



<b>EDi Nos.</b> 210 215 219 223 224 226 247 281 310		<b>21. Bureau of Indian Affairs - Navajo Region Environmental Services Projects</b>
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<b>22. Year Completed Professional Service:</b>	<b>Year Completed Construction:</b> <small>(if applicable)</small>	<b>Navajo Nation</b>
Ongoing	N/A	
<b>CAGE Code:</b> ID1U3		<b>DUNS Number:</b> 61.680.5073
<b>Contract Role:</b> <input checked="" type="checkbox"/> Prime Contractor <input type="checkbox"/> Subcontractor		

<b>23 a. Project Owner/Customer:</b>	<b>23 b. Point of Contact Name:</b>	<b>23 c. POC Contact Info.:</b>
Bureau of Indian Affairs Navajo Regional Office P.O. Box 1060 Gallup, New Mexico 87301	Rose Duwyenie Environmental Specialist	505.863.8285

<b>Key Personnel:</b>			
Ross Dimmick, Sr. Project Manager	Albuquerque Corporate Office	rdimmick@edi-jm.com	505.341.3578
Debbie Finrock, CHMM, Project Mgr.	Albuquerque Corporate Office		505.341.3578

<small>24. (Include scope, size, and cost)</small> <b>Brief Description of Project and Relevance to this Contract:</b>	
<b>Contract Nos.:</b>	(newest to oldest) SMN00100179, SMN00090025, SMN00070072, SMN00060170, SMN00060150, SMN00060145, SMN00060073 & SMN00060059
<b>Period of Performance:</b>	04.01.2006 – continuous
<b>Total Value to Date::</b>	\$262,422.54
<b>Contract Type:</b>	<input type="checkbox"/> Firm Fixed Price <input type="checkbox"/> Cost Reimbursement <input checked="" type="checkbox"/> Time and Materials <input type="checkbox"/> Cost Plus Fixed Fee <input type="checkbox"/> Cost Plus Award Fee <input type="checkbox"/> Performance Based
<b>Type of Work Performed:</b>	541620 & 562910
<b>% of Work Self Performed:</b>	85%
<b>% of Work by Subcontractor:</b>	15%

<b>Contracting Officer</b> <small>(if applicable):</small>	<b>Contracting Agency &amp; Address:</b>	<b>Contracting Officer Contact Info.:</b>
Jeff Sena Elsie J. Begay	Bureau of Indian Affairs Navajo Regional Office P.O. Box 1060 Gallup, New Mexico 87301	505.863.8252

<b>Technical Representative</b> <small>(if applicable):</small>	<b>Tech Rep. Agency &amp; Address:</b>	<b>Tech Rep. Contact Info.:</b>
Rose Duwyenie Environmental specialist	Bureau of Indian Affairs Navajo Regional Office P.O. Box 1060 Gallup, New Mexico 87301	505.863.8285

### Background

EDi has been consulting and performing work for the U.S. Department of Interior, Bureau of Indian Affairs (BIA) - Navajo Region since 2002. EDi has completed a wide range of projects including hazardous waste characterization, NPDES permit renewals, EPA compliance audits, landfill closures, monitoring services, emergency spill response, report and plan authoring, training programs, and UST removal. To date, EDi has successfully completed more than 18 projects for the BIA.

The Navajo Region is comprised of five (5) different agencies including the Chinle Agency, Eastern Navajo Agency, Fort Defiance Agency, the Shiprock Agency, and the Western Navajo Agency all serving the Navajo Nation.

The primary mission of the BIA Navajo Region Office is to enhance the quality of life, facilitate economic opportunity, carry out the responsibility to protect and improve the trust assets of the Navajo Nation and individual Indians.



**EDi Project #310, BIA #SMN00100179- NPDES Permit Renewals  
Lukachukai & Low Mountain Schools Wastewater Lagoons - Navajo Nation**

**Start Date:** 08.02.2010

**End Date:** 08.31.2010

**Project Value:** \$5,031.80

**Scope of Work**

Wastewater Lagoons. In compliance with the provision of the *Clean Water Act*, the Division of Environmental, Cultural & Safety Management is required to renew two National Pollutant Discharge Elimination Systems (NPDES) general permit to discharge treated wastewater from Low Mountain Board School and Lukachukai Community School.

