



Livestock and Water Quality Site Visit

Site Visit Information	<input checked="" type="checkbox"/> First Visit	<input type="checkbox"/> Follow-up Visit
Prepared by: Jessica Kirkpatrick	Arrival Time: 10:30 a.m.	Departure Time: 11:30 a.m.
Date: 6/27/2014	Current Weather Conditions: Just starting to rain	

Owner/Operator Information	
Name: Dave & Jackie Brown	Street: 1769 W. Badger Road
City: Custer	Zip Code: 98240
Phone: 360-815-0054	Email:

Site Information	
County: Whatcom	Watershed: Lower Nooksack (Bertrand)
General site description: Dave and Jackie Brown raise primarily dairy heifers on their approximately 80 acre property. According to Mr. Brown, there are approximately 300 heifers on the property all year. The heifers are kept in two barns and not allowed out on pasture. The facility is a former dairy, and two dairy lagoons are used to store liquids throughout the year. This site visit was conducted in response to an application of solid manure made by this operation to the property to the west in January.	

Site Evaluation

Stream Corridor and Areas Near Surface Water	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
<input type="checkbox"/> Bare, exposed, eroding soils	<input type="checkbox"/> Absence of woody vegetation	
<input checked="" type="checkbox"/> Contaminated run-off (active or potential)	<input type="checkbox"/> Manure accumulations	
<input type="checkbox"/> Slumping stream banks and erosion	<input type="checkbox"/> Animal access to surface water	
<input type="checkbox"/> Overgrazing of grasses	<input type="checkbox"/> Livestock paths and trails along riparian areas	
Comments: A waterway runs south along the western property line and discharges into Dakota Creek. Monitoring station SW21 is the nearest downstream station on this waterway at Loomis Trail Road. The waterway is approximately 200 feet away from the barns, and 130 feet away from the manure/bedding drystack. The area between the facility and the stream is well vegetated, and animals do not have access to the water.		

Confinement Areas	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
<input type="checkbox"/> Distance to surface water (ft)	<input type="checkbox"/> Polluted run-off reaching surface water	
<input type="checkbox"/> Presence of mud and manure	<input type="checkbox"/> Roof runoff water flows to confinement areas	
<input checked="" type="checkbox"/> Signs of previous runoff reaching surface water	<input type="checkbox"/> Adjacent land slopes toward surface water	

Comments: The confinement areas are located inside barns. The majority of the confinement space is contained by barn walls.

The following issue was the only one noted during the inspection:

A floor drain collects runoff from the asphalt pad in front of two heifer barns. The asphalt pad in this location is continually contaminated with manure from vehicle trackout. This drain likely discharges this manure-contaminated water through a pipe outlet into the stream directly west that was identified during the inspection. This pipe may also convey clean roof runoff water to the stream.

Stock Water	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
<input checked="" type="checkbox"/> Distance to surface water (500 ft)	<input type="checkbox"/> Mud and standing water at tanks	
<input type="checkbox"/> Overflow from tanks on to the ground	<input type="checkbox"/> Animals accesses stream for stock water	
Comments: Cattle are watered inside the barns, which are drained to the manure lagoons.		

Upland Pasture Areas	<input type="checkbox"/> Evaluated	<input checked="" type="checkbox"/> Not Evaluated
<input type="checkbox"/> Animal access to stream corridors	<input type="checkbox"/> Signs of overgrazing and erosion	
<input type="checkbox"/> Distance to surface water (>500 ft)	<input type="checkbox"/> Manure accumulations and bare ground	
Comments: There are no pastures used by this operation. Cattle are kept indoors at all times.		

Manure Management	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
Current manure management plan? no	Manure stored on covered, impervious surface?	
Manure collected and stored? yes	Applied during growing season?	
Manure storage properly sized? unknown	Manure applied during non-growing season?	
Manure storage covered?	Vegetated buffer when manure is applied?	
Manure being collected often?	Manure applied or stored off site?	
Comments: Manure from the barns is scraped outside into the two lagoons and the drystack west of the barn. A sump pump between the barns drains liquids to the near lagoon. The operation currently does not have a manure management plan. Not implementing a manure management plan creates a much higher risk of discharging pollutants to state waters than if one was implemented.		
Manure was applied to a frozen, saturated field during the non-growing season in January of this year, likely resulting discharges of pollution to the Dakota Creek watershed that were detected by monitoring at station SW21 during January, February, and March of this year. This is not the only agricultural operation in the area that contributed to those high concentrations.		

Other Areas of Concern

Comments:

Corrective Actions

1. Apply manure at the proper rates and times so as to prevent future discharges of manure into state waters. The best way to do this is to obtain and implement a manure management plan that includes all best management practices necessary to prevent discharges from field applications of manure.
2. Connect the roof drain securely to the floor drain near the grain silo in a way that prevents runoff from the asphalt pad from entering the floor drain. The runoff from the asphalt pad is contaminated with manure from the barns, and should be routed to the manure lagoon.

Photos Taken: ☒ Yes☐ NoSample Taken: ☐ Yes☒ No**Additional Comments**

Comments: I strongly encouraged Mr. and Mrs. Brown to contact the Whatcom Conservation District at 360-354-2035 extension 3 for assistance in creating and implementing a manure management plan that will reduce the risk of their operation discharging pollutants to state waters in the future.

Ecology Contact Information

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Inspector Signature: _____

Date: _____

4/30/2014