

ENVIRONMENTAL PROTECTION

Joe Lombardo, *Governor*James A. Settelmeyer, *Director*Jennifer L. Carr, *Administrator*

FACTSHEET (pursuant to NAC 445A.236)

Permittee Name: IMERYS MINERALS

100 FRONT ST.

FERNLEY, NV 89408

Permit Number: NS2019511

Permit Type: GROUNDWATER DISCHARGE

Designation: GROUNDWATER

New/Existing: NEW

Location: IMERYS MINERALS, CHURCHILL

FRONTAGE ROAD, FERNLEY, NV 89408

LATITUDE: 39.939550, LONGITUDE: -119.0913 TOWNSHIP: 24N, RANGE: 26E, SECTION: 20

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	DUST CONTROL	Surface Disposal Site		39.939550	-119.0913	GROUNDWATER

Permit History/Description of Proposed Action

The Permittee, Imerys Minerals, has applied for a new groundwater discharge permit, NS2019511, for their facility located on Sagehen Creek Road in Fernley, NV. The Permittee proposes to use non-contact process water from the Olam Spices and Vegetables, Inc. (SVI) facility for dust suppression on dirt roads located on their property.

Facility Overview

Imerys Minerals is part of the nonmetallic mineral mining and quarrying industry. Located approximately 24 miles northeast of Fernley, the facility operates in the diatomaceous earth mining business. The Permittee proposes to haul non-contact process water from the Olam SVI facility (permit # NS0080024), located approximately 11 miles to the south of Imerys Minerals, via water trucks where the water will be sprayed on dirt roads to aid in dust control.

The water obtained from the Olam SVI facility is geothermal water sourced from the Brady Power Plant, located approximately 0.45 miles northeast of the Olam SVI facility. Upon delivery to the Olam SVI facility, the geothermal water is first used to operate two dehydration units. The water enters the units at a temperature near 300 °F and exits the units at a temperature around 160 °F. After the non-contact process water exits the dehydrators, the flow stream is split. A portion of the water (approximately 20%) is cooled to no more than 110 °F, and then stored for use as onion and equipment wash water. After use, the wash water is filtered through a 0.03-inch Hydro-sieve screen to remove vegetable matter, then collected in a detention sump. From the sump the water is intermittently discharged to any of the 18 onsite infiltration basins. The remaining non-contact process water (approximately 80%) is diverted into a pond to cool prior to release into an unnamed ditch that discharges to an alkali flat. The portion of the water sent to the onsite pond is the same water to be trucked to Imerys Minerals.

Outfall Summary

Outfall 001 – This outfall is for the discharge of non-contact process water on dirt roads located at the Permittee's facility.

Effluent Characterization

The non-contact process water will be supplied by the Olam SVI facility. Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from the year 2019 to 2023 under NS0080024, was reviewed as part of this permit draft process. For the non-contact process water, total suspended solids (TSS) averaged 36 mg/L; the minimum reported pH level was 4.25 Standard Units (S.U.) and the maximum was 8.47 S.U; total petroleum hydrocarbons (TPH) was consistently non-detect.

Although Olam SVI's previous permit did not require them to sample for total dissolved solids (TDS), the facility did have the water tested for this constituent. During the 2019 to 2023 reporting period TDS averaged 2,892 mg/L.

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. Data obtained through the NetDMR system indicates pH and TDS are pollutants of concern

Receiving Water

The receiving water is groundwater of the State. Depth to groundwater near the discharge location (Imerys Minerals facility) varies from 110 feet to 275 feet below ground surface (bgs).

Compliance History

This is a new permit.

Proposed Effluent Limitations

The discharge shall be limited and monitored by the Permittee as specified below:

NS OTHER - Discharge Limitations Table for Sample Location 001 (Surface Disposal Site) To Be Reported Monthly

		Discharge Lin	nitations	Monitoring Requirements				
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type	
Flow rate	Daily Maximum	< 50000 Gallons per Day (gal/d)		Prior to Reuse	001	Continuous	CALCTD	
Flow rate	30 Day Average	M&R Gallons per Day (gal/d)		Prior to Reuse	001	Continuous	CALCTD	
pH, minimum ^[1]	Daily Minimum		M&R Standard Units (SU)	Prior to Reuse	001	Monthly	DISCRT	
pH, maximum ^[1]	Daily Maximum		M&R Standard Units (SU)	Prior to Reuse	001	Monthly	DISCRT	
Solids, total dissolved ^[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Monthly	DISCRT	

Notes (NS OTHER - Discharge Limitations Table):

1. Results may be obtained from Olam SVI. (Permit NS0080024).

NS OTHER - Discharge Limitations Table for Sample Location 001 (Surface Disposal Site) To Be Reported Quarterly

	Discharge Limitations					Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	_	Measurement Frequency	Sample Type		
Hydrocarbons, total petroleum ^[1]	Daily Maximum		<= 1.0 Milligrams per Liter (mg/L)	Prior to Reuse	001	Quarterly	DISCRT		

Notes (NS OTHER - Discharge Limitations Table):

1. Results may be obtained from Olam SVI (Permit NS0080024).

NS OTHER - Discharge Limitations Table for Sample Location 001 (Surface Disposal Site) 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)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT
Alkalinity, total (as CaCO3)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT
Aluminum, total (as Al) ^[2]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT
Antimony, total (as Sb) ^[2]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT
Arsenic, total (as As) ^[2]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT
Barium, total (as Ba) ^[2]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT
Beryllium, dissolved (as Be)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT
Cadmium, dissolved (as Cd)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT
Calcium, total (as Ca) ^[2]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT
Chromium, total (as Cr) ^[2]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT
			M&R				