EDi reviewed the NPDES permit for this bureau-operated wastewater system then researched and completed the permit renewal application as necessary. EDi staffed and provided environmental engineering services as appropriate including on-site inspections, checked discharge documentation, well logs on water usage, and then completed and submitted renewal applications.



**EDi Project #281, BIA# SMN00090025 - UST Removal  
Kayenta Boarding School Pump House - Navajo Nation**

**Start Date:** 01.08.2009

**End Date:** 02.28.2009

**Project Value:** \$11,000.00

**Scope of Work**

EDi decommissioned, removed, and disposed of one UST, concrete foundations, and associated piping at the Kayenta Boarding School pump house. The UST was uncovered during construction activities of a new pump house. The UST was approximately eight ft. by four ft. in diameters and the estimated volume at 800 gallons.

The UST was removed and closed in accordance with 40 CFR 280 and 281. The tank and metal piping were cut and recycled as metal scrap. All petroleum-contaminated soil and waste were disposed of in a permitted landfill. All non-hazardous construction debris that could not be reused or recycled was disposed of in a permitted landfill in accordance with 40 CFR 258.

Environmental services performed by EDi included preparation of the HASP, Work Plans & Schedules. EDi decommissioned, dismantled and removed the UST by:

- disconnecting the electrical system;
- removing product/residue;
- inerted tank prior to removal;
- dismantled tank and recycled metals as appropriate;
- removed concrete secondary containment and liners. pad, cradles, and contaminated soils were disposed of as waste and transported to appropriate permitted landfills;
- all metal piping was removed and recycled as appropriate;
- contaminated soils were excavated and transported to a permitted landfill;
- EDi screened excavation soils to determine contamination levels, sampled field screenings and then filled the excavation site with clean soil, compacted and contoured to prevent erosions, ponding, and subsidence; and finally
- EDi prepared reports of all activities associated with the project.

**EDi Project #247 BIA# SMN00070072 - NPDES Permit Renewals  
Torreon Day School Wastewater Lagoons - Navajo Nation**

**Start Date:** 06.22.2007

**End Date:** 09.30.2007

**Project Value:** \$1,793.58

**Scope of Work**

Wastewater Lagoons. In compliance with the provision of the *Clean Water Act*, the Division of Environmental, Cultural & Safety Management is required to renew one NPDES general permit to discharge treated wastewater from Torreon Day School located in Torreon, New Mexico.

EDi reviewed the NPDES permit for this bureau-operated wastewater system then researched and completed the permit renewal application as necessary. EDi staffed and provided environmental engineering services as appropriate including on-site inspections, checked discharge documentation, well logs on water usage, and then completed and submitted renewal applications.





**EDi Project #226 BIA# SMN00060170 - UST Removal  
Ft. Defiance Facility & Greyhills High School - Navajo Nation**

**Start Date:** 08.23.2006

**End Date:** 12.31.2006

**Project Value:** \$36,994.80

**Scope of Work**

EDi decommissioned, removed, and disposed of two USTs, concrete foundations, and associated piping at the Ft. Defiance Agency Facility Management Yard and Greyhills High School. Hazardous waste was removed and disposed of in accordance with the *Resource Conservation and Recovery Act (RCRA)* Subtitle C, 40 CFR 260-265 the USTs were removed and closed in accordance with 40 CFR 280 and 281.

The Ft. Defiance UST was approximately 1,000 gallons and contained leaded gasoline. The tank was installed prior to 1960 and used by BIA to fuel government vehicles. The tank was abandoned during the late 60s or early 70s. The Greyhills High School UST was constructed in the late 1990s and contained hydraulic fluid, which was used to maintain heavy equipment and busses. The tank held approximately 300 gallons. In both instances, product was removed, recycled or disposed of accordingly as required by regulatory and industry standards.

