



**FACTSHEET**  
**(pursuant to NAC 445A.236)**

**Permittee Name:** ANIMAL FEED SUPPLEMENT, INC. DBA NEW GENERATION SUPPLEMENTS  
P.O. BOX 188  
BELLE FOURCHE, SD - 57717

**Permit Number:** NS2017500

**Location:** NEW GENERATION SUPPLEMENTS, LYON  
1700 US 50 EAST, SILVER SPRINGS, NV - 89429  
LATITUDE: 39.42117450, LONGITUDE: -119.21721410  
TOWNSHIP: T18N, RANGE: R25E, SECTION: S18

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Outfall City	Outfall State	Outfall Zip	Outfall County	Latitude	Longitude	Receiving Water
001	POND 1	External Outfall		SILVER SPRINGS	NV	89429	LYON	39.42083330	-119.217222	GROUND WATER
002	POND1 LEAK DETECTION	Internal Outfall		SILVER SPRINGS	NV	89429	LYON	39.42083330	-119.217222	GROUND WATER

**General:**

The permittee is requesting a permit for two waste water effluent evaporation ponds to be located at 1700 US50 East, Silver Springs, Lyon County, Nevada 89429. Depth to ground water is 24 feet(Well Log #390494). The site is located at 39.4208, -119.2172 with nearest residence located at 0.25 miles across US 50 .

New Generation Supplements (NGS) is an animal feed supplement manufacturing facility with the effluent primarily consisting of molasses and processed water condensate. When operating at full production capacity, NGS is estimated to generate approximately 2,752,000 gallons per annum, with the base assumptions of 12,800 tons animal feed production capacity at 215 gallons of wastewater generated per ton. Waste water is collected through four discharge points, vacuum pump (60%-70% of total effluent) at 6 gallons per minute (GPM), Condensate Pump at 2 GPM, conditioner/Boiler (5%) and the rest from wash down of equipment. There will be some domestic sewage comprising of waste from employee bathrooms and sinks, however current permit prohibits the sewage and non-process discharge from entering into the evaporation pond. Domestic sewage will be disposed via public sewer system.

Effluent estimates call for 3.0 acres total evaporation surface at maximum production levels. NGS plans to build one evaporation pond of size 1.5 acres and hold off on building the second 1.5 acres until the NGS goes full production with current plant design, or will not build second pond if they could reduce or eliminate vacuum pump effluent as a result of improved or redesigned manufacturing process in near future. The permittee will be implementing a Vector control plan and an Odor Control plan.

**Discharge Characteristics:**

The inflow into the double lined evaporation pond primarily consists of molasses and processed water condensate. BOD5 values of various effluent point sources are significantly high with lowest at 650 mg/L to highest at 2000 mg/L . TDS range is similarly high with lowest 530 mg/L to highest 3000 mg/L. pH of NGS wastewater is typically between 3.5 and 5.5, with occasional 7.0 pH.

**Receiving Water:**

The double lined evaporation pond, under normal operating conditions, has zero discharge into groundwater. In the event of pond liner failure, the discharge may enter into groundwater. As per well log data (Well Log #390494) depth to groundwater is 24 feet.

**Summary of Changes From Previous Permit:**

This is a new permit application.

**Proposed Effluent Limitations:**

The discharge will be limited as per the limits described in the table below.

### Zero Discharge Limitations Table for Sample Location 001 (External Outfall) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
BOD, 5-day	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Quarterly	DISCRT
Solids, total suspended	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Quarterly	DISCRT
Oxygen, dissolved (DO)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Quarterly	INSITU
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Quarterly	DISCRT
pH	Daily Average Minimum		M&R Standard Units (SU)	Effluent Net	001	Quarterly	DISCRT
Phosphorus, total (as P)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Quarterly	DISCRT
Flow rate	30 Day Average	<= .050 Million Gallons per Day (Mgal/d)		Industrial Influent	001	Continuous	METER
Sludge/Solids, depth	Average	<= 2.5 Feet (ft)	M&R Feet (ft)	Effluent Net	001	Monthly	INSITU

**Zero Discharge Limitations Table for Sample Location 001 (External Outfall) To Be Reported Once During The Permit Term**

