FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: NEW GENERATION SUPPLEMENTS

PO BOX 188
BELLE FOURCHE, SD 57717

Permit Number: NS2017500

Permit Type: GROUNDWATER DISCHARGE

Designation: GROUNDWATER

New/Existing: EXISTING

Location: NEW GENERATION SUPPLEMENTS, LYON
1700 US 50 EAST, SILVER SPRINGS, NV 89429
LATITUDE: 39.42083330, LONGITUDE: -119.217222
TOWNSHIP: T18N, RANGE: R25E, SECTION: S18

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	POND 1	External Outfall		39.42083330	-119.217222	ZERO DISCHARGE
002	POND 1 LEAK DETECTION	Internal Outfall		39.42083330	-119.217222	GROUND WATER

Permit History/Description of Proposed Action

The Permittee, Animal Feed Supplements DBA New Generation Supplements, has applied for the renewal of groundwater discharge permit NS2017500 for their facility located at 1700 U.S. 50 East, in Silver Springs, within Lyon County, Nevada for the discharge of process wastewater into a lined pond for evaporation with approximately 70% of the wastewater discharging directly into the local sewer collection system, and then discharged tinto the Lyon County Utilities Department's Silver Springs Water Reclamation Facility (SSWRF)(permit NS0099012).

This permit was first issued on October 26, 2016, and expired on October 25, 2021; the permit has been administratively continued since.

Facility Overview

New Generation Supplements operates an animal feed supplement manufacturing facility that discharges process wastewater to a lined pond for evaporation. Approximately 60-70% of the facility's wastewater, including vacuum pump generated process water and domestic sewer, discharges directly to local sewer collection and then discharged into the SSWRF. The remainder of the wastewater from the manufacturing facility, which consists primarily of molasses-based water condensate, boiler blow off, water conditioner backwash and plant wash down water, is discharged into the onsite evaporation pond. The evaporation pond is 60 mil primary HDPE liner and 40 mil secondary HDPE. Air vents are located under the secondary liner. HDPE emergency ladder strips are located near every corner of the pond; and an HDPE staff gauge is located near the northwest corner. A liner leak detection and monitoring system is in place in the southwest corner of the pond. The pond has approximately 1.52 acres of evaporation surface.

New Generation Supplements' Operation and Maintenance Manual (O & M) was last reviewed and approved by the Division on May 11, 2018, with a revised manual received in April 2020. The Technical, Compliance, and Enforcement (TCE) Branch of the Bureau of Water Pollution Control requires O & M's be updated every two (2) permit cycles which equates to every ten (10) years.

Outfall Summary
Outfall 001 – This outfall is for the discharge of wastewater into the onsite evaporation pond.

Outfall 002 - This outfall is for the pond leak detection system into the onsite evaporation pond.

Effluent Characterization
Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from the years July 2019 to October 2023, was reviewed as part of this permit renewal process. The long-term average discharge flow rate for Outfall 001 was 0.01 million gallons per day (MGD). The daily maximum discharge flow rate for Outfall 001 is limited to 0.05 MGD. There were no reported exceedances for this limit.

New Generation Supplements has been operationally shutdown since October 2023, so reported quarterly averages were based on numbers prior to that time, spanning the July 2019 to October 2023 reporting period, with this reporting period continued during the time of closure. The average discharge characteristics were as follows, with most of the pollutants being conditionally monitored, but with no actual numbers reported unless as described below, along with levels reported for BOD-5, Dissolved Oxygen, Nitrogen, Phosphorus, Total Dissolved Solids (TDS), and Total Suspended Solids (TSS):

BOD, 5-day (mg/L): 1504

Nitrogen (mg/L): 91

Dissolved Oxygen (mg/L): 1

pH (mg/L): 7

Phosphorus (mg/L): 18

TDS (mg/L): 11,344

TSS (mg/L): 1,051

Pollutants of Concern
Pollutants of concern are any pollutants or parameters that are believed to be present in the discharge and could affect or alter the physical, chemical, or biological condition of the receiving water. Common pollutants of concern are BOD-5, Dissolved Oxygen, Nitrogen, Total Dissolved Solids (TDS), and Total Suspended Solids (TSS).