Environmental services performed by EDi included preparation of the HASP, Work Plans, and Schedules. EDi decommissioned, dismantled and removed the USTs by:

- disconnecting the electrical systems;
- removing product/residue;
- inerted tanks prior to removal;
- dismantled tanks and recycled metals as appropriate;
- removed concrete secondary containment and liners. pad, cradles, and contaminated soils were disposed of as waste and transported to appropriate permitted landfills;
- all metal piping was removed and recycled as appropriate;
- contaminated soils were excavated and transported to a permitted landfill;
- EDi screened excavation soils to determine contamination levels, sampled field screenings and then filled the excavation sites with clean soil, compacted and contoured to prevent erosions, ponding, and subsidence; and finally
- EDi prepared reports of all activities associated with these project sites.

**EDi Project #224 BIA# SMN00060150 - Phase I ESAs & Geophysical Surveys  
Kimbeto Range Demonstration Area, Kimbeto School, and Window Rock Power Plant - Navajo Nation**

**Start Date:** 08.14.2006

**End Date:** 02/28/2007

**Project Value:** \$73,648.25

**Scope of Work**

EDi performed a site investigation of a former UST site where heating oil had been spilled. EDi project deliverables included a HASP, a sampling and analysis plan with quality assurance requirements, and a final report delineating the depth and extent of the oil contamination plume on BIA property. another site of oil contamination near the power plant building and surface contamination of boiler wash were also detected.

**EDi Project #223 BIA# SMN00060145 - Phase ESAs & Geophysical Surveys  
Gamerco Work Center, Window Rock Heating Plant & Quarters & Shiprock Complex - Navajo Nation**

**Start Date:** 08.14.2006

**End Date:** 02/28/2007

**Project Value:** \$45,550.70

**Scope of Work**

**Gamerco Work Center (GWC).** BIA granted the Gamerco Township a permit to utilize the GWC as a multi-use facility including a fuel station, pesticide work station, warehouse and receiving point, storage and radio/communication facility. In addition, the western 1/3 portion of the GWC was to dispose or burn drums of out-of-specification chemicals no longer needed or used by the BIA. This practice was carried out during the 1980s through the early 1990s. An investigation was necessary to locate any buried drums or waste and properly dispose of soil and hazardous waste in accordance with 40 CFR 258 and 260-265.

**Window Rock Heating Plant.** This project involved a Phase I with an expanded subsurface investigation of soils to delineate the area of contamination, horizontally, vertically, and laterally, and to investigate potential impacts. Work conducted included data gathering and information review, field investigation, drilling, sample collection of soils, analytical testing of soils, drawing and map preparations, and a final report. The findings of the investigation were summarized and included six remedial alternatives and associated costs.

In 2003, an EPA audit revealed hydrocarbon contamination of the soil as a result of past activities at the heating plant. The site audit recommended additional studies be conducted to determine what remedial actions be taken as cleanup activities. iinà bà, Ltd. removed 20 cubic yards of petroleum-contaminated soil at the former UST at the plant near Building No. 5.

**Work Rock Quarters & Shiprock Admin Complex.** The Navajo Nation requested the transfer of BIA-owned buildings for their use and required ESAs prior to transfer including a 16-unit apartment complex formerly used to house government employees from 1935-2002 on a parcel approximately 5.25 acres. The old Shiprock Administrative Buildings were operated during the early 1900s through 2002 totaling 34,000 square feet on approximately 48 acres.

EDi prepared the appropriate HASPs, Work & QA Plans; performed site reconnaissance and personnel interviews; developed a SAP identifying heating oil contamination levels for TPH, BTEX and DRO, and VOCs and SVOCs in the soil; prepared a drilling plan to delineate the horizontal, vertical and lateral extent of contamination; conducted a Phase 1 study and geophysical surveys; prepared a plot plans of existing structures in excess of 50 feet from the plumes; and prepared and submitted a final report of all site activities, findings and actions.

