

RISK ASSESSMENT
Bonneville Fuels Corporation Fullerton Federal #6E
Unit B Sec 11-T27N-R11W
San Juan County, New Mexico

This pit was neglected in the first remediation efforts in September 1994. Bonneville and its contractor, On Site Technologies, conducted an assessment of this pit in May 1996 and found it to have contamination above the action levels to a depth of 14' where the Geoprobe auger hit shale bedrock and could drill no further.

On May 24 and 25, 1996, the dehydrator pit on the Fullerton Federal #6E was excavated to a depth of 16' where bedrock prevented any further excavation. The length and width of the excavation is irregular as shown on the Assessment Summary Sheet's Site Diagram, but is approximately 30' by 16'. Approximately 500 cubic yards of soil were excavated from the Fullerton Federal #6E location and remediated on site to NMOCD/BLM standards by dilution and aeration.

The vertical extent of contamination is bedrock at 16', but the full lateral extent of contamination was not completely established for several reasons. As shown on the site diagram and photographs, it was not possible to excavate any further north due to a pipeline that runs directly under the road. Excavation was blocked to the west because of surface equipment including a dehydrator, separator and diesel stock tank. The northeastern extent of contamination was determined by a trench that recorded less than 100 ppm on the PID. The position of the wellhead and pipelines to the compressor, dehydrator and meter house prevented excavation to the full southern extent of contamination. The southeastern extent of contamination was not determined in part because of proximity to a cliff on the edge of Kutz Canyon. In some parts of the excavation, pit wall stability precluded any further excavation. Additionally, Bonneville Fuels had spent nearly \$5,000 on the remediation of this site.

This location is believed to be no risk to ground water contamination or public health. Vertical migration of hydrocarbons is blocked by bedrock. Laterally the extent of migration is believed to be no more than 25-40' in any direction from the center of the excavation as evidenced by the northeastern extent being established approximately 25' from the center. there is no evidence of lateral migration extending to the Kutz Canyon walls which are approximately 50-75' from the center of the excavation. There is no surface water within 1000' (and much further) of this location; there are no water wells of any kind within 1000' (and much further) of this location; and groundwater is at a depth of approximately 750' according to the New Mexico Bureau of Mines Publication, Hydrogeology and water resources of the San Juan Basin, New Mexico.

Respectfully submitted,

Bob Kozarek

Bob Kozarek
Senior Geologist
Bonneville Fuels Corporation