



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8

1595 Wynkoop Street  
DENVER, CO 80202-1129  
Phone 800-227-8917  
<http://www.epa.gov/region08>

SEP 20 2010

Ref: 8ENF-W-NP

**CERTIFIED MAIL#:**  
**RETURN RECEIPT REQUESTED**

Nels Nelson  
Cactus Hill Ranch Company  
38990 Hwy 257  
Fort Collins, CO 80524

Re: Cactus Hill Inspection Report  
Findings of Violation and Administrative  
Order for Compliance  
Docket No. **CWA-08-2010-0030**

Dear Mr. Nelson:

On April 22, 2010, the United States Environmental Protection Agency (EPA) and Colorado Department of Public Health and Environment (CDPHE) performed a joint inspection of the Cactus Hill Ranch Company sheep feedlot 3 miles north of Windsor, Colorado. A copy of the report from the inspection (report) is enclosed. Please pay special attention to the Summary of Findings section of the report. Please note that the EPA inspector discussed his observations and concerns during the exit interview.

Also enclosed is an EPA Region 8 administrative order (Order) that finds that Cactus Hill Ranch Company (the Company) has violated the Clean Water Act (the CWA) by discharging pollutants without a permit. The Order also directs the Company to come into compliance with the CWA. EPA's authority for such action is provided under §309(a) of the CWA, 33 U.S.C. §1319(a), which authorizes the Administrator of the EPA to issue an order to any person found to be in violation of § 301 of the CWA, among others, or in violation of any condition or limitation implementing such sections in a National Pollutant Discharge Elimination System (NPDES) permit issued by EPA or an authorized State. The enclosed order is also issued pursuant to § 308(a) of the CWA, 33 U.S.C. § 1318(a), which authorizes the EPA to require, among other things, reports and information to carry out the objectives of the CWA.

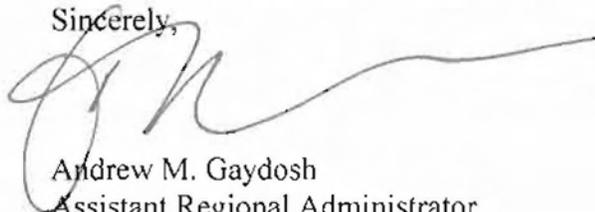
The CWA requires the EPA to take all appropriate enforcement actions necessary to secure prompt compliance with the CWA and any order issued thereunder. Section 309 of the CWA, 33 U.S.C. § 1319, authorizes civil judicial penalties for violating an order issued under § 309(a) of the CWA. The CWA authorizes a variety of possible enforcement actions for noncompliance with the CWA, including civil or criminal actions, administrative penalty actions, and, in some cases following a criminal conviction, debarment from Federal contracts and/or loans. Additionally, EPA may take an enforcement action if this Order is violated. Please also be advised that the issuance of this Order does

not preclude any civil lawsuit, criminal prosecution, or administrative penalty assessment for the violations cited in the Order or for any other violations of the CWA.

If the Company is a small entity, you may find the enclosed Small Business Regulatory Enforcement and Fairness Act (SBREFA) information sheet useful. It contains information on compliance assistance resources and tools available to small entities. SBREFA does not eliminate the responsibility to comply with the Order or the CWA.

Please review the report and the order carefully and ensure that all of the requirements in these documents are fully and timely completed. If you have any questions, the most knowledgeable people on my staff are Peggy Livingston, Enforcement Attorney, at 303-312-6858 and Seth Draper, Environmental Scientist, at 303-312-6763. We urge your prompt attention to this matter.

Sincerely,



Andrew M. Gaydosh  
Assistant Regional Administrator  
Office of Enforcement, Compliance  
and Environmental Justice

Enclosures: 1) Administrative Order for Compliance  
2) Inspection Report, Photo Log, 3560 Form, Summary of Findings  
3) SBREFA Information Sheet  
4) SPCC Guidance Sheet

cc: Phyllis Woodford, CDPHE



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8

2010 SEP 20 AM 10:21

FILED  
EPA REGION VIII  
HEARING CLERK

IN THE MATTER OF:	)	<b>ADMINISTRATIVE</b>
	)	<b>ORDER FOR COMPLIANCE</b>
Cactus Hill Ranch Company	)	
38990 Hwy 257	)	Proceeding under §§ 308(a) and
Fort Collins, CO 80524	)	309(a) of the Clean Water Act, 33 U.S.C.
	)	§§ 1318(a) and 1319(a)
Respondent.	)	
_____	)	Docket No. CWA-08-2010-0030

**I. PRELIMINARY STATEMENT**

1. This Administrative Order for Compliance (Order) is issued pursuant to § 309(a) of the Clean Water Act (Act), 33 U.S.C. § 1319(a), which authorizes the Administrator of the U.S. Environmental Protection Agency (EPA) to issue an order requiring compliance by any person found to be in violation of §§ 301 or 308 of the Act, among others, or in violation of any permit condition or limitation implementing § 402 of the Act. This order is also issued pursuant to § 308(a) of the Act, 33 U.S.C. § 1318(a), which authorizes the Administrator of EPA to require submission of information to determine compliance with the Act. These authorities have been delegated to the Regional Administrator of EPA Region 8 and redelegated to the undersigned official.
2. Respondent Cactus Hill Ranch Company (Respondent) is a Colorado corporation having a business address of 38990 Hwy 257, Fort Collins, CO 80524. Its registered agent for service of process is Nels Nelson, at the same street address. The mailing address for its registered agent is Post Office Box 691, Windsor, CO 80550.
3. Respondent owns and/or operates an animal feeding operation located at 38990 Hwy 257, Fort Collins, CO (the facility).

