

**Analysis of Proximity to
Federally Recognized
Tribal Lands of
Pollutant Sources and
Air Monitors**

March 28, 1995

Submitted to:
Tina Parker
Office of Program
Management Operations,
US Environmental
Protection Agency

Abt Associates Inc.



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**Submitted by:
Abt Associates, Inc.
4800 Montgomery Lane
Bethesda, MD 20814**

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Table of Contents

	<u>Page</u>
Executive Summary	1
I. Introduction	4
II. Method for the Analysis of Proximity to Tribal Lands	5
II.A Identifying Tribal Borders	5
II.B Proximity Method	5
II.C Data Sources for Facilities and Monitors	6
III. Results of the Analysis	8
IV. Refinements of Methodologies and Data Sources	17
IV.A Refinements of the Current Analysis	17
IV.B Linkages with other Data	17
Appendix A: Maps of Tribal Lands	A-1
Appendix B: Table 3	B-1
Appendix C: Table 4	C-1
Appendix D: Table 5	D-1
Appendix E: Public Access to the TRI Database	E-1

List of Tables

	<u>Page</u>
Table 1 - Regional Summary of Facilities Inside or Near Tribal Lands	3
Table 2 - Facility, Monitor, and Release Summary Information by Region and Tribal Land	9
Table 3 - Detail of TRI Facilities On or Near Tribal Lands	B-1
Table 4 - Detail of NAAQS Sources On or Near Tribal Lands	C-1
Table 5 - Chemicals Released On or Near Tribal Lands Nationwide and by Region . . .	D-1
Table 6 - Industry Breakout for Facilities On or Near Tribal Lands Nationwide and by Region	14
Table 7 - Potential Further Applications	19

List of Maps (for Tribes with Sources Inside Border)

	<u>Page</u>
Map 2.A - Allegany	A-1
Map 5.A - Fond du Lac	A-2
Map 5.B - Isabella	A-3
Map 5.C - Oneida	A-4
Map 6.A - Isleta	A-5
Map 6.B - Jicarilla	A-6
Map 6.C - Laguna	A-7
Map 6.D - Osage	A-8
Map 8.A - Blackfeet	A-9
Map 8.B - Devil's Lake	A-10
Map 8.C - Navajo	A-11
Map 8.D - Southern Ute	A-12
Map 8.E - Uintah and Ouray	A-13
Map 8.F - Wind River	A-14
Map 9.A - Cabezón	A-15
Map 9.B - Chemehuevi	A-16
Map 9.C - Fort Yuma	A-17
Map 9.D - Gila River	A-18
Map 9.E - Hoopa Valley	A-19
Map 9.F - Rincon	A-20
Map 9.G - Salt River	A-21
Map 9.H - San Xavier	A-22
Map 10.A - Fort Hall	A-23
Map 10.B - Puyallup	A-24
Map 10.C - Guinault	A-25
Map 10.D - Yakima	A-26

Executive Summary

This study has been prepared by the Office of Air and Radiation and is an expansion and update of the 1993 study entitled "The Toxic Substances Control Act and a Toxics Release Inventory Study for Indian Lands in the Continental United States" (prepared for the Office of Prevention, Pesticides, and Toxic Substances). That 1993 study was undertaken primarily to provide U.S. EPA and tribal staff with toxic chemical release and transfer information for manufacturing facilities identified as being on or near tribal lands using Toxic Release Inventory (TRI) data. In addition to that goal, this study also examines facility and monitor information from the Aerometric Information Retrieval System (AIRS) and the Interim Regional Emissions Inventory (IREI) for proximity to tribal lands.

Under the Emergency Planning and Community Right-to-Know Act of 1986, manufacturing facilities with 10 or more employees that make, process or use certain toxic chemicals are required to report their releases and transfers of these chemicals to U.S. EPA, the states, and the Tribes. This information is placed in a publicly accessible database called the Toxics Release Inventory or TRI.

The AIRS database is EPA's primary source for air quality information. The system contains information on air quality monitor locations and facilities releasing National Ambient Air Quality Standard (NAAQS) pollutants.

The IREI database is a database housed on the EPA National Computer Center IBM Mainframe. The database is maintained by the Office of Air Quality Planning and Standards and lists point sources for CO, VOC, PM10, SO2, and NO2 and their locations for the years 1987-1991.

