

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION FACTSHEET (Pursuant to NAC 445A.236)

PERMITTEE NAME: Broken Arrow Horse & Cattle Co. LLC
P.O. Box 1475
Fallon, Nevada 89407

PERMIT NUMBER: NV0024091

LOCATION: Broken Arrow Horse & Cattle Co. LLC
5676 Indian Lakes Road
Fallon, Churchill County, Nevada 89406

FLOW: Authorized discharges would be only those which result from a **25-year, 24-hour storm event**.

PUBLIC WATER SUPPLY: There are no public supply wells within one (1) mile of this facility.

GENERAL: The Applicant has applied for a new National Pollutant Discharge Elimination System (NPDES) Permit – NV0024091, to discharge manure and/or storm water from its Broken Arrow Horse & Cattle Co. LLC (BAHCC) facility resulting from storm events in excess of a 25-year, 24-hour storm event. The facility is located in southeast Fallon, Nevada.

BAHCC is a wild horse holding, adoption preparation center and has requested a maximum operational capacity to tend to 3,000 horses; this facility has a holding capacity higher than the requested 3,000 horses. This facility is defined as a concentrated animal feeding operation (CAFO) because the facility confines at least 500 horses for 45 days or more in a 12-month period in an area devoid of vegetation during the normal growing season.

BAHCC is bordered on its North side by large drainage ditches which are part of the Carson River, Stillwater Marsh and Truckee/Carson Irrigation District at Fallon, Nevada. In order to prevent manure pollution, BAHCC will not store manure within 30 feet of any water way as part of its operation.

Manure from the corrals will be scraped November thru March and will be given out to BAHCC neighbors. April thru October, corrals will be scraped towards the center of the facility to provide winter bedding for the horses; excess manure will be transferred to the

storage area as needed.

This facility does not propose to land apply any nutrients – thus land application is not allowed under permit conditions. BAHCC intends to transfer all its excess manure to other parties. Manure must be tested as established in the permit prior to its transfer to its neighbors; BAHCC must comply with all specified manure testing and transfer conditions.

As per BAHCC's Animal Mortality Management Plan (AMMP), this facility expects an annual mortality rate of 50 to 100 animals; dead animals will be transferred to a Reno rendering company or the City of Reno general dump for disposal.

This CAFO facility was designed to contain all production area runoff resulting from the 25-year, 24-hour storm event. To prevent rain run-off, the facility was designed with a 1.0 % slope. The 25-year, 24-hour storm event for this area is approximately 1.92 inches of water; the annual precipitation in this area is less than 4.8 inches of water. BAHCC is enclosed by berms designed to hold, without a discharge, storm water produced by a 25-year, 24-hour storm event plus a 20% safety factor; the berms will prevent run-off from the corrals areas to adjacent lands.

This facility does not produce any process wastewater; the water used in this facility is for horse consumption. Under permit conditions, well water may be applied to the corrals for dust control measures as defined in the permit.

FLOW: The proposed permit would only authorize the discharge of an overflow of storm water resulting from storm events that exceed a 25-year, 24-hour storm event.

RECEIVING WATER CHARACTERISTICS: Discharges from BAHCC would flow to mostly ground Waters of the State of Nevada generally away from the Truckee/Carson Irrigation District at Fallon and possibly towards the Stillwater Marsh.

Groundwater is normally encountered between 6 and 13 feet below ground surface; flow is generally to the southeast. Groundwater analysis in the general area has shown poor water quality for the shallow aquifer with elevated total dissolved solids, pH and nitrogen. Groundwater quality monitoring will not be required due to the location and lack of process water production. The only water utilized at this facility is for animal consumption

PROPOSED OPERATIONAL LIMITATIONS:

Discharge Event Monitoring: Discharge water samples taken in compliance with the monitoring specified below in **Table 1: Discharge Event Monitoring** shall be taken from:

- a. Storm-related discharge from release point – Outfall – O001.

