

Brian Sandoval, Governor Leo M. Drozdoff, P.E., Director David Emme, Administrator

FACTSHEET (pursuant to NAC 445A.236)

Permittee Name: MCFARLAND CASCADE HOLDINGS INC. A STELLA JONES COMPANY 1680 SPRUCE AVENUE SILVER SPRINGS, NV - 89429

Permit Number: NS2015503

Location: MCFARLAND CASCADE HOLDINGS INC. A STELLA JONES COMPANY SILVER SPRINGS NEVADA, LYON 1680 SPRUCE AVENUE, SILVER SPRINGS, NV - 89429 LATITUDE: 39.2345, LONGITUDE: 119.131190 TOWNSHIP: T18N, RANGE: R24E, SECTION: 30

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 SYSTEM	Internal Outfall		SILVER SPRINGS	NV	89429	LYON	39.2340	-119.10	GROUNDWATER
002	DUST CONTROL	Land Application Site		SILVER SPRINGS	NV	89429	LYON	39.2340	-119.10	GROUNDWATER
MW1	MONITORING WELL 1 (MW-1)	Monitoring Well		SILVER SPRINGS	NV	89429	LYON	39.2341	-119.131560	GROUNDWATER
MW2	MONITORING WELL 2B (MW-2B)	Monitoring Well		SILVER SPRINGS	NV	89429	LYON	39.2347	-119.1306	GROUNDWATER
MW3	MONITORING WELL 3 (MW-3)	Monitoring Well		SILVER SPRINGS	NV	89429	LYON	39.2343	-119.1630	GROUNDWATER
MW4	MONITORING WELL 4 (MW-4)	Monitoring Well		SILVER SPRINGS	NV	89429	LYON	39.2340	-119.10	GROUNDWATER
MW5	MONITORING WELL 5 (MW-5)	Monitoring Well		SILVER SPRINGS	NV	89429	LYON	39.2340	-119.10	GROUNDWATER
MW6	MONITORING WELL 6 (MW-6)	Monitoring Well		SILVER SPRINGS	NV	89429	LYON	39.2340	-119.10	GROUNDWATER
SUM	SUM OF OUTFALLS 001 AND 002	Sum		SILVER SPRINGS	NV	89429	LYON	39.2340	-119.10	GROUNDWATER

General:

McFarland Cascade Holdings, Inc. (MCHI), a Stella Jones Company, is now the owner of the former Nevada Wood Preserving (NWP) Facility. MCHI operates a wood treatment and preserving facility located in Silver Springs, Nevada, where utility poles are chemically pressure treated to resist rot and decay with pentachlorophenol (PCP). Following pressure treatment, the utility poles are temporarily stored on a concrete drip pad. Wastewaters generated during normal plant operation originate at the door boxes and sumps, and include cylinder boultonizing condensate, drip-pad wash water, boiler blowdown and accumulated storm water. Collected wastewaters are stored and allowed to phase-separate in effluent storage tanks. The system consists of three process steps: the Primary Process Separation Step, which establishes the initial settling tank influent area; the Secondary Process Separation Step, which incorporates three additional settling tanks and oil/water separation equipment followed by filtration; the evaporation of the water and recycling of the oil. When necessary, accumulated solids are removed from the evaporation tanks and transferred to hazardous waste containers for disposal at an Environmental Protection Agency (EPA) certified disposal facility as outlined in the Resource Conservation and Recovery Act (RCRA).The evaporation tanks are located on a contained concrete pad that is visually inspected weekly.

MCHI also discharges excess moisture from kiln-dried untreated utility poles for use as dust control on

facility grounds. The untreated utility pole moisture content is approximately 30% and the poles require kilndrying before treating. The drying process produces excess moisture that is captured by a sump and pumped into a storage tank. Water applied for dust control will not be permitted to come into contact with treated or untreated utility poles stored on the facility grounds. The maximum discharge rate at the facility is 49,999 gallons per day (GPD).