**EDi Project #219 BIA# SMN00060073 - Unregulated Diesel Fuel Release Soil Investigation & Remedial Action  
Black Mesa Community School, Kayenta AZ - Navajo Nation**

**Start Date:** 04.20.2006

**End Date:** 05.15.2006

**Project Value:** \$71,000.00

**Scope of Work**

EDi removed and properly disposed of petroleum-contaminated soil from a school bus diesel spill at the Black Mesa Community School lot on an emergency basis. Several weeks later, another emergency spill response was safely performed on Navajo Route 8066 near the school.

**Spill #1.** On April 19, 2006, at 9:20 am, Ben Johnson, Black Mesa Community School Facility Manager, notified the Division of Environmental, Cultural, and Safety Management (DECSM) of the Bureau of Indian Affairs – Navajo Regional Office that between 60-120 gallons of diesel fuel from a cracked bus fuel tank had been released into the ground at the school. School staff contained the spill area by covering it with sand and called for assistance. EDi was contracted to determine the level of contamination in the soil and clean up the site per the National Contingency Plan, described in 40 CFR 300.



A school bus tank strap failed and dripped fuel for the at least 1.5 miles to the school discharging more fuel when parked in the parking area of the school yard. An estimated 18 cubic yards of petroleum-contaminated soil were in need of disposal. The response team excavated the spill area with about 16 cubic yards of mixed soil from a stormwater berm area and about two cubic yards from the spill site. The average measurement of diesel –TPH of the non-saturated disposed soil was 3,020 ppm. Samples were analyzed and found contaminated above regulatory levels. The contaminated soils were removed and properly disposed of and the team backfilled the hole where the spill had occurred.

During soil excavation, it was suspected there was another source for this soil contamination other than the diesel fuel tank leak from the school bus and a full soils investigation pursued. Two additional sites were confirmed. The emergency response portion of the spill cleanup was completed so the school could resume safe operations. EDi recommended that a site investigation be performed to determine the extents of soil contamination from this diesel fuel spill and other possible sources.

**Spill #2.** On May 12, 2006, the BIA notified EDi that approximately 40 gallons of diesel fuel had been released onto the unpaved road leading to the school. EDi was once again contracted to clean up the site per the National Contingency Plan, described in 40 CFR 300. The diesel had saturated the hard-packed dirt surface, creating a contaminated streak about six inches wide and 400 feet long.

The EDi response team removed the contaminated soil from the hard-packed road surface to a total depth of 7". Approximately five (5) cubic yards of stockpiled contaminated soil was loaded onto a dump truck. Field samples were taken at the western, middle, and eastern ends of the site analyzed. These samples measured 72, 71, and 78 ppm diesel range organics – total petroleum hydrocarbons (TPH). EDi backfilled the area and then compacted the surface to complete. A BIA road crew re-graded the section of road to repair.



**EDi Project #215 BIA# SMN00060059 - Environmental Study & Clean Closure of Unauthorized Dump Site, TiisNazBas Boarding School - Navajo Nation**

**Start Date:** 03.27.2006

**End Date:** 08.01.2006

**Project Value:** \$69,929.92

**Scope of Work**

The Division of Environmental, Cultural, and Safety Management (DECSM) conducted an investigation of recent waste burial in an excavation at the TiisNazBas Boarding School in Teec Nos Pos, Arizona. DECSM found a disturbed area approximately 75 feet long and 27 feet wide. This inspection found one excavated cell about four feet wide by 27 feet long by ten feet deep. The school personnel reportedly buried four large boilers with asbestos thermal system insulation, numerous old computers, batteries, PCB-containing light ballasts, and other hazardous, toxic, or New Mexico special waste that was not accepted for disposal at Crouch Mesa Landfill in Farmington, New Mexico. It was unknown if any additional cells were present in the disturbed area. A geophysical investigation was requested to help define the number and location of other potential cells within the half-acre area.



The Navajo Regional Office of the BIA contracted EDi to perform a geophysical investigation, excavate and characterize the waste in the known cell, and sample the site to determine if contaminants had leached into the soil or the groundwater.