Table 1: Discharge Event Monitoring

Parameters	Discharge Limitations	Monitoring Requirements		
		Sample Location	Measuring Frequency	Sample Type
Volume of Discharge (MG) ¹	Monitor & Report	a	Each discharge ²	Estimate
pH (standard units) ³	Monitor & Report	a	Each discharge ²	Discrete
Chlorides (mg/L, mg/kg) ³	Monitor & Report	a	Each discharge ²	Discrete
Total Dissolved Solids (mg/L) ³	Monitor & Report	a	Each discharge ²	Discrete
Total Suspended Solids (mg/L) ³	Monitor & Report	a	Each discharge ²	Discrete
5-day Biological Oxygen Demand (mg/L) ³	Monitor & Report	a	Each discharge ²	Discrete
Total Phosphorus - P (mg/L) ³	Monitor & Report	a	Each discharge ²	Discrete
Total Kjeldahl Nitrogen-TKN(mg/L) ³	Monitor & Report	a	Each discharge ²	Discrete
Nitrate -N (mg/L) ³	Monitor & Report	a	Each discharge ²	Discrete
Ammonia -N (mg/L) ³	Monitor & Report	a	Each discharge ²	Discrete
Fecal Coliform (CFU or MPN/100 mL)	Monitor & Report	a	Each discharge ²	Discrete

Notes:

- Storm water discharges is precipitation dependent and should be characterized when sufficient volume is available for sampling; report in the appropriate **DMR**.
- The Permittee shall collect the sample within 30 minutes of the first knowledge of the discharge. If sampling in that period is inappropriate due to dangerous weather conditions, collect the sample as soon as possible after suitable conditions occur, and document the reason for delay. Also, report the date and time of each discharge along with sample location.
- Testing protocol in case of a discharge event - the Permittee is only authorized discharges from storm events in excess of a **25-year, 24-hour storm event**.

mg/L: Milligram per liter.
MG: Million Gallons
mL: Milliliter
MNP: Most probable number

-P: As phosphorus.
-N: As nitrogen.
CFU: Coliform forming units

Manure Sampling: Manure shall be analyzed for nitrogen and phosphorus content prior to its transfer to the approved composting operation. Test results shall be provided to the receiving parties at the time of the actual manure transfer.

Manure Testing & Transfer Protocol: Manure samples taken in compliance with the monitoring and nutrients transfer requirements specified below in **Table 2: Manure Testing & Transfer Protocol**, shall be taken from:

- Manure – at main collection point – Monitoring Point - MP001;
- Main Corrals – Monitoring Point - MP002;

Table 2: Manure Testing & Transfer Protocol

Parameters	Discharge Limitations	Monitoring Requirements		
		Sample Location	Measuring Frequency	Sample Type
Number and Type of Animals	Monitor & Report ¹	b	Monthly	Count
Manure Stored On-site (tons)	Monitor & Report ¹	a & b	Monthly	Estimate ²
Material Transferred to Other Parties (tons) ^{2,3}	Monitor & Report ¹	a	Monthly	Estimate ²
Total Phosphorus - P (mg/L, mg/kg) ^{32,3}	Monitor & Report ¹	a & b	Annually ^{1,3}	Composite
Total Nitrogen – N (mg/L, mg/Kg) ^{2,3}	Monitor & Report ¹	a & b	Annually ^{1,3}	Composite

Notes:

1. Characterizations shall be conducted in December for manure and reported in the 4th Quarter Discharge Monitoring Report (DMR).
2. Tons - Based on truck loads or similar.
3. Manure transfer shall be done under conditions established in below.

-N:	As nitrogen.	mL:	Milliliter.
-P:	As phosphorus.	mg/kg:	Milligrams per kilogram.