The analysis in this report identifies 41 TRI facilities on tribal lands and another 173 facilities located within three miles of tribal borders. Releases and transfers for these 214 facilities totalled 100 million pounds. The geographic distribution of facilities, and their releases shows that most are located in EPA's western Regions VI, IX, and X. In addition, 55 other NAAQS pollutant point sources were identified on tribal lands and another 58 were identified to be within 3 miles of tribal borders. These 113 facilities release 730,000 tons of NAAQS pollutants. This information is summarized by region in Table 1. In addition to the 327 facilities identified, 439 air quality monitors were found on or near tribal lands.

For purposes of this report, an electronic boundary file was supplied by the Bureau of Indian Affairs (BIA). The boundary file constitutes all available tribal boundary information used for analysis in this report. The BIA boundary file is not a complete accounting of all lands where Native Americans have a significant presence or interest. One notable example is the exclusion in the BIA file of Alaskan Native Villages. Also from BIA are population estimates for Tribes from their report entitled "Indian Service Populations and Labor Force Estimates" published in January 1991.

The fact that 100 million pounds of toxics and 730 thousand tons of NAAQS

pollutants are released or transferred from facilities located on or near tribal lands is not in itself revealing. Reporting the total quantity of pollutants ignores important elements of a comprehensive risk assessment, such as toxicity and exposure estimates. In all cases, a site-specific analysis would be required to accurately assess human health and ecosystem effects of reported releases and transfers. This study is intended only to characterize the release distributions and monitor coverage in and around tribal lands.

Table 1

Regional Summary of Facilities Inside or Near Tribal Lands

Region	<u>TRI Facilities</u>				<u>NAAQS Pollutant Sources</u>			
	Inside	Near	Release Inside (lbs)	Release Near (lbs)	Inside	Near	Release Inside (tons)	Release Near (tons)
1	No sources identified							
2	1	5	67,331	454,803		4		1,220
3	No Federally recognized tribal lands							
4		6	.	51,857		2	.	2,612
5	6	27	294,871	5,561,053	1	11	313	62,880
6	5	41	1,287,292	8,103,259	14	13	194,918	80,901
7	.	2	.	211,090	.	2	.	82,120
8	3	6	370,759	110,363	25	.	24,717	.
9	12	50	1,196,769	12,614,677	3	11	130,647	27,625
10	14	36	1,237,731	68,550,832	12	15	21,940	102,398
Total	41	173	4,454,753	95,657,934	55	58	372,535	359,756

Notes: TRI releases are for 1992

NAAQS Pollutant source releases are for 1991

A facility is considered near if it is within 3 miles of a tribal border

I. Introduction

The purpose of this report is to provide EPA with a listing of facilities and air quality monitors located on or near tribal lands and to summarize transfers and releases from those facilities so that the Agency can better target its tribal outreach.

This study analyzes the proximity to tribal lands of three major classes of facilities and air quality monitors¹:

- TRI facilities - Facilities reporting to the TRI database
- NAAQS Point sources - Facilities releasing National Ambient Air Quality Standards Pollutants.
- Air Quality Monitors - Monitors from the AIRS Air Quality System

Any facility or monitor from the above classes that is inside or within 3 miles of a tribal land are the targets of this study. The results of this analysis include the following output:

- Summaries of the number of facilities/monitors on or near tribal lands.
- Regional breakouts by tribal land of facility types and monitors.
- For each tribal land affected, a listing of facilities and chemicals released by media.
- Maps of each tribal land with a pollutant source inside the exterior boundary.
- Chemical by Region and Industrial Classification by Region summaries of releases.

Finally, this report suggests additional area of inquiry that may be undertaken to better characterize the risk potential for chemical releases in and around tribal lands.

¹Other data sources were explored but found to be lacking in one respect or another. These data sources are fully described in II.C.

II. Method for the Analysis of Proximity to Tribal Lands

The method adopted for this study involved translating Geographic Information System (GIS) format tribal land border data (longitude/latitude pairs which define the border for each reservation) into a text file and then searching for facilities or monitors located within and near the federally recognized reservations. The majority of the analysis was performed with Atlas GIS for Windows from Strategic Mapping Incorporated.

