

SUPERFUND and ESRI Collector App

Oklahoma Refining Company Superfund Site
 Latitude: 34.89420200 Longitude: -98.19819117



The Oklahoma Department of Environmental Quality (DEQ) and the Environmental Protection Agency (EPA) are working to address contamination at the Oklahoma Refining Company Superfund site (ORC) in Cyril, Oklahoma. ORC operated from 1920 - 1994 processing crude oil into various fuels and solvents.

Over many years of production, contaminants leaked into the soil, sediment, surface water and shallow groundwater beneath the site. The site was included on the National Priorities List in June 1988. Since 1990, various removal and remedial response actions have been implemented to address contamination at the site.

The responsibility of maintaining the two onsite landfills and other capped areas of the site was transferred from EPA to DEQ in 2006. Several locations on-site have subsurface soil remaining with concentrations of contaminants above cleanup levels and have soil covers to eliminate exposure pathways. These areas are inspected quarterly by DEQ staff for any evidence of erosion, noticeable settlement, signs of standing water, and absence of vegetation. DEQ's maintenance plan had a paper inspection form and paper map of capped areas for field staff to use.

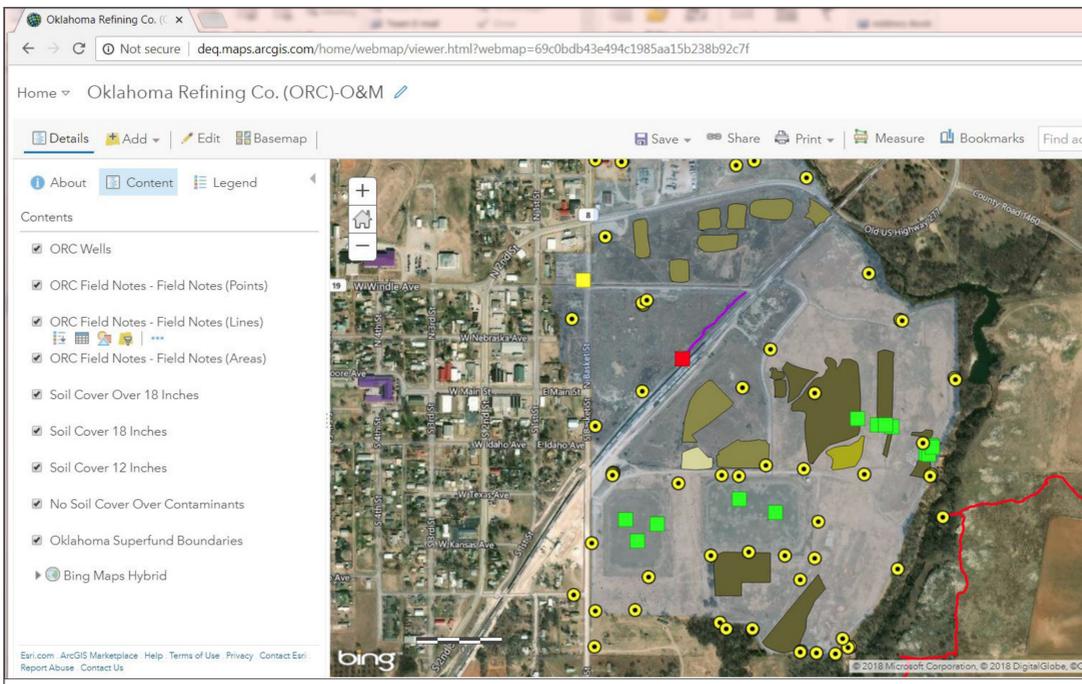


Erosion impacting capped waste



In 2017, DEQ staff started using the ESRI Collector app to help with quarterly inspections. The capped areas shapefile was added to an interactive map.

Amy Brittain
 Environmental Programs Manager
 Site Remediation Section
 Land Protection Division
 Oklahoma DEQ
 405-702-5157
 Amy.Brittain@deq.ok.gov