The EDi team performed a geophysical investigation at the dump site and nearby closed landfill. High resolution electromagnetic surveys were then conducted over both sites using a Geonics EM-61 high-resolution metal locator. The results of the survey revealed at least four burial trenches at the dump site with lengths ranging from approximately 35 feet to 50 feet, all about ten feet wide. Three pits of concentrated waste were located, each about ten feet in diameter. Additional metal was located in the southeast corner where burned tires were observed on the surface.

EDi performed a preliminary waste characterization exploration and sampling wherein municipal solid waste was encountered in many forms including anything from burnt trash to metal water heaters. After performing additional waste sampling and characterization extensive areas of waste burial were discovered indicating the entire disturbed area probably had waste buried beneath it. No hazardous/special waste items were found or suspected to be buried at the site. Minor amounts of PCB ballasts, lead acid batteries, and computer monitors were located.

In order to ensure that all of the waste was removed from this unauthorized dump site, EDi excavating the entire one-quarter acre site; removing, characterizing, and disposing of the waste found there; backfilling with crushed concrete and fill available at the site; and grading and compacting the area for a clean closure of the site. The waste density in the excavated soil is low and there are many cobbles in the soil, so manual sorting and raking were needed to separate the debris. In addition, concrete piles south of the dump site contained metal and other debris and needed to be sorted prior to backfill.

During excavation, many computers were found, several lead-acid batteries, 1 lithium batteries, toilet parts, bedsprings, and evaporative cooler parts, white goods, tires and one fifteen-inch length of transite pipe. Also found was less than ten PCB-containing light ballasts, some floor tile among the other metal and debris in concrete piles south of the site. About 60 cubic yards of metal and other debris were piled on plastic for staging. About 10 CY of electronic debris was piled in a separate bermed area. The lids of the battery drums were hand-tightened. Waste and soil sampling were conducted at the site. No soil contaminants were found at concentrations exceeding RCRA regulatory levels.

All debris and wasted was eventually excavated, profiled and sorted, and then properly disposed of at appropriate waste disposal sites across the southwest. All waste was bulk loaded into end dumps or roll-off containers and packaged appropriately. Any remaining debris was staged on the berm, on plastic-lined areas and the hazardous items have been covered and secured with plastic. After excavation, the site was backfilled with clean fill, compacted, sloped to provide proper drainage, and compacted as necessary to provide a clean closure to the site.





25. Firms/Subcontractors involved with these Projects:

	(1) Firm Name	(2) City and State	(3) Role
a.	Assagai Analytical Laboratories, Inc.	4301 Mastehead, NE • Suite A Albuquerque, NM 87109 505.345.5964 • 505.345.7259 fax	Laboratory Services
b.	Daniel B. Stephens & Associates, Inc. Jim Kelsey, P.G., Sr. Vice President jkelsey@dbstephens.com	6020 Academy Road, NE • Suite 100 Albuquerque, NM 87109 505.822.9400 • 505.822.8877 fax	Testing & Characterization
c.	Finrock Engineering Debbie Finrock, PE, CHMM dfinrock63@yahoo.com	24 Doc Holiday Road Edgewood, NM 87015-8529 505.286.6458 phone & fax	Engineering & Project Manager Services
d.	Flying Eagle Construction Roy Starr, Owner roystarr@earthlink.net	11405 Road 42 Mancos, Colorado 81328 970.533.1091 • 970.533.1093 fax	Excavation Services
e.	Onyx Environmental Services, LLC 602.233.2955 • 602.415.3030 Fax	5736 West Jefferson Phoenix, AZ 85043	Recycling Services
f.	Precision Engineering, Inc. Bill Kingsley kingsleysh@aol.com	3100 Harrelson Street Las Cruces, NM 88004 505.523.7674	Engineering Services
g.	Subelt Geophysics David A. Hyndman	P.O. Box 36404 Albuquerque,, NM 87176 505.922.1140	Geophysical Consulting and Field Survey Services
h.	Terracon Ben Latham	4905 Hawkins, NE Albuquerque, NM 87109 505.797.4287 • 505.797.4288 fax	Engineering and Geotechnical Services