

## **Facility Description**

The existing facility consists of a circular set of pens that are surrounded by a feed road. The pens are at the high point of the area and all waste and runoff flows down towards the feed road. This area covers approximately 4 acres. The area outside the pens, road and basin is grassland that is currently cut for hay.

Runoff from pens drains to a sediment basin that collects runoff outside the road. The sediment basin has been recently cleaned out and had solids removed. The runoff that is collected in the sediment basin drains to the east side to a retention control structure.

The Retention Control Structure (RCS) is approximately 2.5 acres with an unknown depth and holding capacity. According to Mrs. Moyer, the RCS has not had any liquid stored in it which suggests that process wastewater is either minimal or not reaching the RCS. The current owners did not design or build this facility and do not have any documentation of engineering design or liner certification on the existing structure.

## **Permitting requirements and options**

KDHE requires all facilities with over 300 animal units to register. Facilities that are deemed to be a significant pollution potential are required to receive a permit. Facilities that have permanent control structures used for storing waste are required to have a permit. The facility has the capacity to hold over 300 animal units. The new owner will need to submit a registration(attached) to KDHE with the accompanying \$25 fee.

The new owner will have options on how they will want to proceed with how they wish to operate the facility. If they wish to operate it as it is currently configured, a permit will be needed. The permit application is attached as well. The primary concern with permitting will be the existing RCS. Several trees currently exist in the RCS and will need to be removed. The depth and volume will need to be determined, as well as appropriate operating limits to contain a 25 year, 24-hour rain event. Because there is no documentation of seepage testing, the pond will need to be tested to verify it meets KDHE's

required seepage rate. The facility is not in a designated sensitive groundwater area so the seepage would need to be less than  $\frac{1}{4}$  inch per day. This testing can be done by soil core testing of liner or whole pond test. I would recommend the new owner contact an engineer or hire a consultant to assist in this process if they choose to go this direction.

Alternately, the facility could utilize the surrounding grassland as a buffer. This would require grading over the sediment basin and removal of the existing RCS. The slopes off the existing pens are directed to concrete channels every other pen. Ideally, the waste would have more widely dispersed runoff from the pens so that sediments could be filtered in grass. Grass buffers need at least 1:1 ratio of pen space to buffer. This area would need to be separated from any grazing animals but could still be used for hay for livestock. We encourage all delineated grass buffer areas be cut for hay to remove nutrients and allow for more to be taken up from vegetation.

Both of these options will require work from the new owner. If they should have any questions, please direct them to myself or others at our office so that we can provide whatever answers we can. In this instance, the new owner will have a choice on how they wish to proceed. KDHE offers no preference of the two options but would need to be made aware when the registration is submitted. If you have need for further clarification, please feel free to reach out.

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