**II. STATUTORY AND REGULATORY BACKGROUND**

4. Section 301 of the Act, 33 U.S.C. § 1311(a), prohibits, among other things, the discharge of pollutants by any person into waters of the United States except as in compliance with § 402 of the Act, 33 U.S.C. § 1342.

5. Section 402 of the Act, 33 U.S.C. § 1342, establishes a National Pollutant Discharge Elimination System (NPDES) program, administered by EPA and, under certain circumstances, authorized states, to permit discharges of pollutants into navigable waters, subject to specific terms and conditions.

6. EPA has approved the State of Colorado's NPDES program pursuant to § 402(b) of the Act, 42 U.S.C. § 1342(b).

7. Section 502(12) of the Act, 33 U.S.C. § 1362(12), defines the term "discharge of a pollutant" to include "any addition of any pollutant to navigable waters from any point source."

8. "Pollutant" is defined by § 502(6) of the Act, 33 U.S.C. § 1362(6), to include, among other things, biological material and agricultural waste discharged into water.

9. "Point source" is defined by § 502(14) of the Act, 33 U.S.C. § 1362(14), to include "any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, well, discrete fissure, container, rolling stock, concentrated animal feeding operation . . . from which pollutants are or may be discharged."

10. To implement § 402 of the Act, EPA promulgated regulations codified at 40 C.F.R. part 122. According to 40 C.F.R. § 122.23(d), the owner or operator of a CAFO must seek coverage under an NPDES permit if the CAFO discharges or proposes to discharge. A CAFO proposes to discharge if it is designed, constructed, or maintained such that a discharge will occur. Id.

11. "Animal feeding operation" or "AFO" is defined by 40 C.F.R. § 122.23(b)(1) as a lot or facility where animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and where crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

12. "Concentrated animal feeding operation" or "CAFO" is defined in 40 C.F.R. § 122.23(b)(2) as an animal feeding operation that is defined as a Large CAFO or a Medium CAFO in accordance with 40 C.F.R. § 122.23(b), or that is designated as a CAFO in accordance with 40 C.F.R. § 122.23(c).

13. "Large CAFO" is defined at 40 C.F.R. § 122.23(b)(4) to include an animal feeding operation that stables or confines 10,000 or more sheep or lambs.

14. "Waters of the United States" are defined in 40 C.F.R. § 122.2 to include, among other things, interstate waters and tributaries thereto.

15. "Process wastewater" is defined in 40 C.F.R. § 122.23(b)(7) as water "directly or indirectly used in the operation of the AFO for any of the following: spillage or overflow from animal or poultry watering systems; washing, cleaning, or flushing pens, barns, manure pits, or other AFO facilities; direct contact swimming, washing, or spray cooling of animals; or dust control." Process wastewater also includes "any water which comes into contact with any raw materials, products, or byproducts including manure, litter, feed, milk, eggs or bedding." *Id.*

16. The Colorado Department of Public Health and Environment (CDPHE) is the agency within the state of Colorado that is authorized to administer the federal NPDES program. EPA maintains concurrent enforcement authority with authorized state NPDES programs to enforce NPDES violations.

### **III. FINDINGS OF VIOLATION**

17. On April 22, 2010, an EPA inspector, accompanied for part of the inspection by CDPHE inspectors, inspected the facility and observed the following:

- a. Larimer and Weld Canal, which is sometimes also known as the Eaton Canal and is shown as an irrigation ditch on the United States Geologic Survey topographic map of the area, is located approximately one-half (1/2) mile south of the facility's southernmost confinement pens,
- b. process water was flowing from the facility across the access road at the south entrance to the facility and into ditches on both sides of Hwy. 257 (noted in the report of EPA's April 22, 2010, inspection as the "Chokepoint"),
- c. the ditches on both sides of Hwy. 257 flowed to the Larimer and Weld Canal,
- d. feed, manure, and bedding were along the east and west roadside ditch along Hwy. 257,
- e. feed, manure, and bedding were consolidated along the fence row along the west side of Hwy. 257,
- f. feed, manure, and bedding were consolidated along the fence row on the north side of County Road 78, which is south of the facility,
- g. water was flowing from the north side of County Road 78, through a metal culvert, and south from County Road 78 to the Larimer and Weld Canal, and
- h. the Angle Field land application site did not have a tail-water pond to collect any and all excess land applied wastewater before entering Larimer County Ditch.