Manure Transfer Requirements: If the manure is sold, given away, or otherwise transferred to another party, the Permittee shall comply with the following conditions:

- a. Maintain records showing the date and amount of manure and/or process water that leaves the permitted facility;
- b. Record the name and address of the recipient;
- c. Provide the recipient(s) with representative information that includes the most recent analysis of the nutrient content of the manure;
- d. These records are to be retained on-site, for a period of at least five years, and be submitted to the Division upon request;
- e. This part applies to manure that may be transferred to any facility;
- f. This part does not apply to solid manure that may be transferred to other parties for personal use in volumes of five (5) cubic yard or less.

Schedule of Compliance: The Permittee shall implement and comply with the provisions of the schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications which the Administrator may make in approving the schedule of compliance.

- a. The Permittee shall achieve and/or maintain compliance with all effluent limitations

upon issuance of the permit;

- b. By **October 30th, 2011** (60 Days), the Permittee shall submit to NDEP an updated Operations & Maintenance manual (O & M) for this facility;

RATIONALE FOR PERMIT REQUIREMENTS:

Discharge Limitations are being proposed to ensure that the Applicant has appropriate manure data to comply with the manure transfer requirements and to determine any potential impact to Waters of the U.S. that may occur in response to a discharge.

Manure nutrient data, nitrogen and phosphorus, is required for the proper beneficial use of the manure; used primarily to determine manure application rates. The concentration of chlorides in the manure may determine, or at least be a factor in determining, the beneficial uses of this material.

Monitoring of the nitrogen species, total phosphorus, pH, chlorides, total dissolved solids, total suspended solids, and fecal coliform of the discharge is required because these are the parameters most likely to be present in the discharge. These parameters are not limited because NDEP has determined there is no reasonable potential for the discharge to cause or contribute to a violation of water quality standards

Nutrient Management Plan (NMP): Submittal of a NMP is not required by this permit because this facility will transfer 100% of their manure to other parties; BAHCC will not be authorized to land apply any manure or nutrients. Although a NMP is not required, the National Resource Conservation Service (NRCS) - Fallon Nevada office - prepared a NMP for this facility in order to document pertinent operational sections which are normally part of the NMP. Some permit requirements include the inclusion of applicable sections that are normally included in NMPs.

Containment of manure and feed storage area run-offs are part of the production area operation requirements. Providing the nutrient analysis data to anyone receiving manure are included in the proposed permit. The Division does not have authority to regulate manure transferred to other parties, unless the manure is used in an activity identified by the Administrator as a significant contributor of pollution or the manure is composted.

OPERATION REQUIREMENTS:

The Permittee shall operate the facility in compliance with permit provisions and requirements and in accordance with the Division approved Operations and Maintenance Manual (O & M Manual). The O & M Manual shall contain information required to comply with this permit.

PROPOSED DETERMINATION:

The division has made the tentative determination to issue the proposed permit, under the provisions prescribed, for a 5-year period. Under NAC 445A.232, this permit is classified as a permit for a concentrated animal feeding operation that does not discharge – CAFO

whose animal holding area is five (5) acres or more.

PROCEDURES FOR PUBLIC COMMENT:

The Notice of the Division's intent to issue a discharge permit to the applicant, subject to the conditions contained within the permit is being sent to the **Reno Gazette Journal & Lahontan Valley News** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of thirty (30) days following the date of publication of the public notice in the newspaper. The comment period can be extended at the discretion of the Administrator. The deadline date and time by which all comments are to be submitted (via postmarked mail or time-stamped faxes, e-mails, or hand-delivered items) to the Division is **August, 29th, 2011 by 5:00 P.M.** A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238. The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

The application and proposed permit on file and may be copied or copies may be obtained by writing or by calling **Alexi Lanza, P.E.**, Bureau of Water Pollution Control at **(775)687-9468**; fax: **(775)687-4684**; or email: alanza@ndep.nv.gov. This notice and the fact sheet can be viewed online at the following web address: <http://ndep.nv.gov/admin/public.htm>

Prepared by:

Alexi Lanza, P.E.

Nevada Division of Environmental Protection
Bureau of Water Pollution Control – Permits Branch
June - 2011.