

**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: 2/24/18 @ 07:00 Spill Ended: 2/24/19 @ 23:00 (blank if ongoing)

Duration of spill: 16 hours Estimated Quantity: 2,000,000 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.

2/24/19 @ 07:32 Emergency Hotline employee (HDOH): The HDOH emergency hotline was called to notify the State of the lagoon level and that a controlled drawdown procedure of the lagoon had been initiated at 07:00. In the week prior to the discharge, Derek Whitesides, in a meeting with HDOH, communicated the high level of the lagoon, and the likelihood of the need to drawdown the lagoon during the weekend.

2/24/19 @ 09:32 Neil Mukai (HDOH): Neil called Steve Manning and expressed concern for the potential of a breach of the lagoon berm. Neil was informed that the potential only exists should water overflow the top of the berm and erode the back side of the berm wall, and to prevent overflow, the Dairy initiated the controlled drawdown procedure. Lagoon level at the initiation of the drawdown procedure was 1 foot below the top of the berm.

2/25/19 @ 13:15 Neil Mukai (HDOH): Neil arrived onsite to observe the discharge. Richard Walker informed Neil that the drawdown procedure was terminated the previous night at 23:00. He was invited to inspect the lagoon and the area of the discharge. Neil called Matt Kurano to inquire if observation of the lagoon was necessary since the pumping operations had been terminated the previous night. He was informed that he only needed to witness the discharge, and since there was no ongoing discharge, he did not need to observe the lagoon. Neil left the Dairy at 13:22.

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, utilizing two pumps. Both pumps were started at 07:00. One pump was run for 14 hours and one was run for 8 hours. The drawdown procedure was terminated at 23:00. The point of release from the hoses was immediately below the containment berm of the Lower Lagoon. Flow traveled downslope through the field to the conservation ditch, and traveled along the ditch to the entry into Kaohaoha Gulch. Flow then traveled down Kaohaoha Gulch. None of the flow entered either the Kaula or Alaiialoa gulches.

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:

Above average rainfall from 1/25/19 to 2/24/19 resulting in 34.77" of rain, added significant volume to the lagoons. Additionally, wet field conditions during this timeframe prevented land application of manure wastewater to the fields. On 1/24/19, before the extended period of rain, the lower lagoon level was nearly empty, and the upper lagoon was 2 ft below the spillway.

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.):

HDOH was notified via the HDOH Emergency Hotline of the lagoon level and the initiated drawdown procedure. Additionally, O'okala community representative Genard Frazier was notified of the drawdown of the lagoon. Genard Frazier was invited to come onsite, and came onsite to witness the drawdown operations.

As previously directed by HDOH, weather conditions and forecast rainfall were considered in determining required drawdown level to safely contain any future forecast rainfall.

Weather conditions following the controlled discharge have not improved significantly, and as such we are still unable to apply wastewater due to wet field conditions. 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.

Map is the same as the previous 12/24/18 discharge.