In February 2011, NWP was issued an individual groundwater discharge permit, NS2009508 (formerly NEV2009508) to use kiln-dried wood excess water during dust control activities at the facility. In April 2012, NWP applied for another individual groundwater discharge permit, NS2012504, for the evaporation of process wastewater at the facility. The permit was public noticed on October 30, 2013 and was never issued. After ownership of NWP was passed on to MCHI, it was decided that a single individual groundwater discharge permit covering evaporation and dust control activities would be more appropriate. In November 2014, MCHI applied for the new facility wide permit NS2015503. Throughout the permitting process, the facility has been permitted under a series of Temporary Discharge to Waters of the State Permits that are valid for 180 days each. Once the NS2015503 permit is issued, the NS2012504 application will be cancelled, the NS2009508 (formerly NEV2009508) dust control permit will be terminated, and no additional Temporary Permits will be issued.

Discharge Characteristics:

Water from the kiln drying of wood will be used for dust control on the MCHI facility grounds. Discharges to surface waters are not authorized by this permit.

Receiving Water:

Area groundwater generally flows in a northerly direction at approximately 48 feet (ft) below the ground surface. Groundwater at the facility has been monitored at three locations since 2000 in accordance with the Administrative Order on Consent (AOC) NV090805W1, National Pollutant Discharge Elimination System (NPDES) Permit NV0022501, and groundwater discharge permit NEV2009508.

The Silver Springs area is known to have elevated levels of naturally occurring arsenic that exceed the Environmental Protection Agency Maximum Contaminant Level for drinking water, 0.010 mg/L. Historically, this facility used PCP in conjunction with borates and chromium copper arsenate (CCA) in the wood preserving process. CCA and borates have been phased out, and the facility now uses PCP for wood preserving. An expanded groundwater monitoring program at the facility is required with the issuance of this permit to determine whether there has been any contamination of the local groundwater as a result of past and present facility activities.

From November 2013 through May 2014, groundwater sampled from monitoring wells MW-1, MW-2B, and MW-3 was reported to have the following average characteristics:

<u>MW-1</u>

Depth to Groundwater – 47.8 ft Arsenic – 0.024 mg/L Boron – 0.165 mg/L Chromium, total – <0.010 mg/L Chromium, hexavalent – <0.001 mg/L Copper – <0.020 mg/L Pentachlorophenol – <0.0015 mg/L Total Dissolved Solids – 205 mg/L pH – 7.52 Standard Units (S.U.)

<u>MW-2</u>

Depth to Groundwater – 46.9 ft Arsenic – 0.062 mg/L Boron – 0.210 mg/L Chromium, total – <0.010 mg/L Chromium, hexavalent – <0.001 mg/L Copper – <0.020 mg/L Pentachlorophenol – <0.0015 mg/L Total Dissolved Solids – 240 mg/L pH – 7.80 S.U.

<u>MW-3</u>

Depth to Groundwater – 49.8 ft Arsenic – 0.057 mg/L Boron – 0.285 mg/L Chromium, total – <0.010 mg/L Chromium, hexavalent – <0.001 mg/L Copper – <0.020 mg/L Pentachlorophenol – <0.0015 mg/L Total Dissolved Solids – 365 mg/L pH – 7.68 S.U.

Summary of Changes From Previous Permit:

This is a new permit.

Proposed Effluent Limitations:

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

Groundwater Monitoring Wells Table for Sample Location Mw1 (Monitoring Well) To Be Reported Monthly

		Discharge Lir	Monitoring Requirements				
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Boron, total (as B)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW1	Monthly	DISCRT
Water level relative to mean sea level ^[1]	Value	M&R Feet (ft)		Groundwater	MW1	Monthly	CALCTD
Depth to water level ft below landsurface ^[2]	Value	M&R Feet (ft)		Groundwater	MW1	Monthly	VISUAL ^[3]
Arsenic, total (as As)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW1	Monthly	DISCRT
Chromium, hexavalent (as Cr)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW1	Monthly	DISCRT
Chromium, total (as Cr)	Value		<= 0.05 Milligrams per Liter (mg/L)	Groundwater	MW1	Monthly	DISCRT
Copper, total (as Cu)	Value		<= 1.0 Milligrams per Liter (mg/L)	Groundwater	MW1	Monthly	DISCRT
Pentachlorophenol ^[4]	Value		<= 0.001 Milligrams per Liter (mg/L)	Groundwater	MW1	Monthly	DISCRT
рН	Value		M&R Standard Units (SU)	Groundwater	MW1	Monthly	DISCRT
Solids, total dissolved	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW1	Monthly	DISCRT

Notes (Groundwater Monitoring Wells Table):

1. Groundwater elevation, feet above mean sea level (AMSL).

^{2.} Depth to groundwater in feet.