II.A. Identifying Tribal Borders

The Geographic Data Services Center of the Bureau of Indian Affairs (BIA) provided U.S. EPA Region I's GIS staff a tape of the reservation boundaries for the lower 48 states in GIS format. The data were derived from U.S. Geological Survey digital line graphs and were in 1:2,000,000 scale. It should be recognized that reservation boundaries are not synonymous with Indian lands; reservation lands may be composed of fee patent, non-Indian lands. In addition, there are non-reservation lands where Indians have significant interests; e.g., treaty rights to resources.

U.S EPA Region I's GIS staff provided Abt Associates with a text file defining the Indian tribal reservations using the ARCINFO (version 6.0) UNGENERATE procedure.² A second text file was provided which included descriptive data associated with each land tract.

II.B. Proximity Method

In the previous study which this study updates, all analysis was performed outside of a GIS paradigm. To determine entities either on or near tribal borders, the classic "point-in-polygon" routine was coded and run for each of the facilities in our selected dataset. To limit the time of the search routine, Abt Associates first reconstructed the reservation borders from the latitude/longitude pairs and then constructed a set of inclusive rectangles (within three kilometers of the tribal land borders). A search routine identified facilities located within tribal borders as well as those within three kilometers of tribal borders. Essentially, the search routine first checked for TRI facilities within the three kilometer border rectangle formed around the minimum rectangle enclosing each reservation. If a facility was within this rectangle, a longitudinal line was drawn eastward from the facility. If this line intersected the tribal boundary an odd number of times then the facility was flagged as inside the reservation boundary. If the number of intersections is zero or an even number then the facility was flagged as outside the reservation border.

In this update, a new method was employed to accomplish the task of locating entities on or near tribal border. It uses GIS software to perform this checking and has the added benefit of allowing detailed maps of the of each tribal land. The process began by converting the BIA supplied tribal boundaries into a format that the GIS software could read.

²A computer software used to manipulate and maintain geographic data.

Then, boundaries were read into the GIS software as regions that could be subsequently checked for inclusion and distances to facilities or air monitors.

II.C Data Sources for Facilities and Monitors

This section describes the data sources that were examined for this study. Some data sources were included and some were dropped. An explanation of each source follows.

Toxic Release Inventory Data

TRI data from calendar year 1992 were extracted from EPA's own TRIPQUIC System. TRIPQUIC is a subset of the official Toxic Release Inventory System (TRIS) that has a great advantage for this work. The TRIPQUIC system has routines to verify and correct facility supplied longitude/latitude information. Thus, the location information in TRIPQUIC is more accurate and reliable than that of its parent dataset, TRIS. The TRI data is limited to only manufacturing facilities with SIC codes between 20 and 39. In addition, only those manufacturers using specified chemicals above a certain threshold are required to report.

Facility location and address information were retrieved for all reporting facilities in 1992. Those 24 thousand facilities were read into our GIS project as the universe of TRI facilities.

AIRS Air Quality Monitor Data

The Aerometric Information Retrieval System (AIRS) database is maintained the Office of Air Quality Planning and Standards and it stores information on monitored concentration of National Ambient Air Quality Standard pollutants. Each monitored location includes a longitude and latitude. No attempt was made to differentiate ambient air quality monitors from emission monitors. Over 14,000 monitors were identified in this database as having reasonable longitudes and latitudes. Reasonable longitudes and latitudes essentially means that data were present and within the bounds of the continental United States (no federally recognized Tribes appear in the Bureau of Indian Affairs boundary file in Alaska or Hawaii). These 14,000 or so monitors served as the universe of air quality monitor locations and were included in the project as such.

AIRS Facility Data

Facilities from the AIRS Facility System (AFS) were intended for inclusion in the study but were dropped in favor of a more robust data source (see entry under Interim Regional Emission Inventory). AFS data, in general, have missing or improbable location information. A cursory look at a subset of AIRS data showed very few facilities with longitude/latitude information. Since a data source existed for point source information about NAAQS, we opted to use that in lieu of facility data directly from the AIRS system.

Interim Regional Emissions Inventory

In an attempt to correct the lack of location information in the AIRS facility database, the Interim Regional Emissions Inventory was identified as an appropriate source for NAAQS pollutants. This database is maintained by the Office of Air Quality Planning and Standards. It consists of text files on the National Computer Center's IBM mainframe, one for each year of the inventory. The data in this file is collected from several sources. Information for utilities is compiled from the latest Department of Energy forms completed by the individual utilities. Information from other sources is projected from the 1985 National Acid Precipitation Assessment Program (NAPAP) data to 1991. The reporting limit for this data is 100 tons. Smaller facilities are not included. Plant openings and closings after 1985 are not reflected in this data. About 7,000 sources were identified for 1991 release estimates and served as our universe of NAAQS pollutant point sources in our analysis.