18. The Larimer and Weld Canal/Eaton Canal is at least a seasonal waterway. It flows to Eaton Draw, which is at least a seasonal waterway. Eaton Draw flows to the Cache La Poudre River, which is a navigable-in-fact waterway. The Cache La Poudre River flows to the South Platte River, which is an interstate, navigable-in-fact waterway.
19. The Larimer and Weld Canal/Eaton Canal, Eaton Draw, the Cache La Poudre River, and the South Platte River are waters of the United States as defined in 40 C.F.R. § 122.2.
20. The facility confines and feeds or maintains sheep and lambs for a total of 45 days or more in any 12-month period.
21. Crops, vegetation, forage growth, and post harvest residues are not sustained in the normal growing season over any portion of the facility's feeding areas.
22. The facility is an AFO as defined by 40 C.F.R. § 122.23(b)(1).
23. The facility was confining and feeding approximately 11,000 head of sheep and lambs at the time of the EPA inspection. The facility has a capacity for 75,000 head of sheep and lambs. It confines and feeds approximately 20,000 head of sheep and lambs for approximately nine months per year.
24. Because the number of sheep and lambs confined at the facility is greater than or equal to 10,000, the facility is a CAFO as defined in 40 C.F.R. § 122.23(b)(2) and § 502(14) of the Act, 33 U.S.C. § 1562(14), and a Large CAFO as that term is defined in 40 C.F.R. § 122.23(b)(4).
25. Respondent is a "person" within the meaning of § 502(5) of the Act, 33 U.S.C. § 1362(5).
26. Respondent has not applied for or received coverage under an NPDES § 402 permit as required under 40 C.F.R. § 122.23.
27. Respondent has discharged pollutants from the facility to waters of the United States without an NPDES permit, in violation of § 301(a) of the Act, 33 U.S.C. § 1311(a).

#### **IV. ORDER**

Based on the foregoing FINDINGS OF VIOLATION, and pursuant to the authority vested in the Administrator of EPA pursuant to §§ 308 and 309(a) of the Act, 33 U.S.C. §§ 1318 and 1319(a), as properly delegated to the Assistant Regional Administrator of the Office of Enforcement, Compliance, and Environmental Justice, Region 8, it is hereby ORDERED as follows:

1. Respondent shall immediately cease and desist discharging pollutants into waters of the United States unless such discharges are in accordance with a NPDES permit issued pursuant to § 402 of the Act, 33 U.S.C. § 1342.
2. Within ten (10) calendar days of receipt of this Order, Respondent shall submit to EPA written notice of its intent to comply with the requirements of this Order.
3. Respondent shall immediately conduct daily visual monitoring of all potential sources of discharges containing manure, waste silage, and/or feed to waters of the United States from the facility. Monitoring locations shall include but are not limited to: the area depicted within the Chokepoint, areas of potential or actual discharges from fields subject to land application of wastes, confinement areas, silage piles, and waste storage lagoons.
4. Respondent shall immediately develop and maintain a written monitoring log containing the following information for each area monitored as required by the preceding paragraph: the date and time of the visual observation, an indication of whether or not a discharge was observed, and the initials of the person making the observation. Respondent shall maintain the monitoring records at the facility for at least three (3) years after the date of this Order and make them available for inspection or copying upon request by any authorized representatives of EPA and the CDPHE.
5. Respondent shall immediately conduct daily monitoring of precipitation at the facility, using a rain gauge. Respondent shall record and maintain records of precipitation amounts with the monitoring records required by this Order.
6. For each observed discharge of any agricultural waste or other pollutant(s) from the facility that may enter any water of the United States, Respondent shall:
  - a. Within two (2) hours of the discharge, sample the discharge in accordance with the methods specified in 40 C.F.R. part 136, and submit the sample to a laboratory to be analyzed in accordance with the sample holding times and methods of analysis specified in 40 C.F.R. part 136 for fecal coliform, 5-day Biochemical Oxygen Demand (BOD5), Ammonia, Nitrate-Nitrite, and Total Suspended Solids;
  - b. Submit to EPA and CDPHE with fifteen (15) calendar days of the discharge a written report containing:
    - 1) date and time of the discharge;
    - 2) location of the discharge;
    - 3) origin of the discharge;
    - 4) estimated volume of the discharge;
    - 5) daily rainfall measurements for the 30 days prior to the discharge event;

- 6) sample analysis results of the discharge; and,
- 7) steps taken to prevent reoccurrence of the discharge.

Timely reporting of an unpermitted discharge does not authorize any such discharge or excuse the Respondent from the requirement in paragraph 9 to apply for an NPDES permit. Also, any reporting of a discharge does not alleviate any further EPA or CDPHE enforcement action.

7. Within fourteen (14) calendar days of receipt of this Order, Respondent shall submit a written report to EPA of the actions the Respondent has taken to remove the manure, waste silage, and/or feed from all roadside ditches along Hwy. 257 and County Road 78 between the facility and the Larimer and Weld Canal.