^{3.} Field measurement.

^{4.} The pentachlorophenol sample shall be unfiltered and analyzed using EPA Method 8151.

Groundwater Monitoring Wells Table for Sample Location Mw2 (Monitoring Well) To Be Reported Monthly

		Discharge Lir	Monitoring Requirements				
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Water level relative to mean sea level ^[1]	Value	M&R Feet (ft)		Groundwater	MW2	Monthly	CALCTD
Depth to water level ft below landsurface ^[2]	Value	M&R Feet (ft)		Groundwater	MW2	Monthly	VISUAL ^[3]
Arsenic, total (as As)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW2	Monthly	DISCRT
Boron, total (as B)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW2	Monthly	DISCRT
Chromium, hexavalent (as Cr)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW2	Monthly	DISCRT
Chromium, total (as Cr)	Value		<= 0.05 Milligrams per Liter (mg/L)	Groundwater	MW2	Monthly	DISCRT
Copper, total (as Cu)	Value		<= 1.0 Milligrams per Liter (mg/L)	Groundwater	MW2	Monthly	DISCRT
Pentachlorophenol ^[4]	Value		<= 0.001 Milligrams per Liter (mg/L)	Groundwater	MW2	Monthly	DISCRT
рН	Value		M&R Standard Units (SU)	Groundwater	MW2	Monthly	DISCRT
Solids, total dissolved	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW2	Monthly	DISCRT

^{1.} Groundwater elevation, feet AMSL.

^{2.} Depth to groundwater in feet.

^{3.} Field measurement.

^{4.} The pentachlorophenol sample shall be unfiltered and analyzed using EPA Method 8151.

Groundwater Monitoring Wells Table for Sample Location Mw3 (Monitoring Well) To Be Reported Monthly

	I	Discharge Lin	Monitoring Requirements				
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Water level relative to mean sea level ^[1]	Value	M&R Feet (ft)		Groundwater	MW3	Monthly	CALCTD
Depth to water level ft below landsurface ^[2]	Value	M&R Feet (ft)		Groundwater	MW3	Monthly	VISUAL ^[3]
Arsenic, total (as As)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW3	Monthly	DISCRT
Boron, total (as B)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW3	Monthly	DISCRT
Chromium, hexavalent (as Cr)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW3	Monthly	DISCRT
Chromium, total (as Cr)	Value		<= 0.05 Milligrams per Liter (mg/L)	Groundwater	MW3	Monthly	DISCRT
Copper, total (as Cu)	Value		<= 1.0 Milligrams per Liter (mg/L)	Groundwater	MW3	Monthly	DISCRT
Pentachlorophenol ^[4]	Value		<= 0.001 Milligrams per Liter (mg/L)	Groundwater	MW3	Monthly	DISCRT
рН	Value		M&R Standard Units (SU)	Groundwater	MW3	Monthly	DISCRT
Solids, total dissolved	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW3	Monthly	DISCRT

^{1.} Groundwater elevation, feet AMSL.

^{2.} Depth to groundwater in feet.

^{3.} Field measurement.

^{4.} The pentachlorophenol sample shall be unfiltered and analyzed using EPA Method 8151.

Groundwater Monitoring Wells Table for Sample Location Mw4 (Monitoring Well) To Be Reported Monthly

	I	Discharge Lir	Monitoring Requirements				
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Chromium, total (as Cr)	Value		<= 0.05 Milligrams per Liter (mg/L)	Groundwater	MW4	Monthly	DISCRT
Depth to water level ft below landsurface ^[2]	Value	M&R Feet (ft)		Groundwater	MW4	Monthly	VISUAL ^[3]
Water level relative to mean sea level ^[1]	Value	M&R Feet (ft)		Groundwater	MW4	Monthly	CALCTD
Arsenic, total (as As)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW4	Monthly	DISCRT
Boron, total (as B)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW4	Monthly	DISCRT
Chromium, hexavalent (as Cr)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW4	Monthly	DISCRT
Copper, total (as Cu)	Value		<= 1.0 Milligrams per Liter (mg/L)	Groundwater	MW4	Monthly	DISCRT
Pentachlorophenol ^[4]	Value		<= 0.001 Milligrams per Liter (mg/L)	Groundwater	MW4	Monthly	DISCRT
рН	Value		M&R Standard Units (SU)	Groundwater	MW4	Monthly	DISCRT
Solids, total dissolved	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW4	Monthly	DISCRT

^{1.} Groundwater elevation, feet AMSL.

