

**SPILL REPORT Clean
Water Branch (CWB)**

Location of spill (Address, intersection, or description): Hwy 19 Mile Marker 30, Big Island Dairy Lower Lagoon

Island Hawaii Type of Spill (Raw sewage, oil, diesel, paint, etc.): Manure contaminated rainwater

(Date and Time) Spill Began: 12/24/18 @ 09:40 Spill Ended: 12/24/18 @ 15:40 (blank if ongoing)

Duration of spill: 6 hours Estimated Quantity: 600,000 gallons

Reported by: Steve Manning Phone: (208) 431-3292 Email: stevem@bigislanddairy.com

Include the Date(s), Time(s), and Contact Name(s) for all verbal reports given to the State Hospital or CWB on the spaces below.

12/24/18 @ 08:30 Scott Miyashiro (HDOH): Reported high lagoon level due to heavy rains and informed him of the need to drawdown the level to a safe level. We were told to proceed and began the drawdown procedure at 09:40.

12/24/18 @ 09:50 Scott Miyashiro (HDOH): Reported drawdown was initiated and described the drawdown procedure. Received 3 more phone calls from Scott throughout the day.

12/24/18 @ 12:10 Neil Mukai (HDOH): Neil arrived onsite to witness the pumpdown procedure and observe the flow into Kaohaoha Gulch.

12/24/18 @ EOD: Sent email to Scott and Matt Kurano reporting the termination of the drawdown procedure at 15:40 and reported the estimated discharge volume.

Name of Business or Agency (Owner/responsible party): Big Island Dairy, LLC

Mailing Address: PO Box 55 City: O'okala State: HI Zip: 96774

Project/Wastewater Treatment Plant Name: N/A Permit number: N/A

Include a description where the spill occurred and how it entered any drainage systems, and streams or the Pacific Ocean (State waters). Attach a map showing the locations.

The unavoidable controlled drawdown was done on the Lower Lagoon through two 6" hoses. The point of release from the hoses was immediately below the containment berm of the Lower Lagoon as shown on the attached map. Flow traveled downslope through the field to the conservation ditch, and traveled to the ditch entry into Kaohaoha Gulch. Flow then traveled down Kaohaoha Gulch.

Description of the cause and responsible parties if known (e.g., grease, roots, rags, pipe failure, contractor error, roots, wet weather etc.). If unknown include steps being taken for further investigation:

Wet, adverse weather conditions from October to the date of the controlled release resulted in significant amounts of rainwater entering the wastewater system, and impeded land application of wastewater to the dairy grazed fields. Rainfall in the days preceding the release totaled 13.27", which caused the level in the Lower Lagoon to rise 2.5' to the level where a controlled drawdown was required.

Actions taken to correct the problem, warn and protect the public, and prevent future spills (e.g., turned off water source, stopped spill, cleaned and disinfected the area of the spill, repaired, etc.):

Prior to initiating the drawdown procedure, HDOH was notified verbally. Additionally, O'okala community representatives Valerie Poindexter and Genard Frazier were notified of the impending drawdown of the lagoon. Genard Frazier was invited to come onsite to witness the drawdown operations.

Weather conditions and forecast rainfall at the time were considered, as previously directed by HDOH, in determining required drawdown level to safely contain any future forecast rainfall. The forecast on the morning of 12/24 showed 50% - 80% chance of rain, heavy at times, for the next six days. Weather conditions and forecast rainfall improved into the afternoon of 12/24, and the decision was made to terminate the drawdown at 15:40.

With improved weather conditions following the release, the dairy is actively land applying wastewater using the incorporator and sprinkler in accordance with our CNMP in an effort to further reduce level in the Lower Lagoon. The dairy continues to actively monitor lagoon levels daily and will manage lagoon levels through land application of wastewater as weather and soil conditions permit.

Attach location maps, and any press releases, issued by you or your agency, to notify the public of the spill. Include maps showing the location of signs and the dates posted. Include any stream or ocean monitoring information if known. Include any additional relevant information.