8. Within thirty (30) calendar days of receipt of this Order, Respondent shall provide to EPA a Best Management Practice (BMP) implementation plan (plan) for review and approval. The plan shall set forth measures that the Respondent will take to prevent the discharge of pollutants from the facility to waters of the United States. The measures must include, but need not be limited to: BMPs to prevent discharges from the Chokepoint, areas of potential or actual discharges from fields subject to land application of wastes, confinement areas, silage piles, or waste storage lagoons. The plan shall also include a schedule for completing implementation of the measures within sixty (60) days of approval of the plan and schedule by EPA. Respondent shall respond to any EPA comments on the plan and schedule within fifteen (15) days of receipt of the comments. Upon approval by the EPA, the schedule will be incorporated into this Order as an enforceable requirement.

9. Unless Respondent can completely demonstrate that no further discharges will occur from the facility to waters of the United States, Respondent shall within ninety (90) days of receipt of this Order, submit a complete application for an NPDES permit to CDPHE. However, if the facility discharges any agricultural waste or other pollutant(s) to any water of the United States, Respondent shall submit this application to CDPHE no later than thirty (30) days after such discharge. The application must include a site-specific Nutrient Management Plan (NMP) that meets the requirement of 40 C.F.R. § 122.42(e).

10. Respondent shall provide each notification or report required by this Order, and a copy of the permit application referenced in paragraph 9, above, to the following:

Seth Draper  
U.S. Environmental Protection Agency, Region 8  
1595 Wynkoop St.  
Denver, CO 80202-1129  
Draper.seth@epa.gov  
Phone: 303-312-6763

and

Phyllis Woodford  
Office of Environmental Integration and Sustainability  
Environmental Agriculture Program  
Colorado Department of Public Health and Environment  
4300 Cherry Creek Drive South  
Denver, CO 80246-1530  
Phyllis.woodford@state.co.us  
Phone: 303-692-2978

11. Respondent shall submit to EPA and CDPHE monthly reports of its efforts to achieve compliance with this Order, postmarked by the 10<sup>th</sup> day of every month, until EPA or CDPHE notifies the Respondent, in writing, that it no longer requires such reports. Each report shall include an update of the progress of the plan required by Par. 8 of this Order and local rainfall amounts for the previous month, as well as copies of all monitoring logs and records required by this Order.

12. Respondent shall allow access to the facility by any authorized representatives of EPA and the CDPHE, including but not limited to any of the agencies' contractors, upon proper presentation of credentials, to the facility and to records relevant to this Order for the following purposes:

- a. To inspect and monitor progress of the activities required by this Order;
- b. To inspect and monitor compliance with this Order; and
- c. To verify and evaluate data and other information submitted to EPA.

13. This Order shall in no way limit or otherwise affect EPA's authority, or the authority of any other governmental agency, to enter the facility, conduct inspections, have access to records, issue notices and orders for enforcement, compliance, or abatement purposes, or monitor compliance pursuant to any statute, regulation, permit, or court order.

14. Compliance with the terms and conditions of this Order shall not be construed to relieve Respondent of its obligation to comply with any applicable Federal, state, or local law or regulation.

15. Section 309(d) of the Act, 33 U.S.C. § 1319(d), as adjusted for inflation by 40 C.F.R. part 19, authorizes civil penalties of up to \$32,500 per day for each violation which occurred from March 15, 2004, through January 12, 2009, and \$37,500 per day for each violation thereafter of § 301 of the Act, 33 U.S.C. § 1311, or of any order issued by EPA under § 309(a) of the Act, 33

U.S.C. § 1319(a), including this Order. Additionally, § 309(g) of the Act, 33 U.S.C. § 1319(g), authorizes EPA to impose administrative penalties for violations of the Act. Further, § 309(c) of the Act, 33 U.S.C. § 1319(c), authorizes fines and imprisonment for willful or negligent violations of the Act. Issuance of this Order shall not be deemed an election by the United States to forego any civil or criminal action to seek penalties, fines, or other appropriate relief under the Act for violations giving rise to this Order.

16. Issuance of this Order shall not be deemed an election by the United States to forego any civil or criminal action to seek penalties, fines, or other appropriate relief under the Act for violations giving rise to this Order.

17. This Order shall be effective upon receipt by Respondent.

DATED this 16th day of September, 2010.



Andrew M. Gaydosh  
Assistant Regional Administrator  
Office of Enforcement, Compliance, and  
Environmental Justice



## ANIMAL FEEDING OPERATION INSPECTION REPORT

**Lead Inspector:** Seth Draper (EPA)  
**2<sup>nd</sup> Inspector:** Jennifer Ferrando (TetraTech), Phyllis Woodford (CDPHE)  
**Date:** 4/22/10  
**Arrival Time:** 9:30am  
**Departure Time:** 12:20pm  
**Weather conditions:** Overcast/Rain  
**Lat/Long information:** 40.566764, -104.907564

### I. GENERAL INFORMATION

Facility Info:

Name: Cactus Hill Ranch Company  
 Address: 38990 Hwy 257, Fort Collins, CO  
           80524  
 Phone: 303-686-2215  
 Fax: 303-686-5851

Owner Info (possibly parent corporation):

Name: Same as facility info  
 Mailing Address:  
 Phone:  
 Fax:

Operator Info (if different from Owner):

Name: Nels Nelson  
 Mailing Address:  
 Phone: **Same As Above**  
 Fax:

Env. Consultant Info:

Name: Dave Rau  
 Mailing Address: Nels Nelson did not know  
 address.  
 Phone: 303-225-0688  
 Fax:

Name/position of individual to who credentials presented: Nels Nelson, AJ Nelson

### II. FACILITY OPERATION INFORMATION

1. What type of operation is the facility?

<input type="checkbox"/> Dairy Cattle	<input type="checkbox"/> Turkeys	<input type="checkbox"/> Livestock Market
<input type="checkbox"/> Beef Cattle	<input type="checkbox"/> Swine	<input type="checkbox"/> Racetrack/Rodeo
<input type="checkbox"/> Chickens	<input type="checkbox"/> Horses	<input checked="" type="checkbox"/> Other (Sheep)

2. How many and what type of animals are present?

	<u>Currently present</u>	<u>Capacity</u>
<input type="checkbox"/> Dairy Cattle (milking and dry)	No. of animals _____	No. of animals _____
<input type="checkbox"/> Swine (Over 55 lbs.)	No. of animals _____	No. of animals _____
<input checked="" type="checkbox"/> Beef Cattle	No. of animals <u>200*</u>	No. of animals <500*
<input type="checkbox"/> Horses	No. of animals _____	No. of animals _____
<input type="checkbox"/> Sheep and/or Lambs	No. of animals _____	No. of animals _____
<input type="checkbox"/> Chickens	No. of animals _____	No. of animals _____
<input type="checkbox"/> Turkeys	No. of animals _____	No. of animals _____
<input checked="" type="checkbox"/> Other (Sheep)	No. of animals <u>~11,000</u>	No. of animals <u>75,000</u>

\*Nels Nelson operates a beef feedlot ~200 yards to the west of the Cactus Hill Ranch facility. This location has been in operation by Nels Nelson from about 2002. The facility is owned by City of Thornton and Nels feeds about 200 cattle onsite.

3. Approximate number of days animals are stabled/confined and fed/maintained over any 12-month period (provide source of the information)  
The Cactus Hill Ranch Company has animals onsite 12-months a year. 9 months of the year the facility operates with about 20,000 sheep onsite. The facility operates near capacity the remaining portion of the year.
4. How long has the facility been in operation at this location?  
The facility has been in operation since the 1920s.
5. Is there another facility under common ownership or management located adjacent to this one? If so, does it share a common area or system for waste disposal?  
Yes, there is a beef feedlot about ¼ mile to the west of Cactus Hill. The facility operator, Nels Nelson, stated that they have not spread the manure from the beef feedlot facility for about 10 years.
6. Did the facility submit an annual report to CDPHE?  
No, Cactus Hill Ranch Company currently operates as an unpermitted CAFO.
7. Is the facility located near surface water?  X  Y   N  
Proximity of surface water  ~1 Mile downgradient of Cactus Hill  
Name of surface water:  Larimer and Weld Canal/Eaton Canal
8. What is the 25-year, 24-hour rainfall amount for this location?  
Nels Nelson did not know the rainfall amount. EPA has reviewed the isometric maps from NOAA and it appears that this facility falls between the 3.0-3.4 inches isometric lines.
9. What is the Chronic Storm amount for this location?  
Unknown
10. How are the animals watered? Is there overflow, and where does it go?  
The animals are watered via a gravity flow watering system. The facility directs the excess drinking water to the excess drinking water pond in the southwest corner of the facility.
11. Is water used for dust control? Is it fresh water or lagoon water?  
The facility does use water for dust control. The facility primarily uses the excess drinking water pond. However, Cactus Hill Ranch will use lagoon water when the excess drinking water pond is dry.
12. Are daily inspections of water lines, including drinking water or cooling water lines, performed?  
Daily inspections are performed yet not documented. When one waterer is damaged the rest of the water lines do not flow, creating a situation where animals are without water.

13. How are the animals fed? Where is feed stored? Can feed enter surface water?  
The animals are fed in a bunk style. The feed is stored on the north end of the facility. When water is flowing overland the feed can flow downgradient through a series of conveyance structures. Feed and manure were observed on both sides of the roadside ditch along Hwy 257. The feed storage area is indicated on the aerial map.
14. How is process generated wastewater, such as flush water from a dairy and open lot stormwater that has come into contact with manure, feed, bedding, etc., handled?  
The facility's production wastewater is directed to the southwest corner of the facility. This water is run through a series of settling ponds that are in place throughout the facility.  
It is unclear how the water enters the lagoon. It appears that once the wastewater has reached the southwest corner it is collected in the excess drinking water pond or the settling pond on the east side of the lagoon. The collected wastewater is then pumped into the lagoon. The outlet pipe to the lagoon is show in photo 80 and 81.  
It is at this southwest corner of the facility where a chokepoint seems to have been created. The pictures illustrate this chokepoint and water is shown spilling out over the access road at the southwest corner of the facility. The water spills into a roadside ditch that flows both across the road and south along Hwy. 257. This open lot stormwater contains manure, feed, and bedding materials.

