

GROUND WATER QUALITY DISCHARGE PERMIT

STATEMENT OF BASIS

PERMIT NO. UGW270006

Desert View Dairy LLC

INTRODUCTION

Desert View Dairy LLC consists of a dairy operation with associated manure waste handling facilities. This Statement of Basis covers the renewal of the ground water discharge permit.

Previously known as Delta Milk Company, the facility was purchased by Desert View Dairy LLC (“Desert View”) in 2024. On August 29, 2025, the Division of Water Quality (“Division”) received a Transfer of Ownership Agreement signed by both parties, transferring the permit to the current owner and operator of the facility.

DESCRIPTION OF FACILITY

A dairy has been operating at the current location since 2002. The dairy is located in Millard County, approximately 6 miles southeast of Delta, and consists of barns, parlors, and waste facilities. The operation currently consists of approximately 3,000 milking heads in confinement and can accommodate up to 4,800 dairy cows.

Manure from dairy operations is flushed from the barns using recycled plate-cooler water. The liquid fraction is stored in a waste retention lagoon. Most of the solid fraction is sold as compost. A Comprehensive Nutrient Management Plan is in place and followed when liquids or solids are applied at the appropriate agronomic rate over the 880 acres farmed by the operation.

SUBSURFACE CONDITIONS

The dairy is located in Delta Valley, approximately 6 miles Southeast of Delta in Millard County. In this vicinity, ground water generally moves from the mountainous recharge areas to the east in a west-southwesterly direction toward Sevier Lake. The aquifer beneath existing grade at the site consists of unconsolidated and semi-consolidated, poorly sorted alluvial materials; primarily clay, sand, and gravel, inter-bedded with silt and clay. The alluvial aquifer in the Delta Valley exceeds 500 feet in thickness through the center of the valley and may be several hundred feet thick under the dairy site. Monitoring wells have been completed in the uppermost water table aquifer at the site.

GROUND WATER CLASSIFICATION AND PROTECTION LEVELS

Analysis of monitoring wells installed at the site shows that Total Dissolved Solids (TDS) concentrations range from 2,300 mg/l to 3,000 mg/l. Based on these concentrations, ground water

in the vicinity of the dairy is Class II. Protection levels have been established for nitrate and nitrite, chloride, and TDS, and are included in Table 1 of the ground water discharge permit.

BEST AVAILABLE TREATMENT TECHNOLOGY

At full population, the dairy can contain 4,800 milking animals in total confinement. The farm's waste disposal lagoons are designed to hold approximately 61.6 acre-feet, excluding 1 foot of freeboard. Wastewater and composted manure are applied to approximately 880 acres of adjacent farmland via the irrigation system. The solids are used as an organic fertilizer or sold as compost.

Dry, scraped manure is composted. Solids are deposited on a graded and bermed area for composting. Runoff from the compost area drains into a settling pond.

The design, operational, and contingency requirements detailed above represent Best Available Technology, as their implementation will protect ground water resources in the area surrounding the facility.

GROUND WATER MONITORING

The dairy has installed one upgradient and two downgradient monitoring wells, located along the presumed direction of ground water flow, and completed in the uppermost water-bearing zone under the lagoons. Ground water will be sampled and analyzed semi-annually for nitrate + nitrite, ammonia, pH, chloride, bicarbonate, and TDS for the term of the permit.

Regulatory decisions made as a result of ground water monitoring must consider the background variability of ground water quality at the dairy site. Desert View will not be required to take corrective action if it can be verified that changes in ground water quality are a result of other factors not related to their operations.

COMPLIANCE SCHEDULE

1. Compliance Monitoring Well Replacement

Currently, all three of the compliance monitoring wells installed at the site are dry and cannot be sampled. According to Permit Part I.E.2, Desert View must submit a plan to the Division for Director review and approval within 60 days of permit issuance. The plan should outline a schedule for replacement of the monitoring wells and for resumption of semi-annual sampling according to the requirements of the Permit.

2. Updated Site Diagram

The Permittee shall generate and provide an updated site map that includes the location of all compliance monitoring wells and potentiometric contours derived from the most recently collected ground water elevations within 365 days of permit issuance.