NS OTHER - Discharge Limitations Table for Sample Location 001 (Surface Disposal Site) To Be Reported Annually $^{[1]}$

Discharge Limitations						Monitoring Requirements				
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type			
Copper, dissolved (as Cu)	Daily Maximum		Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT			
Fluoride, total (as F)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT			
Iron, total (as Fe) ^[2]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT			
Lead, dissolved (as Pb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT			
Magnesium, total (as Mg) ^[2]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT			
Manganese, total (as Mn) ^[2]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT			
Mercury, dissolved (as Hg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT			
Nitrite plus nitrate total 1 det. (as N)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT			
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT			
pH, maximum	Daily Maximum		M&R Standard Units (SU)	Prior to Reuse	001	Annual	DISCRT			
pH, minimum	Daily Minimum		M&R Standard Units (SU)	Prior to Reuse	001	Annual	DISCRT			
Potassium, total (as K) ^[2]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT			

NS OTHER - Discharge Limitations Table for Sample Location 001 (Surface Disposal Site) To Be Reported Annually^[1]

		Discharge Lin	nitations		Monitorin	g Requirements	
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Selenium, dissolved [as Se]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT
Silver, total (as Ag) [2]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT
Sodium, total (as Na) ^[2]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT
Sulfate, total (as SO4)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT
Thallium, total (as	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT
Uranium, natural, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT
Cyanide, weak acid, dissociable	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT
Zinc, dissolved (as Zn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Annual	DISCRT

Notes (NS OTHER - Discharge Limitations Table):

- 1. Results may be obtained from Olam SVI (Permit NS0080024).
- 2. Analysis shall be for the dissolved fraction.

Summary of Changes From Previous Permit

This is a new permit.

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.

Basis for Effluent Limitations

There are currently no specific water quality standards that have been formally adopted by the State for groundwater. However, the Division has the discretion to implement effluent limitations outside water quality standards per Nevada Administrative Code (NAC) 445A.243, which states, "In establishing an effluent limitation to carry out the policy of this State set forth in NRS 445A.305, consideration must be given to, but is not limited by, the following: ... (2) the need for standards that specify by chemical, physical, biological, or other characteristics the extent to which pollution by various substances will not be tolerated." The constituents listed in Profile I have been vetted by the Division and have been included in groundwater discharge permits for many years as a means of regulating groundwater quality. Per Nevada Revised Statute (NRS) 445A.490, "No permit may be issued which authorizes any discharge or injection of fluids through a well into any waters of the State: ... (3) which would result in the degradation of existing or potential underground sources of drinking water." Therefore, the requirement to sample for the constituents listed in Profile I, once each year to obtain water quality data, has been established. No limits have been established for Profile I constituents as the water is geothermal water which typically contains elevated levels of TDS, metals, and minerals as well as varying pH levels.

The permit establishes quarterly sampling of TPH. This constituent has the potential to be present in the water as it is first sourced from the power plant, which may contain traces of lubricants used for their well pumping equipment, before being used at Olam SVI. A limit of 1.0 mg/L, which has been determined by the Division to be reasonably obtainable using best management practices, is established.

The permit establishes monthly sampling for TDS and pH as these constituents are considered pollutants of concern and therefore should be monitored more closely.

Anti-backsliding

To prevent backsliding, effluent limitations in reissued permits are required to be as stringent as those in the previous permit. As this is a new permit, anti-backsliding requirements are not applicable.

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 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 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 drafting process does not indicate the potential for degradation of the groundwater from the non-contact process water discharged within the compliance limits of the proposed permit.

Special Conditions

See the Special Approvals / Conditions Table below.

SA - Special Approvals / Conditions Table

Item #	Description
	The Permittee shall not allow non-contact process water, used for dust control, to pond or run off of the dust control application areas.

Item #	Description
2	The Permittee shall not use non-contact process water for dust control when the weather and ground
-	conditions do not allow for the effective use of dust control water (e.g., rain, frozen ground, etc.).

Discharges From Future Outfalls/ Planned Facility Changes

The Permittee does not anticipate discharges from future outfalls or any changes to the facility.

Corrective Action Sites

There are no Bureau of Corrective Action Sites located within a one-mile radius of the facility.

Wellhead Protection Program

The nearest Public Water Supply (PWS) well is located approximately 10 miles to the southeast. The Imerys facility is not located within a Drinking Water Protection Area, which is defined by a 3,000-foot radius around a PWS well, or a Wellhead Protection Area, which represents an approximate 10-year capture zone of a well.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit to the Division, for review and approval, two (2) copies (one hard copy and one electronic copy) of a Reclaimed Water Management Plan (RWMP). The RWMP shall follow guidance document WTS-1B: General Criteria for Preparing a Reclaimed Water Management Plan.	4/28/2025
2	Discharge Monitoring Reports (DMRs) shall be submitted via the Nevada NetDMR system https://netdmr.ndep.nv.gov/netdmr/public/home.htm .	4/28/2025

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 DMRs	Annually	1/28/2026

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. 12/16/2024, 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: **Bonnie Hartley**Date: 11/12/2024

Title: Staff II, Associate Engineer