### III. CONFINEMENT

1. Describe the types of confinement:  
 free stall barns  
 sheltered or limited shelter dirt lots  
 paved lots  
 dirt open lots.  
 swine houses  
 other
2. Are any crops, vegetation, forage growth, or post-harvest residues sustained in the normal growing season over any portion of the lot or facility where animals are kept?(provide source of this information).  
No, the operator stated that when the pens do not contain animals they are cleaned out and regraded.
3. Do the animals enter/or cross surface water (e.g., rivers, streams, canals) on a regular basis?  
No
4. Were animals observed in surface water?  
No.
5. How many feedlots does the owner have?  
The owner operates two feedlots, Cactus Hill Ranch Company and a beef feedlot ¼ mile west from the facility entrance.
6. Is there any other location where animals are confined for more than 45 days in a year?  
Yes, the beef feedlot to the west of the facility contains animals >45 days a year.

#### IV. WASTE MANAGEMENT

1. Describe the types of waste handling used:  
 direct spreading in solid form  
 slotted floor with lagoon or pit  
 single or multi-cell lagoon  
 aerated lagoon  
 land application of liquid manure  
 spray irrigation, contractor disposal  
 other
  
2. Waste storage lagoon:  Y  N  
How many: 3  
Capacity: 34 acre-feet  
Date constructed: 1970, refer to the CDPHE groundwater report for further information regarding the lagoons onsite.  
Date improvements made to lagoon(s): Nels Nelson stated that no improvements were made to the pond since the pond was constructed, ~1970  
How dimensions were obtained by inspector: Nels Nelson  
Gage to measure freeboard present? Yes, there are two gauges, one to measure the height of the water and one to determine the amount of freeboard present.  
Are lagoons lined? The lagoon was lined in 1970 when it was constructed  
Is clean water diverted around the animal containment area? The facility is generally located along a ridge, there is limited clean water run-on.  
Will all wastewater flow into the lagoons? No, a portion of the facility wastewater flowed across the access road along Hwy 257.
  
3. Are impoundments and tanks for production areas designed and constructed so they are capable of storing, at a minimum, the volume of all liquid manure and process water, including the runoff from a 25-year, 24-hour Storm or Chronic Storm, whichever is greater?  
The wastewater lagoon is currently being evaluated to determine the 25-year, 24-hour storm volume needed to contain the water. The drinking water pond did not contain a freeboard gauge.
  
4. Is 2 feet of freeboard maintained in all impoundments and tanks?  
At the time of inspection, it appeared that 2 feet of freeboard was present in the wastewater pond. However, the wastewater lagoon is currently being evaluated by the Cactus Hill's Environmental Consultant to determine where to place the gauge to determine freeboard. The water level on the excess drinking water pond could not be determined due to the lack of a freeboard gauge.

5. Are depth markers installed in all impoundments and storage tanks to indicate the design volume and the minimum capacity necessary to contain the 25-year, 24-hour Storm or Chronic Storm, whichever is greater, and to clearly indicate the 2-foot freeboard elevation?

The wastewater pond has two depth markers. One depth marker shows the amount of wastewater contained in the pond. There is no 25-year, 24-hour Storm mark on the wastewater elevation marker. The second marker is placed upside down on the pump structure. This is used as freeboard level marker. The wastewater pond is currently being evaluated by Paragon to determine the accurate 25-year, 24-hour storm holding capacity.

6. Do all impoundments have a spillway designed to prevent erosion of the structural integrity of the impoundment (unless exempted)?

No

7. Are weekly inspections of impoundments and tanks, including the recording of wastewater levels, performed?

The facility operator is recording the freeboard level on a bi-monthly basis for the wastewater lagoon. The facility also documents the amount of precipitation received.

8. How is manure stored?

The facility composts the manure in the north central portion of the facility.

9. Does the facility sell/give away manure? If so, what records are kept?

The facility stated that they do not sell or give away manure. However, the facility has signage along Hwy 257 that says they will sell composted sheep manure.

For transfers to third parties are the following records kept:

The most current nutrient analysis provided to the recipient? Unknown

The date and approximate amount transferred? Unknown

The name and address of the recipient(s)? Unknown

11. How are mortalities handled?

The facility uses a truck daily to dump mortalities off at the landfill ~5 miles east of the facility.

12. Are structures used to divert clean water from running on to feedlots, holding pens, manure and process water storage systems, manure stockpiles, and composting areas designed, constructed, and maintained such that they can carry the flow from a 25-year, 24-hour storm?

There is limited clean water run-on.

13. Are weekly inspections of all storm water run-on diversion devices, runoff diversion structures, animal waste storage structures, and devices channeling process water to impoundments or tanks performed?

The operator is recording the wastewater lagoon water levels.

14. Are impoundments, tanks, manure stockpiles, or composting areas located within a 100-year floodplain? If so, are they protected from inundation and damage from 100-year or smaller flood events?

FEMA floodplain maps appeared to show the facility was not within a 100-year floodplain.

#### IV. LAND APPLICATION

1. If waste is land applied:

Does the facility own or control the land? Yes

What crops are grown? The facility has an alfalfa and corn rotation.

How many acres? ~1000 acres.