^{2.} Depth to groundwater in feet.

^{3.} Field measurement.

^{4.} The pentachlorophenol sample shall be unfiltered and analyzed using EPA Method 8151.

Groundwater Monitoring Wells Table for Sample Location Mw5 (Monitoring Well) To Be Reported Monthly

	[Discharge Lin	Monitoring Requirements				
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
рН	Value		M&R Standard Units (SU)	Groundwater	MW5	Monthly	DISCRT
Chromium, total (as Cr)	Value		<= 0.05 Milligrams per Liter (mg/L)	Groundwater	MW5	Monthly	DISCRT
Copper, total (as Cu)	Value		<= 1.0 Milligrams per Liter (mg/L)	Groundwater	MW5	Monthly	DISCRT
Pentachlorophenol ^[4]	Value		<= 0.001 Milligrams per Liter (mg/L)	Groundwater	MW5	Monthly	DISCRT
Water level relative to mean sea level ^[1]	Value	M&R Feet (ft)		Groundwater	MW5	Monthly	CALCTD
Depth to water level ft below landsurface ^[2]	Value	M&R Feet (ft)		Groundwater	MW5	Monthly	VISUAL ^[3]
Arsenic, total (as As)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW5	Monthly	DISCRT
Boron, total (as B)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW5	Monthly	DISCRT
Chromium, hexavalent (as Cr)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW5	Monthly	DISCRT
Solids, total dissolved	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW5	Monthly	DISCRT

^{1.} Groundwater elevation, feet AMSL.

^{2.} Depth to groundwater in feet.

^{3.} Field measurement.

^{4.} The pentachlorophenol sample shall be unfiltered and analyzed using EPA Method 8151.

Groundwater Monitoring Wells Table for Sample Location Mw6 (Monitoring Well) To Be Reported Monthly

		Discharge Lir	Monitoring Requirements				
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Water level relative to mean sea level ^[1]	Value	M&R Feet (ft)		Groundwater	MW6	Monthly	CALCTD
Depth to water level ft below landsurface ^[2]	Value	M&R Feet (ft)		Groundwater	MW6	Monthly	VISUAL ^[3]
Arsenic, total (as As)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW6	Monthly	DISCRT
Boron, total (as B)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW6	Monthly	DISCRT
Chromium, hexavalent (as Cr)	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW6	Monthly	DISCRT
Chromium, total (as Cr)	Value		<= 0.05 Milligrams per Liter (mg/L)	Groundwater	MW6	Monthly	DISCRT
Copper, total (as Cu)	Value		<= 1.0 Milligrams per Liter (mg/L)	Groundwater	MW6	Monthly	DISCRT
Pentachlorophenol ^[4]	Value		<= 0.001 Milligrams per Liter (mg/L)	Groundwater	MW6	Monthly	DISCRT
рН	Value		M&R Standard Units (SU)	Groundwater	MW6	Monthly	DISCRT
Solids, total dissolved	Value		M&R Milligrams per Liter (mg/L)	Groundwater	MW6	Monthly	DISCRT

^{1.} Groundwater elevation, feet AMSL.

^{2.} Depth to groundwater in feet.

^{3.} Field measurement.

^{4.} The pentachlorophenol sample shall be unfiltered and analyzed using EPA Method 8151.

Re-use Discharge Limitations Table for Sample Location 002 (Land Application Site) To Be Reported Monthly

		Discharge Lim	Monitoring Requirements				
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Daily Maximum	M&R Gallons per Day (gal/d)		Prior to Reuse	002	Daily	CALCTD
Flow rate	30 Day Average	M&R Gallons per Day (gal/d)		Prior to Reuse	002	Daily	CALCTD

Re-use Discharge Limitations Table for Sample Location 002 (Land Application Site) To Be Reported Annually^[2]

		Discharge Li	mitations		Monitorin	g Requirements	j.
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Arsenic, total (as As) ^[3]	Value		<= .1 Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Alkalinity, bicarbonate (as CaCO3) ^[3]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Alkalinity, total (as CaCO3) ^[3]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Aluminum, total (as Al) ^[3]	Value		<= .2 Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Antimony, total (as Sb) ^[3]	Value		<= .006 Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Barium, total (as Ba) ^[3]	Value		<= 2 Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Beryllium, total (as Be) ^[3]	Value		<= .004 Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Cadmium, total (as Cd) ^[3]	Value		<= .005 Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Calcium, total (as Ca) ^[3]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Chloride (as Cl) ^[3]	Value		<= 400 Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Chromium, total (as Cr) ^[3]	Value		<= .1 Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
			<= 1				