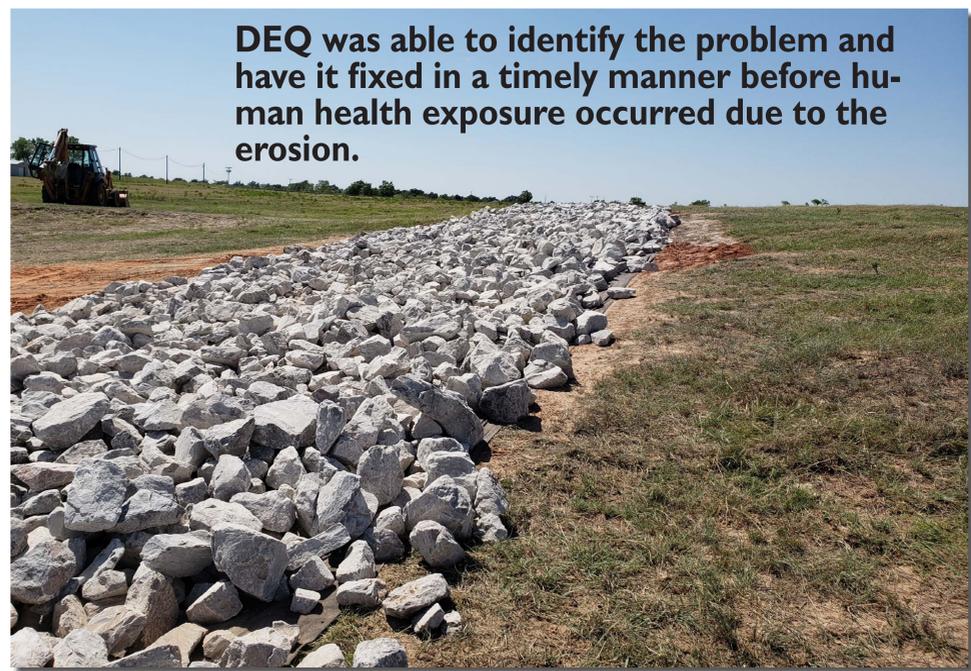
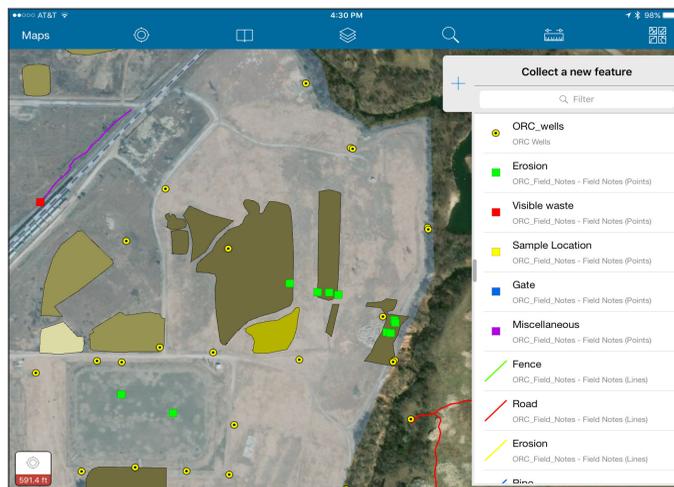
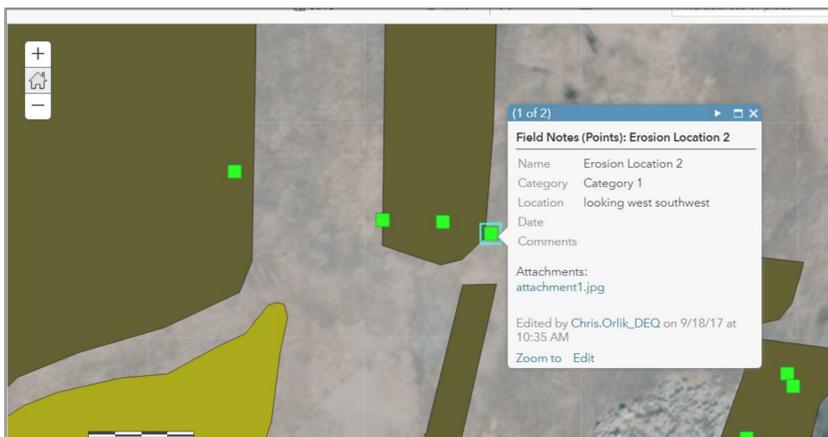


DEQ used the "Field Notes" template in ArcGIS online to create editable feature layers to capture simple observations during inspections. The inspectors can also attach photos of features in the field with the field observations.

The collector app allows inspectors to see where they are in relation to capped areas.

Because of this ability DEQ identified a large erosion area that needed to be fixed. Due to the large size of the property it was not identified the year before with the paper maps.

Interactive Maps for Inspections and Maintenance



DEQ was able to identify the problem and have it fixed in a timely manner before human health exposure occurred due to the erosion.