Are soil and/or manure analyses done? Yes,

How often? The facility performs annual soil and manure analysis.

What application records are kept?

Cactus Hill Ranch Company keeps soil analysis, manure analysis, and land application records. The facility uses the soil sampling records to determine the amount of manure to apply. The soil, manure, and land application records are shown in the photos of the documents.

2. For flood irrigation: Are tail water facilities used? Is there adequate capacity to retain all wastewater runoff?

No, the facility does not use tail water facilities to contain their overland flow runoff.

The fields that receive flood irrigation are documented in red in the aerial photo. Most of the fields generally drain to south and are intercepted by other fields, however, the angle field drains back into the Larimer County Canal.

3. Are the following records maintained for land application sites:

- a. Expected crop yields? Yes
- b. The date(s) manure or process water is applied to each land application site? The dates are defined; the type of manure has not been defined.
- c. The amount of precipitation received at the time of land application and for 24 hours prior to and following application? Yes, Cactus Hill Ranch Company keeps the record of the amount of precipitation it received both 24 hours prior and after land application of manure.
- d. Test methods used to sample and analyze manure, process water, and soil? Methods not defined in documents reviewed.
- e. Results from manure, process water, and soil sampling and analysis? The dry manure and soil have been sampled. The wastewater sample was not included in the documents reviewed.
- f. Explanations of the basis for determining manure and process water application rates? No explanations for determining application rates.

- g. Calculations showing the total nitrogen and phosphorus that will be applied to each land application site?  
The calculations are not included in the documents.
- h. The total amount of nitrogen and phosphorus actually applied to each land application site, including documentation of calculations?  
The total amount is defined, the calculations are not included.
- i. The method used to apply the manure and wastewater?  
The method has not been defined.
- j. Dates of manure application equipment inspections?  
Nels Nelson has included a calibration record of the sprinkler on field No.1. The record has not been dated.

## V. NUTRIENT MANAGEMENT PLAN

- 1. Is there a site-specific nutrient management plan (i.e., land application records) kept on-site? The facility is not permitted, a facility management plan (FMP) is required by Colorado Regulation 81.  
Date developed or last revised? The facility is currently updating the FMP being developed for Cactus Hill Ranch.

## VI. DISCHARGE INFORMATION

- 1. Can pollutants from the disposal of wastes and wastewater enter a surface water, drybed, ditch, canal, etc?  
The facility has a chokepoint in its designed process water management. The chokepoint was observed discharging into a roadside ditch. This ditch had remnants of feed and manure along its banks. The discharge flowed from the southwest corner of the facility, under Hwy 257, and then through a field to the Larimer and Weld Canal.
- 2. Name the surface water, drybed, ditch, canal, etc.  
Larimer and Weld Canal whose names changes to Eaton Canal just past Hwy. 257.  
Describe how the discharge may occur.  
The facility's overland flow process water encounters a chokepoint which overwhelms the facility designed conveyance structure. The water is discharged at the access road next to the excess drinking water pond. This water then flows either south along Hwy. 257 in a roadside ditch or under the road via a concrete culvert and then south along Hwy. 257 in a roadside ditch. This is depicted in the overview photos, Chokepoint Composite, Collection Composite, and Ditch to Larimer and Weld Canal/Eaton Canal Composite. EPA also consulted the local Windsor CO rain gauge data obtained from [www.wunderground.com](http://www.wunderground.com) and on April 21<sup>st</sup>, Windsor received .43 inches of rainfall and on April 22, Windsor received .73 inches of rainfall.
- 3. If a past overflow did occur, are there records of the date, time, and estimated volume of the overflow?  
None reported by the facility.

4. Are there records of discharge monitoring for all past discharges?  
Yes, the facility keeps a record of discharges. None have been reported by the facility.

If there is evidence of a discharge or a discharge was observed, obtain answers to the following and indicate how the information was obtained. Also, take a sample from the source of the discharge and take photographs of the discharge or evidence of the discharge.

5. List any discharges which have occurred at the facility and describe how and why the discharge occurred (e.g., failure of manure-storage structure, 25-year, 24-hour storm)

Discharges	How Discharge Occurred	Why Discharge Occurred
4/22/2010	Conveyance structure overwhelmed, the wastewater flowed out along a roadside ditch on Hwy 257 and into Larimer and Weld Canal/Eaton Canal.	The facility's wastewater conveyance is not adequate to direct all of the water moving through the facility.

6. Did any of the discharges occur through a:
- Y  N man-made ditch
  - Y  N flushing system
  - Y  N similar man-made device (i.e., man-made shaping or grading or man-made alteration to property, trough)

7. Verify the type ( ditch, canal, stream, river, drybed) and name of the water body receiving the discharge:  
Larimer and Weld Canal whose names changes to Eaton Canal just past Hwy. 257.

8. Was the discharge:
- |                         |   |                             |
|-------------------------|---|-----------------------------|
| Process-Generated Water | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Raw Animal Waste        | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Rain or snow runoff     | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |

If another type of discharge, please describe:

The facility flood irrigates the fields depicted in the aerial photo below. The Angle Field slopes to the Larimer County Canal. If the facility applies manure and then flood irrigates, the facility could discharge the land application manure to the Larimer County Canal.