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Alkalinity, bicarbonate (as CaCO <sub>3</sub> )	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Once Per Permit Term	DISCRT
Alkalinity, carbonate (as CaCO <sub>3</sub> )	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Once Per Permit Term	DISCRT
Aluminum, total (as Al)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Once Per Permit Term	DISCRT
Antimony, total (as Sb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Once Per Permit Term	DISCRT
Arsenic, total (as As)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Once Per Permit Term	DISCRT
Barium, total (as Ba)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Once Per Permit Term	DISCRT
Beryllium, total (as Be)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Once Per Permit Term	DISCRT
Cadmium, total (as Cd)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Once Per Permit Term	DISCRT
Calcium, total (as Ca)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Once Per Permit Term	DISCRT
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Once Per Permit Term	DISCRT
Chromium, total (as Cr)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Once Per Permit Term	DISCRT
			M&R				

**Zero Discharge Limitations Table for Sample Location 001 (External Outfall) To Be Reported Once During The Permit Term**

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Copper, total (as Cu)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Net	001	Once Per Permit Term	DISCRT
Fluoride, total (as F)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Once Per Permit Term	DISCRT
Iron, total (as Fe)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Once Per Permit Term	DISCRT
Lead, total (as Pb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Once Per Permit Term	DISCRT
Magnesium, total (as Mg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Once Per Permit Term	DISCRT
Manganese, total (as Mn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Once Per Permit Term	DISCRT
Mercury, total (as Hg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Once Per Permit Term	DISCRT
Nickel, total (as Ni)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Once Per Permit Term	DISCRT
Potassium, total (as K)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Once Per Permit Term	DISCRT
Selenium, total (as Se)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Once Per Permit Term	DISCRT
Silver, total (as Ag)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Once Per Permit Term	DISCRT
Sodium, total (as Na)	Daily Maximum		M&R Milligrams per Liter	Effluent Net	001	Once Per Permit Term	DISCRT

**Zero Discharge Limitations Table for Sample Location 001 (External Outfall) To Be Reported Once During The Permit Term**

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
			(mg/L)				
Sulfate (as S)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Once Per Permit Term	DISCRT
Thallium, total (as Tl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Once Per Permit Term	DISCRT
Zinc, total (as Zn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Net	001	Once Per Permit Term	DISCRT

**Zero Discharge Limitations Table for Sample Location 002 (Internal Outfall) To Be Reported Monthly**

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Liner Leakage Rate	Average	<= 500 Gallons per Acre per Day (gal/acre/d)		Internal Monitoring Point	002	Monthly	METER

**Rationale for Permit Requirements:**

High BOD5 ,TDS, low pH, and expected low DO are factored into special requirements of vector management plan as well as odor control and management plan .

The proposed permit is conditioned upon sludge depth monitoring and compliance to account for the pond inflow characters, and to maintain consistent compliance requirements from similar facilities.

Given the location of the facility, it is determined to seek metal analysis report once per permit period, to be submitted on the 4th year of the permit period.

**Special Conditions:**

SA – Special Approvals / Conditions Table

Item #	Description
1	The Permittee shall test the sludge depths at various spots in the pond that have been approved by NDEP. When sludge depths average 20-percent of the total depth of the pond(s), the Permittee shall submit to NDEP a plan to remove the sludge within two years.
2	Permittee shall implement odor control plan and vector control plan as submitted in the permit application.

**Flow:**

Estimated average flow at full production is 7,540 gallons per day. At facility's current production levels, wastewater flow is significantly below the annual average daily flow rate.

**Discharges From Future Outfalls:**

Permittee is currently constructing one of two evaporation holding ponds. Second pond and outfalls may be added as minor modification in the future.

**Corrective Action Sites:**

Currently, there are no corrective action sites within one mile of the facility.

**Wellhead Protection Program:**

Proposed site is not within a source water protection area.

**Schedule of Compliance:**

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The permittee shall submit Operations & Maintenance Manual prepared by a Professional Engineer licensed in Nevada for the Evaporation Pond and the leak detection system.	10/3/2016

**Deliverable Schedule:**

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

No records in Deliverable Schedule for Reports, Plans, and Other Submittals table

**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, Lahontan 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. **10/18/2016**, 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: **sharada Maligireddy**

Date: **9/15/2016**

Title: **Staff Engineer**