

**IOWA DEPARTMENT OF NATURAL RESOURCES
FIELD SERVICES AND COMPLIANCE BUREAU
FIELD OFFICE #2 - MASON CITY IOWA**

DATE: June 22, 2020

TO: The Record

FROM: Dan Bratrud *DB*

SUBJECT: **Storm Water Complaint # 28376 Memo**
Rural Iowa Waste Management Association, 20488 M Ave, Eldora,
Hardin County

On June 10, 2020, this office received an anonymous complaint claiming that storm water from the Rural Iowa Waste Management Association (RIWMA) land fill was washing out parts of their crop field. The complainant also sent pictures of areas of the crop field that had obvious gully erosion occurring, however, it should be noted that were not good reference points in most of the pictures. This made it difficult, at best, trying to determine if I was looking at the right areas of the field during the investigation.

On June 12, 2020, I investigated this complaint. Upon arrival I stopped at the office and found no one there but there was a phone number posted to call if this were the case. I contacted Josh Emerson and he came to the office to meet me. I showed Josh the complaint and several of the pictures we had received from the complainant. He said he thought he recognized where a couple of the areas might be but they were difficult to get to. He told me that they had received 4.5" of rain in <48 hours the week prior to my visit so he was not surprised that there would be some washed out areas in the crop fields in the area. He offered to take me around the facility on their Gator ATV.

We drove along the south boundary to the southeast corner of the property where he thought one of the pictures had been taken. I did not observe any erosion occurring in the crop field on the south side of the landfill. We stopped short of the east boundary fence and observed a small settling basin. Looking north I could see that there was a berm along the east fence and the area had been shaped and graded to drain toward the basin. The entire area was well vegetated with brome grass and trees.

We walked out into the edge of the field where I did observe a minor gully area starting in the fence line and continued into a vegetated area in the corner of the crop field. Closer observation revealed a pipe through the berm of the settling basin that was likely causing this. I told Josh that I would recommend installing some rip rap or rerouting the outlet.

We walked north along the east fence line until we reached the top of the hill approximately half way along the east boundary. I did not observe any erosion in the crop field that was being caused by any practices being used by the landfill. I did observe some areas of the crop field where erosion was occurring due soil types and the slope of the land (6-10 percent slope in some areas verified on the USDA Web Soil Survey). These sloped areas could benefit from some improved cropping methods or conservation practices such as vegetated field borders and grassed waterways.

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Josh said we could access the rest of the boundary with the ATV. We drove north through the borrow area in the landfill to the point where we had walked to along the east fence line. We then drove north along the rest of the boundary. I did not observe any areas along the entire east boundary where the landfill was causing any of the erosion occurring on the crop field. The landfill property is shaped, graded and vegetated such that storm water will remain on the property and flow to the settling basins located on the southeast and northeast corners of the property.

On Tuesday June 16, 2020, I talked to Dan Aastrup, RIWMA Manager. We discussed the settling basin in the southeast corner of the property and the possible improvements that could be made to keep the outlet from causing any erosion on the neighboring crop field. Mr. Aastrup agreed to make some improvements in that area once the ground dries out some. He will send me pictures when the improvements are completed. No further action is required at this time.



Field erosion pictures sent in by the complainant. The only reference point is in the picture with the three swine confinement buildings. That is the south border of the field. No gully was observed there the day of this investigation.



Picture of the pipe through the settling basin berm.



Gully erosion in the middle of the field in an area that has a 6-10 percent slope.



Minor erosion along the fence line between the crop field and the landfill. Very sandy sloping ground.



Picture shows a vegetated berm between the crop field and any disturbed area on the landfill property. The east boundary looks like this or wider for the entire length.