## V. WATER QUALITY ASSESSMENT

1. Does a surface water, drybed, ditch, canal, etc., pass over, across, through, or along side the area where the animals are confined?  Y  N

2. If the answer to #1 is no, what is the distance from the area where a discharge could occur to a surface water, drybed, ditch, canal, etc.?  
The path in a straight line is about .67 miles; overland flow is about .88 miles.
3. If there is a buffer or diversion structure to prevent waste from entering surface water, describe the condition of the buffer or diversion structure.  
No, the ditch empties into the Larimer and Weld Canal.
4. Describe where the surface water originates and where it flows once it has received a discharge.  
The facility directs its stormwater/process water to the southwest corner of the facility. The water flows to a central conveyance structure, from which process water appears to be pumped to the wastewater containment pond. The water reached this conveyance structure and then flowed out of the facility and into the roadside ditch. The water then flowed to the Larimer and Weld Canal.
5. Describe other animal operations in the immediate vicinity and their proximity to the same or other surface waters.  
N/A
6. Provide information on the nearby surface water, such as uses, known impairment, etc.  
Unknown

## **VI. OTHER QUESTIONS TO CONSIDER**

1. Are waste oil containers labeled properly?  
Yes, oil containers are labeled.
2. Does the facility have a total storage capacity of fuel and oil greater than 1,320 gallons?  
Yes, the facility has more than 1,320 gallons.  
The facility has one 10,000 gallon container, the facility has a 500 gallon waste oil trailer, and a 500 gallon unleaded gas container.
3. Do fuel tanks have spill containment structures?  
No, there are no secondary containment structures for the fuel storage containers.
4. Does the facility have a SPCC plan?  
No, an SPCC plan has not been developed for this facility
5. Where and how is vehicle maintenance and washing done?  
The facility maintains its vehicles onsite. The waste oil is placed inside the waste oil trailer. A business comes and takes the waste oil.
6. Are there any drinking water wells nearby?  
No

## VII. RECOMMENDATIONS

Concentrated Animal Feeding Operation (CAFO) Inspection  
 Cactus Hill Ranch, Windsor CO  
 April 22, 2010  
 Findings and Required Corrective Actions

Findings	Required Corrective Actions
<p>1. Cactus Hill Ranch had an active discharge from the facility to a roadside ditch along Hwy. 257 during the inspection. Evidence that the discharge reached Larimer and Weld Canal is shown in the Ditch to Larimer and Weld Canal/Eaton Canal Composite photo.</p>	<p>1. Cactus Hill must cease all discharges from the facility.</p> <p>Provide EPA and CDPHE a response of the steps taken to correct the problem identified and stop all discharges from the Cactus Hill facility. Please provide EPA and CDPHE a written explanation and photo documentation of the corrections you have made.</p> <p><b>This required corrective action must be accomplished in thirty (30) days following the receipt of this report.</b></p>
<p>2. The CAFO had 11,000 animals confined during the inspection and does not have a CAFO permit.</p>	<p>2. It has a capacity of 75,000 animals which exceeds the threshold of 10,000 sheep definition of a Large CAFO. The Cactus Hill Ranch must contact the Colorado Department of Public Health and the Environment (CDPHE) to discuss whether the CDPHE would recommend application for a CAFO permit. Please provide EPA and CDPHE a written explanation of the corrections you have made</p> <p><b>This required corrective action must be accomplished in thirty (30) days following the receipt of this report.</b></p>
<p>3. A blue pipe was seen at the discharge location. It appears this pipe discharges to the ditch along Hwy. 257. The blue pipe can be seen in the Chokepoint Composite photo as well as Photos (123, 125, and 129)</p>	<p>3. Cactus Hill Ranch must describe, in detail, the purpose of the pipe. This must include the origin and the constituents discharged from the pipe.</p> <p>Provide EPA and CDPHE a description of the function served by the pipe photographed by the EPA inspector. This description should include a schematic of the origin of the pipe, the inflow to the pipe, the outflow, and a description of the usual constituents that come out of the pipe.</p> <p><b>This required corrective action must be accomplished in thirty (30) days following the receipt of this report.</b></p>

Concentrated Animal Feeding Operation (CAFO) Inspection  
Cactus Hill Ranch, Windsor CO  
April 22, 2010  
Findings and Recommended Corrective Actions

Findings	Recommended Corrective Actions
1. Cactus Hill Ranch had greater than 1,320 gallons of fuel and oil stored onsite.	1. Cactus Hill should consult the SPCC guidance enclosed in the inspection report packet to determine whether it needs to develop and SPCC plan.  Provide EPA and CDPHE a response of the steps taken to address the fuel and oil stored onsite. Please provide EPA and CDPHE a written explanation and photo documentation of the corrections you have made.  <b>This recommended corrective action should be accomplished in thirty (30) days following the receipt of this report.</b>

### VIII. FACILITY DIAGRAM

Attach a sketch of the facility layout, including pertinent information such as surface water, discharge location, buildings, fencing, etc.