Re-use Discharge Limitations Table for Sample Location 002 (Land Application Site) To Be Reported Annually^[2]

		Discharge Lim	nitations		Monitorin	g Requirements	
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Copper, total (as Cu) ^[3]	Value		Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Fluoride, total (as F) ^[3]	Value		<= 4 Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Iron, total (as Fe) ^[3]	Value		<= .6 Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Lead, total (as Pb) ^[3]	Value		<= .015 Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Magnesium, total (as Mg) ^[3]	Value		<= 150 Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Manganese, total (as Mn) ^[3]	Value		<= .1 Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Mercury, total (as Hg) ^[3]	Value		<= .002 Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Nickel, total (as Ni) ^[3]	Value		<= .1 Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Nitrite plus nitrate total 1 det. (as N) ^[3]	Value		<= 10 Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Nitrogen, total ^[3]	Value		<= 10 Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Phosphorus, total (as P) ^[3]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
			M&R				

Re-use Discharge Limitations Table for Sample Location 002 (Land Application Site) To Be Reported Annually^[2]

	D	ischarge Lim	itations		Monitorin	g Requirements	
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Potassium, total (as K) ^[3]	Value		Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Selenium, total (as Se) ^[3]	Value		<= .05 Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Silver, total (as Ag) ^[3]	Value		<= .1 Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Sodium, total (as Na) ^[3]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Sulfate, total (as SO4) ^[3]	Value		<= 500 Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Thallium, total (as TI) ^[3]	Value		<= .002 Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Solids, total dissolved ^[3]	Value		<= 1000 Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Cyanide, weak acid, dissociable ^[3]	Value		<= .2 Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Hydrocarbons, total petroleum ^[1]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Zinc, total (as Zn) ^[3]	Value		<= 5 Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
pH, minimum ^[3]	Daily Minimum		>= 6.5 Standard Units (SU)	Effluent Gross	002	Annual	DISCRT
pH, maximum ^[3]	Daily Maximum		<= 8.5 Standard Units (SU)	Effluent Gross	002	Annual	DISCRT

Notes (Re-use Discharge Limitations Table):

- 1. Sample and report purgeable and extractable TPH annually in the calendar 4th quarter. Report the full range of hydrocarbons C6-C40, using EPA Method 8015B and 8260B or equivalent methods, and report all parameters.
- 2. Samples shall be taken during the 3rd quarter of the calendar year.
- 3. NDEP Profile 1.

	Di	scharge Limi	Monitoring Requirements				
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Daily Maximum	M&R Gallons per Day (gal/d)		Effluent Gross	001	Continuous	METER
Pentachlorophenol	Daily Maximum		<= 100 Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly	DISCRT

Discharge Limitations Monitoring Requirement							
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Arsenic, total (as As) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Hydrocarbons, total petroleum ^[1]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Pentachlorophenol ^[2]	Value		<= 100 Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Alkalinity, bicarbonate (as CaCO3) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Alkalinity, total (as CaCO3) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Aluminum, total (as Al) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Antimony, total (as Sb) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Barium, total (as Ba) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Beryllium, total (as Be) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Cadmium, total (as Cd) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Calcium, total (as Ca) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
			M&R				

	Μ	Monitoring Requirements					
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Chloride (as Cl) ^[5]	Value		Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Chromium, total (as Cr) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Copper, total (as Cu) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Fluoride, total (as F) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Iron, total (as Fe) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Mercury, total (as Hg) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Lead, total (as Pb) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Magnesium, total (as Mg) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Manganese, total (as Mn) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Nickel, total (as Ni) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Nitrite plus nitrate total 1 det. (as N) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
			M&R				

	М	Monitoring Requirements					
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Nitrogen, total ^[5]	Value		Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Phosphorus, total (as P) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Potassium, total (as K) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Selenium, total (as Se) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Silver, total (as Ag) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Sodium, total (as Na) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Sulfate, total (as SO4) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Thallium, total (as TI) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Solids, total dissolved ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Cyanide, weak acid, dissociable ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Zinc, total (as Zn) ^[5]	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT

Discharge Limitations Monitorin						g Requirements		
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type	
рН ^[5]	Value		M&R Standard Units (SU)	Effluent Gross	001	Annual	DISCRT	
1,1,1-Trichloroethane ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT	
1,1,2,2- Tetrachloroethane ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT	
1,1,2-Trichloroethane ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT	
1,1-Dichloroethane ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT	
1,1-Dichloroethylene ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT	
1,2-Dichlorobenzene ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT	
1,2-Dichloroethane ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT	
1,2-Dichloropropane ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT	
1,3-Dichlorobenzene ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT	
1,4-Dichlorobenzene ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT	
			M&R					

Discharge Limitations					Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type	
2-Chloroethyl vinyl ether, (mixed) ^[6]	Value		Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT	
Benzene ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT	
Dichlorobromomethane ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT	
Bromoform ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT	
Methyl bromide (Bromomethane) ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT	
Carbon tetrachloride ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT	
Chlorobenzene ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT	
Chloroethane ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT	
Chloroform ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT	
Methyl chloride (Chloromethane) ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT	
cis-1,3- Dichloropropene ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT	
			M&R					

	М	Monitoring Requirements					
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Dibromochloromethane ^[6]	Value		Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Ethylbenzene ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Methylene chloride ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Tetrachloroethylene ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Toluene ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
trans-1,2- Dichloroethylene ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
trans-1,3- Dichloropropene ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Trichloroethylene ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Trichlorofluoromethane ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Vinyl chloride ^[6]	Value		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT

Notes (NS OTHER - Discharge Limitations Table):

^{1.} Sample and report purgeable and extractable TPH annually in the calendar 4th quarter. Report the full range of hydrocarbons C6-C40, using EPA Method 8015B and 8260B or equivalent methods, and report all parameters.

^{2.} The pentachlorophenol sample shall be unfiltered and analyzed using EPA Method 8151.

^{3.} Annual sampling shall be conducted during the 3rd quarter of the calendar year.

^{4.} Samples shall be taken from the sampling port located immediately after the final carbon canister.

5. NDEP Profile 1.

6. Volatile Organic Compounds.

	Monitoring Requirements						
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Daily Maximum	<= 49,999 Gallons per Day (gal/d)		Effluent Gross	SUM	Continuous	CALCTD
Flow rate	30 Day Average	M&R Gallons per Day (gal/d)		Effluent Gross	SUM	Continuous	CALCTD

NS OTHER - Discharge Limitations Table for Sample Location Sum (Sum) To Be Reported Monthly

Rationale for Permit Requirements:

Flow: Influent flow to the evaporation tanks is monitored via flow meters. This monitoring ensures that the treatment process is working properly and that an appropriate amount of process wastewater is being moved to the evaporation tanks. The amount of non-process wastewater used for dust control is also monitored to ensure that the water is not over applied.

Depth to Groundwater, Groundwater Gradient and Flow Direction, and Groundwater Elevation: Groundwater monitoring for these parameters is required to assess their variability throughout the year.

Total Boron, Total Arsenic, Total Chromium, Hexavalent Chromium, and Total Copper: Groundwater monitoring for these parameters is required to determine whether any contamination from the chemicals previously used to preserve wood on the MCHI site, Borates and CCA, is present and being transported to the groundwater on-site. Permit limits for Total Chromium and Total Copper were established in the AOC, NV090805W1, and have been incorporated in this permit.

Pentachlorophenol (PCP): Groundwater monitoring for this parameter is required to determine whether any contamination from this currently used chemical is present and leaving the MCHI property. A permit limit for this parameter was established in the AOC, NV090805W1, and has been incorporated in this permit. This parameter is also sampled for in the process wastewater stream to ensure that the amount of PCP in the wastewater is not above the 100 mg/L limit agreed upon by MCHI and NDEP. This will ensure that the wastewater is not considered hazardous waste.

pH: Groundwater monitoring for this parameter is required to ensure that waters of the State are not degraded as a result of facility activities and to provide information about the local groundwater quality. Monitoring of this parameter in the dust control water is required to ensure that waters of the State are not degraded as a result of reuse activities.

Volatile Organic Compounds (VOC): These parameters are monitored in the process wastewater going to the evaporation tanks to identify the constituents that may be present.

Total Dissolved Solids (TDS): Groundwater monitoring of this parameter is required to ensure that waters of the State are not degraded as a result of facility activities and to provide information about the local groundwater quality.