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. Depth to groundwater is 24 feet as per well log data (Well Log #390494).

Compliance History
The facility was in substantial compliance during the July 2019 to October 2023 reporting period.

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 (Pond 1 - 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 Gross	001	Quarterly	DISCRT
Solids, total suspended	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Oxygen, dissolved (DO)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	INSITU
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
pH	Daily Maximum		M&R Standard Units (SU)	Effluent Gross	001	Quarterly	INSITU
Flow rate	Daily Maximum	<= 0.050 Million Gallons per Day (Mgal/d)		Effluent Gross	001	Continuous	METER
Freeboard	Monthly Minimum		>= 3 Feet (ft)	See Footnote	001	Monthly	VISUAL

Zero Discharge Limitations Table for Sample Location 001 (Pond 1 Leak Detection - Internal Outfall) To Be Reported Once During The Permit Term[1]

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Alkalinity, bicarbonate (as CaCO3)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Alkalinity, carbonate (as CaCO3)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Aluminum, total (as Al)	Daily Maximum		<= 0.20 Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Antimony, total (as Sb)	Daily Maximum		<= 0.006 Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Arsenic, total (as As)	Daily Maximum		<= 0.010 Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Barium, total (as Ba)	Daily Maximum		<= 2.0 Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Beryllium, total (as Be)	Daily Maximum		<= 0.004 Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Cadmium, total (as Cd)	Daily Maximum		<= 0.005 Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Calcium, total (as Ca)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chloride (as Cl)	Daily Maximum		<= 400 Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chromium, total (as Cr)	Daily Maximum		<= 0.10 Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
			<= 1.0				

Zero Discharge Limitations Table for Sample Location 001 (Pond 1 Leak Detection - Internal Outfall) To Be Reported Once During The Permit Term[1]

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 Gross	001	Once Per Permit Term	DISCRT
Fluoride, total (as F)	Daily Maximum		<= 4.0 Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Iron, total (as Fe)	Daily Maximum		<= 0.60 Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Lead, total (as Pb)	Daily Maximum		<= 0.015 Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Magnesium, total (as Mg)	Daily Maximum		<= 150 Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Manganese, total (as Mn)	Daily Maximum		<= 0.10 Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Mercury, total (as Hg)	Daily Maximum		<= 0.002 Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Potassium, total (as K)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Selenium, total (as Se)	Daily Maximum		<= 0.05 Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Silver, total (as Ag)	Daily Maximum		<= 0.10 Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Sodium, total (as Na)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
			M&R				

Zero Discharge Limitations Table for Sample Location 001 (Pond 1 Leak Detection - Internal Outfall) To Be Reported Once During The Permit Term[1]

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

Notes (Zero Discharge Limitations Table):

1. Constituents need to be analyzed for the dissolved fraction.

Ponds / Rapid Infiltration Basins for Sample Location 001 (Pond 1 - External Outfall) To Be Reported Annually

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Sludge/Solids, depth[1]	Maximum[2]	<= 2.50 Feet (ft)[3]		See Footnote[4]	001	Annual[5]	VISUAL

Notes (Ponds / Rapid Infiltration Basins):

1. The Permittee shall use a method approved by NDEP to determine the sludge depth in its pond. The plan for monitoring the sludge depths shall be submitted with O&M Manual.
2. When sludge depths average 20-percent of the total depth of the pond, the Permittee shall submit to NDEP a plan to remove the sludge within two years.
3. The Permittee shall report the total depth of the pond and the depth of sludge.
4. The Permittee shall test the sludge depths at various spots in the pond that have been approved by NDEP.
5. The Permittee shall sample the sludge depths during the 3rd quarter.

