

Emergency Order No. EM 21-01

EMERGENCY ORDER

*Made under section 42.1 of the
Agricultural Operation Practices Act, RSA 2000, c A-7 (AOPA)*

Date Issued: July 9, 2021

Issued by: Karl Ivarson, Inspector, Compliance Division
Natural Resources Conservation Board (NRCB), Lethbridge

Issued to: **Estate of Margaret Josephine Johnson by way of its executors/owners:**

Andrea Christine Davies
Calgary Alberta

and
Carol Elizabeth Booker
Dewinton Alberta

and
Denise Susan Stromness
Bountiful Utah U.S.A.

and
Sharon Lynn Huddle
Calgary Alberta

This is an Emergency Order with respect to a release of manure that may occur and may cause immediate and significant risk to the environment. In particular, the manure involves lands located on the 20 acre parcel defined by the north 660 feet of the westerly 1320 feet of the North East Quarter of Section 10, Township 22, Range 2, West of the 5th Meridian, in Foothills County, in the Province of Alberta.

Background

On June 4, 2021, the combined Alberta Environment and Parks (AE&P)/NRCB call center received a complaint that a previous renter of the above noted property had placed manure over a water well at the same location. The complaint was forwarded to me and I contacted the complainant the same day. On asking the complainant to describe the manure pile they said the renter had pushed manure and hay, from a short distance away, over on top of the old well. I told the complainant I needed to confirm manure and a water well are involved. I advised that I would be out Monday morning to inspect the site.

To find out more back ground information, I contacted the previous renter. He confirmed he had been renting the site up until recently. He said there is no water well at the location in question and that there was no manure involved; rather, an old round bale was placed at the location as it is an old burning pit for old posts, tree branches and debris.

On the morning of June 7, 2021, I called Ms. Huddle, one of the owners of the land, to arrange a site inspection and agreed to meet on site that morning at 10:45 a.m. I met with Ms. Huddle as arranged. Ms. Huddle led me to what appeared to be an old large round hay bale to the east of and down below the hill the residence is on. Ms. Huddle showed me where the hay bale had been prior and was pushed/scraped up and placed on top of the well location. The hay pile included some manure, which appeared to have been caught up by the action of the loader pushing the hay bale across the grazing pasture to the location, picking up and pushing along with the hay, some cow manure pats that were on the ground. Initially I could find no indication of a water well. On digging by hand into east side of the hay/manure pile I located a water well casing and the remains of an old pump under about 0.5m of hay and manure. The well casing was not capped, and was fully open to the hay and manure piled on top. In my view, there was a high probability some hay and possibly some manure would have already fallen down into the well.

I directed Ms. Huddle to immediately cover the water well casing so that no more debris can fall into the well to which she agreed. I also noted what appeared to be some significant subsidence around the well casing, around 0.5m deep or slightly more. This subsidence could also foreseeably allow manure contaminated surface water from what was placed on top of the well and the surrounding pasture into the water well. I took photographs of the well casing, the ground subsidence and the hay pile location. I advised Ms. Huddle that I would call AE&P, (as it is that department's jurisdiction on ground water issues) about the water well and the potential contamination. Before leaving I asked her to ensure the well was going to be covered. She asked if a plastic milk jug taped over the well casing would do for now. I said it would do for now but the well is going to have to be properly decommissioned and capped if it is no longer to be used.

On June 8, 2021 I received several photographs from Ms. Huddle confirming the water well casing was covered with tapped plastic wrap under a plastic jug tapped over the same casing. I spoke with AE&P and update them on the complaint by e-mail. I also wanted to determine if AE&P required their involvement with the complaint.

On June 9, 2021 I received an email from Mr. Rick McClelland with AE&P that stated in part:

- “1. As discussed with Ms. Huddle, would be to place a cap on the water well to minimize any potential impacts to the groundwater aquifer.*
- 2. The family should establish a plan with a water well driller to reclaim the water well since it is no longer in use.*
- 3. From a due diligence perspective, it is advised for Ms. Huddle and her family to obtain potable water samples from this well to assess the water quality. A qualified water well driller may be able to assist with this process. Any contamination discovered would be the responsibility of the landowner to remediate. If contaminants are discovered, it would be advised for Ms. Huddle and her family to retain a qualified environmental consultant to assist with developing a remediation plan. Removal of any waste away*

from the well casing is the responsibility of the landowner. No further action is anticipated to be taken by AEP at this time, so long as the above steps are taken.”

On June 17, 2021 I forwarded Mr. McClelland's email to Sharon Huddle.

On June 21, Ms. Huddle called to provide an update on the manure/hay removal from the water well area. She advised me the estate had not determined to do work/debris removal at the water well site. I advised Ms. Huddle that if this matter is not resolved soon, enforcement action would be forthcoming.

I provided an email to Ms. Huddle on June 24, 2021, (copying Rick McClelland of AE&P), providing a deadline of 4:30 p.m. on June 29, 2021 for the estate to provide me with a plan to resolve the matter.

On July 5, 2021, I emailed Ms. Huddle, asking for an update on the matter as I had not received a response to my email of June 24, 2021. She indicated that challenges with the estate were ongoing.

Opinion and Remediation

For the reasons set out above, I am of the opinion that the presence of manure on top of and around the open water well has likely posed a significant risk to the environment. The ground around the water well casing had subsided by up to 0.5m, providing a potential route for seepage along the well casing into the ground water. The presence of the manure has the potential to contaminate ground water via the open abandoned water well and/or by traveling along the subsided ground around the water well casing. Furthermore, AOPA Standards and Administration Regulation sec. 24(9) prohibits manure, compost or composting materials to be applied within 30m of a water well. While the water well is now capped, it is a temporary measure and will not provide long-term protection that immediate removal of the manure would achieve. A release of manure into the environment may occur, and has likely already occurred. If it occurs, the manure release may cause an immediate and significant risk to the environment.

Regardless of challenges faced by the Estate, removal of the manure and hay in the quickest time possible is necessary to mitigate any further risk of contamination of ground water at the site.

In response to the comments from Mr. McClelland of AE&P (above), I leave these to the attention of the Estate.

For these reasons, and under section 42.1 of the *Agricultural Operation Practices Act*, I consider that the following emergency measures are necessary, and you are hereby ordered to:

1. No later than noon on Monday, July 26, 2021, take immediate action to remove the manure and hay placed on and around the water well to a location more than 30m away and downhill from the water well.
2. No later than noon on Monday, July 26, 2021, seal off the subsiding area around the water well with bentonite or a similar suitable product approved by the NRCB.
3. No later than noon on Monday, July 26, 2021, place a steel cap over the water well casing appropriate for the future use of the well.

4. Written confirmation items #1, #2, and #3 have been completed must be provided to the NRCB no later than 4:30 p.m., July 26, 2021.

The deadlines above may be extended or modified by the NRCB if agreed to by the NRCB in writing.

Please note that, under section 43 of AOPA, all persons named in an emergency order are jointly responsible for carrying out the terms of the order.

CONSEQUENCES OF NON-COMPLIANCE

Under section 42.2 of AOPA:

- If a person to whom an emergency order is issued fails to comply with the emergency order the Board [the NRCB] may take whatever action the Board considers necessary to carry out the terms of the emergency order;
- Costs incurred by the Board under this section are recoverable by the Government in an action in debt against the persons to whom the emergency order was issued.

(Original Signed)

Karl Ivarson
Inspector, Compliance Division
Natural Resources Conservation Board