Brownfields Success Story



Poplar is a city in the Fort Peck Indian Reservation in northeast Montana with a population of just over 800. The former Fort Peck airfield, located in Poplar, was used by local farmers for fueling, loading and storing crop-dusting planes and later operated as a county airport for 40 years. Upon the airfield's closure in 2011, contamination remained and prevented the reuse of the site. Petroleum had leaked into the subsurface from underground storage tanks and from runoff associated with jet-fueling activities.

After the airfield closed, the site was largely unused until a group of tribal stakeholders, federal partners and a nonprofit organization collaborated to build a sustainable village there, revitalizing the community, improving housing and furthering economic development in Poplar.

The Opportunity

Leadership from local Assiniboine and Sioux Tribes worked with the U.S. Environmental Protection Agency (EPA) Brownfields Program and the Make It Right Foundation, a nonprofit organization that builds energy-efficient homes for low-income families, to develop the village.

Wilfred Lambert, Brownfields coordinator for the Fort Peck Office of Environmental Protection, a division of the Fort Peck Assiniboine and Sioux Tribes, says the project was slow to start but gained momentum quickly once a plan was in place.

"The Tribes had no zoning ordinances to follow," he says, "and we needed to decide what level of remediation would be necessary to build on the site. Once we decided on the houses, where they would go, where the roads would go, where the Indian Reservation Roads Department would go—things went a lot easier." (The Indian Reservation Roads [IRR] Department now uses a portion of the site for its offices, storage and vehicles.)





EPA Grant Recipients: Fort Peck Assiniboine and Sioux Tribes

EPA Grant: Brownfields Cleanup Grant

Former Use: Airfield

Current Uses: Residential, Recreational, Transportation Operations



The former Fort Peck airfield was contaminated by petroleum that had leaked from underground storage tanks and from runoff associated with jetfueling activities.





The Make It Right Foundation built 20 high-efficiency homes at the former airfield.



A lot of people came together to reduce blight and make the community a cleaner and safer place to live.

> —Wilfred Lambert, Brownfields Coordinator, Fort Peck Office of Environmental Protection

For more information: Visit

the EPA Brownfields website at www.epa.gov/brownfields or contact Greg Davis at 303-312-6314 or Davis.Gregory@epa.gov.

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The Cleanup

Phase I and II Environmental Site Assessments were conducted in compliance with the All Appropriate Inquiries rule to obtain protection from potential liability for any contamination at the site. The assessments revealed that the site contained hazardous substances, including herbicides, insecticides, petroleum products, and miscellaneous oils, cleaning solvents and lubricants. Soil samples that were collected from the bottom of the excavation—where two underground storage tanks had been—exceeded regulatory standards for the presence of hazardous materials. Lead-based paint was also identified on the exterior surfaces of a former schoolhouse on the site and in the soil surrounding the building.

EPA awarded the Tribes a \$200,000 Cleanup Grant to remediate the contamination, which included:

- Removing gasoline-impacted soils from the former storage tank basin
- Landfarming contaminated soils at a nearby landfill and periodically turning them over to aerate the mixture
- Removing and disposing of lead-impacted and pesticidecontaminated soils
- Collecting and testing soil samples in each soil removal area

The Redevelopment

The Make It Right Foundation built 20 LEED Platinum single-family homes for low-income families at the site. EPA worked with the Department of Energy's National Renewable Energy Laboratory to assess the performance of these high-standard buildings.

Tim Rehder, who works in the EPA Region 8 Brownfields Program, helped implement the study. "We compared the energy performance of the Make It Right homes to other residential buildings in the area," he says. "Then we used energy modeling to estimate what improvements could be made to increase energy savings—like a higher graded window or more insulation in the attic."

The homes were performing well overall, despite some gaps in the insulation in a few of them. EPA recommended that the tribes continue to conduct periodic energy audits to ensure efficiency.

The Benefits

The sustainable village development brought jobs, housing for low-income families and opportunity for Poplar residents. "We used our IRR to build roads and infrastructure and connect water," says Lambert. "Make It Right was required to hire local contractors through our Tribal Employment Rights Office for all the groundwork and infrastructure on-site."

The Tribes also built greenhouses and outdoor basketball courts on-site, and they are planning to build a wellness center there soon. The center will have healthcare facilities, a swimming pool, basketball courts, space for weightlifting and running, and other amenities for the community.

"There's lots of activity at the former airfield now," Lambert says. "I wasn't eligible to live in the new homes there, but I would if I could. They are all state of the art."