Dunn & Bradstreet Data

The TRI staff is considering expanded reporting to the Toxic Release Inventory System. One of the current considerations is an expansion of the industries required to report. Currently, manufacturers in SIC codes 20-39 are required to submit provided they meet certain thresholds. The potential expansion would increase the number of SIC codes required to report. The SIC codes under consideration are:

- 10 - Metal Mining
- 12 - Coal Mining
- 13 - Oil and Gas
- 14 - Other Mining
- 40 - Railroads
- 42 - Motor Freight
- 45 - Airports
- 46 - Pipelines
- 47 - Transportation Services
- 49 - Utilities
- 50,51 - Wholesale
- 7389 - Solvent Recovery

The Dunn & Bradstreet database has information on businesses in these SIC codes. In addition, the Dun & Bradstreet file provides location information that, in theory, would allow their inclusion into this analysis. Unfortunately, while all facilities have longitude and latitude information, we have concerns over their accuracy. In a limited test of this data, about 2,000 facilities, all were aligned along a narrow band of longitude, an extremely unlikely occurrence. So, for now, Dunn & Bradstreet information on potential reporters to the TRI are not included in the analysis.

III. Results of the Analysis

Appendix A has 26 maps for all tribal lands with a TRI or NAAQS pollutant point source on or within 3 miles. These maps also show air quality monitors on and near tribal lands.

As reported in Table 1, the analysis identified 41 TRI facilities located on tribal lands and another 173 facilities within 3 miles of the tribal borders, 0.9 percent of the total number of facilities filing in 1992 (23,437). Releases and transfers for these 214 facilities totaled 100.1 million pounds in 1992. In addition, Table 1 shows 55 NAAQS pollutant sources on tribal lands and another 58 within 3 miles of tribal borders, or about 1.5 percent of all facilities from the Interim Regional Emissions Inventory. These 113 facilities emitted 730 thousand tons of NAAQS pollutants in 1991.

Table 2 expands the view of Table 1 by presenting similar results at a finer level of detail. Results in Table 2 are displayed by region and individual tribal land³. In addition, Table 2 introduces another result, that of air quality monitors in and around Tribes. Nationally, 439 air monitors sit either on reservations or within 3 miles of reservation borders. Tribal lands with notable activity around them include Osage in Region 6, with 50 facilities and 34 monitors, Gila River in Region 9 with 24 facilities and 2 monitors, and Puyallup with 32 facilities and 18 monitors. About 475 thousand people live on the reservations listed in Table 2.⁴

Tables 3 and 4 increase the level of detail still further.⁵ In Table 3, individual TRI facility information is presented. For each facility identified, its name and SIC code are shown along with every chemical it releases and to which media each chemical is released. Similar data is provided for facilities identified as NAAQS pollutant emitters in Table 4.

Table 5 is a listing by region of all chemicals released on or near tribal lands and the amount of each release. At the beginning of the table, a national summary is presented. Methanol, Toluene, and Manganese compounds top the list of TRI releases to air.

Table 6 lists by SIC code and region, total chemical releases. While SIC 28 (Chemicals), SIC 33 (Primary Metals), and SIC 29 (Petroleum) are the most frequently reported industrial classifications, 18 of the 20 manufacturing industrial classifications in TRI are present. Of the 20 manufacturing two-digit SIC codes, SIC 21 (Tobacco) and SIC 23 (Apparel) are not represented in the universe of facilities located on or near tribal lands.

³Region 1 had no identified facilities on or near a tribal land. Region 3 has no federally recognized tribal lands.

⁴Population figures in Table 2 are from the Bureau of Indian Affairs, "Indian Service Populations and Labor Force Estimates", January 1991.

⁵Because of the size of Tables 3, 4, and 5, they have been placed in appendices B, C and D respectively.

