitrate (500 mg/L), sodium (4,000 mg/L) and total dissolved solids (25,000 mg/L). No volatile organic compounds or petroleum hydrocarbons were detected.

Receiving Water:

Groundwater of the State via percolation. Area groundwater is reported to flow to the south at a depth greater than 30' below ground surface.

Summary of Changes From Previous Permit:

1. The requirement to report the amount of wastewater shipped to the Lockwood Regional Landfill each month has been added to this Permit. These amounts shall be reported quarterly.
2. The concentration limits for the annual Profile I analysis have been changed to monitor & report.
3. Due to a new Permit naming convention at NDEP, Bureau of Water Pollution Control, the permit ID has been changed from NEV2007510 to NS2007510. This change does not reflect a change in the type of permit being issued.

Proposed Effluent Limitations:

The discharge shall be limited and monitored by the Permittee as specified in the following tables:

Ponds / Rapid Infiltration Basins for Sample Location 001 (External Outfall) To Be Reported Monthly^[1]

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Daily Maximum	< 0.05 Million Gallons per Day (Mgal/d)		Effluent Gross	001	Continuous	METER
Flow rate	Monthly Average	< 0.02 Million Gallons per Day (Mgal/d)		Effluent Gross	001	Continuous	METER

Notes (Ponds / Rapid Infiltration Basins):

1. Discharge to the evaporation pond.

Ponds / Rapid Infiltration Basins for Sample Location 001 (External Outfall) To Be Reported Quarterly

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Solids, total dissolved	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT

Ponds / Rapid Infiltration Basins for Sample Location 001 (External Outfall) To Be Reported Annually^[1]

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Alkalinity, bicarbonate (as CaCO ₃)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Alkalinity, total (as CaCO ₃)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Aluminum, total (as Al)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Antimony, total (as Sb)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Arsenic, total (as As)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Barium, total (as Ba)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Beryllium, total (as Be)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Cadmium, total (as Cd)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Calcium, total (as Ca)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Chloride (as Cl)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Chromium, total (as Cr)	Value		M&R Milligrams per Liter	Effluent Gross	001	Annual	DISCRT

Ponds / Rapid Infiltration Basins for Sample Location 001 (External Outfall) To Be Reported Annually^[1]

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration (mg/L)	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Copper, total (as Cu)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Fluoride, total (as F)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Iron, total (as Fe)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Lead, total (as Pb)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Magnesium, total (as Mg)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Manganese, total (as Mn)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Mercury, total (as Hg)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Nickel, total (as Ni)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Nitrite plus nitrate total 1 det. (as N)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Nitrogen, total	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
			M&R				

Ponds / Rapid Infiltration Basins for Sample Location 001 (External Outfall) To Be Reported Annually^[1]

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Phosphorus, total (as P)	Value		Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Potassium, total (as K)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Selenium, total (as Se)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Silver, total (as Ag)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Sodium, total (as Na)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Sulfate, total (as SO4)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Thallium, total (as Tl)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Solids, total dissolved	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Zinc, total (as Zn)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
pH	Value		M&R Standard Units (SU)	Effluent Gross	001	Annual	DISCRT

Notes (Ponds / Rapid Infiltration Basins):

1. Submit NDEP Profile I results with the 4th quarter report.

Ponds / Rapid Infiltration Basins for Sample Location 002 (Internal Outfall) To Be Reported Monthly^[1]

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	S a m p l e Type
Flow, total	Daily Maximum [2]	<= 50 Gallons (gal)		Internal Monitoring Point	002	Daily	METER

Notes (Ponds / Rapid Infiltration Basins):

1. Leak detection sump.
2. Report the highest daily flow into the leak detection sump during the current reporting month.

Ponds / Rapid Infiltration Basins for Sample Location 003 (External Outfall) To Be Reported Monthly^[1]

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow, total	Monthly Total	M&R Gallons (gal)		Prior to Reuse	003	Monthly	CALCTD

Notes (Ponds / Rapid Infiltration Basins):

1. Monitor and report the total amount of water shipped to the Lockwood Regional Landfill each month.

Rationale for Permit Requirements:

Flow is monitored to track the amount of wastewater discharged each month to the evaporation pond and the Lockwood Regional Landfill.

The leak rate is monitored to confirm the integrity of the HDPE liners.

Total dissolved solids (TDS) and Profile I metals are monitored to allow the Permittee and NDEP to track the composition of the wastewater discharged to the evaporation pond and ultimately to the Lockwood Regional Landfill.

Special Conditions:

SA – Special Approvals / Conditions Table

There are no Special Approval / Condition items

Flow:

The applicant has requested a 30-day average flow of 0.02 million gallons per day (MGD) and a daily maximum flow of 0.049999 MGD. During the previous 12-month reporting period, January 1, 2013, through December 31, 2013, the average daily flow discharged to the evaporation basin was 0.008 MGD. A maximum daily flow of 0.018 MGD was reported one time during this period.

Corrective Action Sites:

There are no NDEP Bureau of Corrective Actions remediation sites within a one-mile radius of this facility.

Wellhead Protection Program:

This facility is not located within a Drinking Water Protection Area or an active Wellhead Protection Area established for any well sources.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
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1	The Permittee shall submit two (2) copies of an updated Operation and Maintenance (O&M) Manual for review and approval by the Division. The O&M Manual shall be prepared by a Nevada Registered Professional Engineer or other Division-approved qualified person. ^[1]	6/30/2014
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Notes (Schedule of Compliance Table):

- O&M Manuals prepared by Nevada Registered Professional Engineers must be signed and stamped in accordance with NAC 625.610.

Deliverable Schedule:

DLV– Deliverable Schedule for Reports, Plans, and Other Submittals

Item #	Description	Interval	First Scheduled Due Date
1	Discharge Monitoring Reports	Quarterly	7/28/2014
2	Annual Reports	Annually	1/28/2015

Procedures for Public Comment:

The Notice of the Division's intent to reissue a permit authorizing the facility to discharge to groundwater of the State of Nevada subject to the conditions contained within the permit, is being sent to the **Nevada Appeal and the Reno Gazette Journal** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing until 5:00 P.M. **5/26/2014**, a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator of EPA Region IX or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted. Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determined to be appropriate. All public hearings must be conducted to accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Proposed Determination:

The Division has made the tentative determination to issue / re-issue the proposed 5-year permit.

Prepared by: **Arthur B. Marr III**

Date: **6/26/2013**

Title: **P.E.**