

MEMORANDUM

DATE: February 25, 2021
TO: AltEn, LLC.
THRU: Brad Pracheil
FROM: Dane Pauley
RE: NPDES Site Visit, Aerial Photography

FACILITY ID: 84069

On February 23, 2021 at approximately 13:00, I, Dane Pauley, Josh Wilhelm and Alan Aanerud, visited AltEn for a scheduled drone flight over their property. We met with Ken Peterson, at the main office of AltEn. Here we were informed that Scott Tinglehoff was out on the grounds and would not be meeting us. We informed Ken that we were there to conduct aerial photography of the site. Ken was aware of our visit and gave us permission to fly and go wherever we needed on site.

The first and second inspection flights were piloted by Josh Wilhelm at 13:39 and were from the spill site and east. This flight followed the discharge stream east and then south to the corner of 9th street and County Road J. At this corner it was observed pumping of fluid out of unnamed tributary of Clear Creek into pipes running north back to facility. On the return flight we followed the discharge pipe to the north to lagoon 1 on south east side. Video was recorded all along the route.

The third inspection flight was piloted by Dane Pauley at 14:23. This flight included lagoons on north side of creek and wet cake piles on the east side of the property. The fourth inspection flight was at 14:36. It included lagoons 2 and 3 and the wet cake piles on the north west side of the property along County Road 10. The fifth inspection flight was flown at 15:45. This set of flights were of the wet cake piles on the west side and in the center of the property and over the center of the property to the spill site. Video and pictures were taken along the routes.

A total of 5 missions were flown that day covering all parts of AltEn and the creek running south off the property. All flights were recorded in paper flight logs and on the Kittyhawk application. NDEE staff concluded the flights and left AltEn property at approximately 16:15 hours.

Video Log

DJI_0702 – Over digester facing south, then following creek headed east facing east
703 – Excavator
704 – Creek channel headed east, facing east
705 – Creek channel on east side of property, flying south to culvert halfway through Mead Cattle Company yards
706 – From culvert headed south to pumping location at corner of 9th St and County Rd J
707 – Flight following pump location headed north along east side of property to lagoon 3
708 – Southeast corner of Lagoon 3
709 – South side of Mead cattle company lagoons heading east to wet cake piles
710 – Wet cake pile on east side of property, fly around piles
722 – Flight around lagoon 2
734 – Flight around lagoon 1
742 – Wet cake piles on north west side of property, flight starts heading south and around piles
757 – Wet cake piles on north west side of property, flight starts heading north from hoop buildings then east on north side.

Picture Log

DJI_0711, 712, 713 – Overall picture of east wet cake piles
714 – High picture of property from east side looking west
715, 716, 717 – Wet cake pile on east side of property looking west and south
718, 719 – Wet cake piles on east side looking south from north side
720, 721 – Lagoons looking west from east side
723, 724 – Northeast corner of lagoon 2, looking northeast
725 – Lagoon 2 looking west from east side dike



726, 727 – East corner of lagoon 2 and 3
728 – Southeast corner of lagoon 1 looking southeast
729 – Lagoon 1 east side looking west
730 – North corner of lagoon 1 and 2, facing north
731 – Northeast corner of lagoon 1, looking south
732 – Dike between lagoons 1 & 2, looking south
733 – Dike on north side of lagoon 1, looking west
735, 736, 737, 738 – Northeast corner of wet cake piles on the west side of property
739 – Northwest corner of lagoon 1 looking southeast, looking at all lagoons
740, 741, – Northwest corner of wet cake piles on west side of property, looking south next to road
743, 744, 745, 746, 747, 781 – Southeast corner of wet cake piles on the west side of property
748 – Southwest corner of lagoon 1, looking southwest
749 – Area south of lagoon 1, looking south from southwest corner of lagoon 1
750, 768, 769 – Area south of lagoon 1, looking west from southeast corner of lagoon 1
751 – West dike of lagoon 3, looking south
752, 753 – Area south of lagoon 1, looking west
754 – Wet cake piles on west side of property, southeast corner looking west
755 – Southwest corner of west wet cake pile, looking east
756 – Southwest corner of west wet cake pile, looking north
758, 762 – Northeast corner of west wet cake pile, looking south
759, 760, 761, 763 – Northeast corner of west wet cake pile, looking west
764, 765 – Area south of lagoon 1, looking southeast
766, 767 – Area south of lagoon 1, looking south
770 – Area south of lagoon 1, looking west
771 – Area south of lagoon 1, looking north
772 – Emergency lagoon, east side looking southeast
773 – West side on emergency lagoon, looking west
774 – East side of digester, looking west
775, 776 – East side of digester, looking east
777, 778 – East side of digester, looking north and northwest
779 – South of lagoon 1, looking north
780 – South of lagoon 1, looking northeast
782 – Area east of hoop buildings, looking southwest

Attachments

Attachment A – Aerial image of AltEn property.

Date: 2/25/2021

Dane Pauley, Program Specialist







































































































