Ponds / Rapid Infiltration Basins for Sample Location 002 (Pond 1 Leak Detection - Internal Outfall) To Be Reported Quarterly

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Liner Leakage Rate[1]	Daily Maximum	<= 500 Gallons per Acre per Day (gal/acre/d)		Internal Monitoring Point	002	Monthly	METER

Notes (Ponds / Rapid Infiltration Basins):

1. See Section B.PB.5.5 of the permit for further information.

Summary of Changes From Previous Permit
Plant is currently "For Sale" and has not been in operation since October 2023. Should the facility be sold, the new owner is encouraged to submit forms to update Owner/Responsible Party, Billing, and Facility Contact Information as found under the Division's website along with any changes to discharge wastewater pollutants/output or facility modifications.

Nickel was removed from the parameters as it is not part of the ingredients list for what was being manufactured at the facility.

Phosphorus was removed from the parameters as the aeration pond was designed for evaporation only with no discharge to the groundwater. Phosphorus is only measured when it is a surface water discharge.

Technology Based Effluent Limitations
Technology based effluent limitations are not applicable to this permit.

Water Quality Based Effluent Limitations
Water quality based effluent limitations are not applicable to this permit.

Proposed Water Quality Based Effluent Limits (monthly/weekly/daily)
Water quality based effluent limitations are not applicable to this permit.

Basis for Effluent Limitations
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. The requirement to monitor the effluent for Profile I pollutants once per permit term is included to evaluate the quality of the processing wastewater and determine whether the processing wastewater has potential to impact the receiving water. Although these constituents are not expected to be present in the processing wastewater, the proposed permit requires the Permittee sample these contaminants once during the permit term, as they are included in the Profile I list.

Anti-backsliding
None of the proposed permit limits were changed to a less restrictive limit compared to those in the previous permit.

Antidegradation
The Division has developed an antidegradation regulation that is applied on a statewide basis, and which meets the statutory requirements of Nevada's water pollution control law found at Nevada Revised Statute (NRS) 445A.520 and NRS 445A.565 and is consistent with the federal antidegradation policy found at Title 40 in the Code of Federal Regulations (CFR) § 131.12. The objective of the Division's antidegradation regulation is to prevent degradation of Nevada's surface waters and maintain the unique attributes and special characteristics and water quality associated with high-quality waters.

As this permit is for (potential) discharges to groundwater, and not surface water, the new antidegradation rule is not applicable. There are currently no specific water quality standards that have been formally adopted by the State for groundwater, however, data reviewed during the renewal process does not indicate the potential for degradation of the groundwater from the reclaimed water discharged within the compliance limits of the proposed permit.

Special Conditions
See Special Approval/Conditions table below

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.

Discharges From Future Outfalls/ Planned Facility Changes
Permittee is currently completed construction, and is utilizing, just one of the two proposed evaporation holding ponds.

Corrective Action Sites
There are no active Bureau of Corrective Actions (BCA) sites located within a one-mile radius of the discharge location.

Wellhead Protection Program
The nearest Public Water Supply (PWS) well is located approximately one (1) mile to the south of the facility. There are other PWS wells located to the south of the facility. The facility is not located within a Wellhead Protection Area, which represents an approximate 10-year capture zone of a well, or within a Drinking Water Protection Area, which is defined by a 3,000 foot radius around a PWS well.

Schedule of Compliance:

SOC – Schedule of Compliance Table

There are no Schedule of Compliance items

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	4/28/2025
2	Annual Report (see Section C.1.2 of the permit)	Annually	1/28/2026
3	Once during the Permit Term Report	Once during the permit term	1/28/2030

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 mailed to interested persons on our mailing list and will be posted on our website at https://ndep.nv.gov/posts. Anyone wishing to comment on the proposed permit can do so in writing until 5:00 P.M. **12/20/2024,** 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 in 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: **Melissa Marr**
Date: **11/18/2024**
Title: **Staff II Engineer**