Total Petroleum Hydrocarbons (TPH): This parameter is monitored in the dust control water to ensure that

no hydrocarbons are entering the groundwater as the result of reuse activities. Monitoring of the process wastewater for TPH is also required to determine whether any hydrocarbons are present after the treatment process.

Profile 1: The dust control water is sampled annually for NDEP-Profile I constituents. These parameters are monitored to ensure that waters of the State are not degraded as a result of reuse activities. Monitoring of the process wastewater for all of the Profile 1 constituents is also required to determine which of the constituents are present in the wastewater to be evaporated.

Special Conditions:

See Special Approvals/Conditions Table.

SA – Special Approvals / Conditions Table

ltem #	Description						
1	There shall be no discharge of treated liquids from the evaporation tanks other than by evaporation or as otherwise allowed under this permit.						
2	In the Annual Report, the Permittee shall provide average annual precipitation data for the facility. This information may be obtained from the closest airport or meteorological station. Note which months or seasons are usually the wettest and include such details as typical rainfall and storm intensity (e.g. wet season: November-March; typical amount: 0.5-2 inches over 2 hours).						
3	3 In the Quarterly Report, the Permittee shall describe the groundwater gradient and flow direction for each month in that guarter.						
4	The Permittee shall notify the Division within 30 days of the completion of each well (MW-4, MW-5, and MW-6) and include copies of the well logs and as-built drawings for each new monitoring well.						
5	Monthly sampling of monitoring wells MW-4, MW-5, and MW-6 shall begin within 30 days of each well being completed.						
6	After the conclusion of the first year of the permit cycle, the Permittee may submit a report to the Division requesting a minor modification of the permit to adjust the groundwater monitoring well sampling frequency. The report shall demonstrate that the previous 12 consecutive monthly sampling events did not result in any exceedances of the permit limits. If this requirement is met, the Permittee may request that the monitoring frequency be reduced from monthly to quarterly sampling. The reduced monitoring frequency shall not commence until after the Division approves the minor modification.						
7	The Permittee may land apply the purge water on the MCHI property during the development of the new groundwater monitoring wells (MW-4, MW-5, and MW-6) and during well monitoring activities. Best management Practices shall be implemented to prevent erosion on-site.						
8	Since MW-3 is not owned by MCHI and is not located on the MCHI property, the Permittee is not responsible for abandoning MW-3. Monitoring of this well may cease once monthly sampling of MW-4, MW-5, and MW-6 begins.						

Flow:

Total flow to the evaporation tank system is limited to the amount of process wastewater that can be evaporated in a day. Together, the amount of water used for dust control activities and the evaporation system flow is limited to a daily maximum of 49,999 GPD.

Corrective Action Sites:

There are no NDEP-Bureau of Corrective Actions (BCA) remediation sites located within one (1) mile of this facility.

Wellhead Protection Program:

This facility is located within a 6000-ft Drinking Water Protection Area, but it is not located within a Wellhead Protection Area.

Schedule of Compliance:

ltem #	Description	Due Date					
1	Within 60 days of permit issuance, the Permittee shall submit, for Division review, two (2) copies of an Operations and Maintenance (O&M) Manual, signed by a qualified person familiar with facility operations.	9/28/2015					
2	Within 60 days of permit issuance, the Permittee shall submit to the Division for review, a plan for the installation of two new monitoring wells (MW-4, MW-5) and the MW-3 replacement well (MW-6) on the MCHI property.	9/28/2015					
3	Within 120 days of permit issuance, the Permittee shall install the two new monitoring wells (MW-4, MW-5) and the MW-3 replacement well (MW-6) on the MCHI property. The monitoring wells shall be constructed in accordance with "WTS-4: Guidance Document for the Design and Construction of Groundwater Monitoring Wells" (NDEP, Revised July 2012).	11/27/2015					

SOC – Schedule of Compliance Table

Deliverable Schedule:

Item # Description		Interval	First Scheduled Due Date						
1	Quarterly DMRs	Quarterly	10/28/2015						
2	Annual Report	Annually	1/28/2016						

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

Procedures for Public Comment:

The Notice of the Division's intent to issue 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 **Reno Gazette Journal, Mason Valley News** 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. **7/19/2015**, 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:Briana JohnsonDate:6/11/2015Title:Environmental Scientist