FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: SIERRA CHEMICAL COMPANY
2302 LARKIN CIRCLE
SPARKS, NV - 89431

Permit Number: NS0092036

Location: SIERRA CHEMICAL COMPANY, WASHOE
2302 LARKIN CIRCLE, SPARKS, NV - 89431
LATITUDE: 39.523611, LONGITUDE: -119.698611
TOWNSHIP: T19N, RANGE: R20E, SECTION: S11

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Outfall City	Outfall State	Outfall Zip	Outfall County	Latitude	Longitude	Receiving Water
001	OUTFALL 001	External Outfall						39.540833	-119.630833	GROUNDWATER

General:
Sierra Chemical Company (SCCo.) operates a chemical distribution and manufacturing facility in Sparks, Nevada. SCCo. receives bulk chemicals via rail-car and truck, then repackages the products for resale. Chemicals typically handled include gaseous chlorine, sodium hydroxide, sulfur dioxide, sulfuric acid, hydrochloric acid and nitric acid. Manufactured chemicals include liquid bleach and sodium bisulfite. Wastewater generated during the clean out of rail-car unloading areas and the rinsing of shipping containers is collected in containment sumps prior to being pumped into empty 350 gallon shipping containers (poly-totes). The water in the poly-totes is analyzed for pH and then neutralized by blending high pH wastewater with low pH wastewater. Sodium thiosulfate, citric acid, and soda ash may also be used for wastewater neutralization. Following neutralization, the wastewater is transferred to a 4,500 gallon water truck. When the water truck is full, the neutralized water is used for dust control at SCCo.'s Kean Canyon property which is located one mile north of US I-80, approximately 3.5 miles east-northeast of SCCo.

Discharge Characteristics:
During the monitoring period from January 1, 2012, through December 31, 2012, the following 30-day average discharge characteristics were reported:

1. 30-day average flow - 194 gallons per day.
2. Total Organic Carbon (TOC) - 0.27 pounds per day.
3. Total Dissolved Solids (TDS) - 27.0 pounds per day.
4. Nitrate as Nitrogen - 0.015 pounds per day.
5. Total Nitrogen - 8.6 pounds per day.
6. Sulfate - 6.7 pounds per day.
7. Chloride - 9.0 pounds per day.
8. pH - 7.3 S.U.
9. Total Petroleum Hydrocarbons, Diesel Range - 0.34 mg/L

10. Total Petroleum Hydrocarbons, Gasoline Range - Non Detect
11. Total Petroleum Hydrocarbons, Oil Range - Non Detect

Receiving Water:

Groundwater in the area of the discharge is reported to be in excess of 430 feet below ground surface. This discharge is not expected to impact groundwater.

Summary of Changes From Previous Permit:

The following changes have been made:

1. The flow rate has been increased to a 30-day average of 1,000 gallons per day. This change will allow the Permittee greater flexibility in the storage and management of the neutralized water.
2. The requirement to monitor total organic carbon (TOC) has been removed as no organic chemicals are normally handled or manufactured.
3. The requirement to monitor NDEP Profile I parameters on an annual basis has been added to the permit.
4. The requirements to monitor total nitrogen as nitrogen (N), nitrate as N, sulfate, and chloride have been reduced from quarterly to annually (Profile I).
5. The requirement to report total flow, total dissolved solids, and pH has been increased from quarterly to monthly.
6. The limit range for pH has been increased from 6.5 - 8.5 to the EPA Secondary Treatment standard of 6.0 - 9.0.
7. The mass loading limitations have been replaced with a concentration monitor and report requirement.
8. Due to a new Permit naming convention at NDEP, Bureau of Water Pollution Control, the permit ID has been changed from NEV92036 to NS0092036. 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:

NS OTHER - Discharge Limitations Table for Sample Location 001 (External Outfall) To Be Reported Monthly

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	30 Day Average	<= 1000 Gallons per Day (gal/d)		Effluent Gross	001	Continuous	CALCTD
Solids, total dissolved	30 Day Average		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Batch[1]	DISCRT
Solids, total dissolved	30 Day Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Batch[1]	DISCRT
pH, minimum	Monthly Minimum		>= 6 Standard Units (SU)	Effluent Gross	001	Once Per Batch[1]	DISCRT
pH, maximum	Monthly Maximum		<= 9 Standard Units (SU)	Effluent Gross	001	Once Per Batch[1]	DISCRT

Notes (NS OTHER - Discharge Limitations Table):

1. Sample and analyze from each 4,500 gallon water truck prior to discharge.

NS OTHER - Discharge Limitations Table for Sample Location 001 (External Outfall) To Be Reported Annually[1]

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Alkalinity, bicarbonate (as CaCO3)	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Alkalinity, total (as CaCO3)	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

NS OTHER - Discharge Limitations Table for Sample Location 001 (External Outfall) To Be Reported Annually[1]

	Discharge Limitations			Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
			(mg/L)				
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				

NS OTHER - Discharge Limitations Table for Sample Location 001 (External Outfall) To Be Reported Annually[1]

	Discharge Limitations			Monitoring Requirements			
Parameter	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
Hydrocarbons, total petroleum	Value		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT

Notes (NS OTHER - Discharge Limitations Table):

1. Analyze and report TPH and all NDEP Profile I parameters, minus cyanide, annually during the 4th quarter.

Rationale for Permit Requirements:

The proposed monitoring requirements are intended to ensure that that the discharged water is properly neutralized and suitable for use as a dust palliative.

Special Conditions:

SA – Special Approvals / Conditions Table

Item #	Description
1	With each quarterly DMR submittal, the Permittee shall report the number of truckloads of wastewater discharged each month to the Kean Canyon site.
2	No surface ponding or runoff of neutralized water is allowed. Water shall not be discharged at the Kean Canyon site when the ground is wet, frozen, or covered with snow.

Flow:

The flow rate will be permitted at a 30-day average rate of 1,000 gallons per day.

Corrective Action Sites:

There are no Bureau of Corrective Actions remediation sites within a 1-mile radius of the Kean Canyon disposal site.

Wellhead Protection Program:

The Kean Canyon disposal site is not located within a wellhead protection area or a drinking water protection area designated for a public water source.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit two (2) copies of an updated Operations 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 qualified person. If no updates or revisions are required, the Permittee shall submit a letter by the above due date stating that there have been no changes to the previously approved O&M Manual.[1]	8/22/2013

Notes (Schedule of Compliance Table):

1. 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	Quarterly Reports	Quarterly	7/28/2013

2	Annual Reports	Annually	1/28/2014

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 **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. **5/22/2013** , 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.650.

Proposed Determination:

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

Prepared by: **Arthur Marr III**
Date: **3/4/2013**
Title: **P.E.**