Table 2
Facility, Monitor, and Release Summary Information by Region and Tribal Land

Tribe	Popn	TRI				TRI Air Release Inside or Near Border (lbs)	Air Quality Monitors (Inside or Near)	NAAQS		NAAQS	
		Facilities (Inside Border)	Facilities (Near Border)	Air Release Inside Border (lbs)	Total Release Inside Border (lbs)			Sources Inside Border	Sources Near Border	Pollutant Air Release Inside Border (tons)	Pollutant Air Release Inside or Near Border (tons)
Region- 2											
Allegheny	6,227	1		64,150	64,150	64,150			.	.	.
Cattaraugus	-	.	1	.	.	49,706	4	.	2	.	610
St. Regis	5,376	.	2	.	.	106,810	2	.	2	.	610
Tonawanda	689		2	.	.	82,330	1	.	.	.	.
Tuscarora	664		.	.	.	.	2	.	.	.	.
Total - Region 2	12,956	1	5	64,150	64,150	302,996	9	0	4	0	1,220
Region- 4											
Cherokee	10,114	.	.	.	.	.	1	.	.	.	.
Choctaw	4,824	.	2	.	.	10,868	.	.	.	.	.
Hollywood	?		4	.	.	32,346	7	.	2	.	2,612
Total - Region 4	14,938	0	6	0	0	43,214	8	0	2	0	2,612
Region- 5											
Bad River	1,416	.	1	.	.	500	2	.	.	.	.
Fond Du Lac	2,922	.	4	.	.	589,835	12	1	2	313	6,696
Greater Leech Lak	5,771		1	.	.	167,739	1	.	.	.	.
Hannahville	347	.	1	.	.	74,200		.	.	.	.
Isabella	664	3	2	38,988	38,988	126,488	3	.	.	.	.
L'Anse	803	.	.	.	.	.	.	.	1	.	1,887
Lac Corte Oreille	3,049	.	1	.	.	53,769	.	.	.	.	.
Lac Du Flambeau	1,414	.	.	.	.	.	1	.	.	.	.
Mole Lake	?	.	.	.	.	.	2	.	.	.	.
Oneida	4,923	3	16	822	822	1,302,798	11	.	8	.	54,610
Potawatomi	486	.	.	.	.	.	2	.	.	.	.
Prairie Isle	176	.	1	.	.	108,450	.	.	.	.	.
Stockbridge Munse	826	.	.	.	.	.	1	.	.	.	.
White Earth	4,395	.	.	.	.	.	5	.	.	.	.
Winnebago	2,608	.	.	.	.	.	1	.	.	.	.

Table 2
Facility, Monitor, and Release Summary Information by Region and Tribal Land

Tribe	Popn	TRI Facilities (Inside Border)	TRI Facilities (Near Border)	TRI Air Release Inside Border (lbs)	TRI Total Release Inside Border (lbs)	TRI Air Release Inside or Near Border (lbs)	Air Quality Monitors (Inside or Near)	NAAQS Sources Inside Border	NAAQS Sources Near Border	NAAQS Pollutant Air Release Inside Border (tons)	NAAQS Pollutant Air Release Inside or Near Border (tons)
Total - Region 5	29,800	6	27	39,810	39,810	2,423,779	41	1	11	313	63,193
Region- 6											
Isleta	3,948	1		1,260	1,520	1,260	3				
Jicarilla	3,100						2	2	1	899	1,023
Laguna	3,634						2	2		2,151	2,151
Navajo	2,360						16	7	1	181,898	182,504
Osage	10,594	4	33	927,525	948,801	4,893,141	34	2	11	9,039	89,210
San Ildefonso	634		1			500	1				
San Juan	2,132							1		931	931
Sandia	286		6			132,879	10				
Santa Clara	1,742						2				
Taos	1,601						3				
Tesuque	389		1								
Ute Mountain	1,243						1				
Zuni	8,546						2				
Total - Region 6	40,209	5	41	928,785	950,321	5,027,780	76	14	13	194,918	275,819
Region- 7											
Sac And Fox	42		1			11,000					
Winnebago	1,650		1				2		2		82,120
Total - Region 7	1,692	0	2	0	0	11,000	2	0	2	0	82,120

Table 2
Facility, Monitor, and Release Summary Information by Region and Tribal Land

Tnbe	Popn.	TRI				Air Quality Monitors (Inside or Near)	NAAQS			
		Facilities (Inside Border)	Facilities (Near Border)	Air Release Inside Border (lbs)	Total Release Inside Border (lbs)	TRI Air Release Inside or Near Border (lbs)	Sources Inside Border	Sources Near Border	Pollutant Air Release Inside Border (tons)	Pollutant Air Release Inside or Near Border (tons)

Region- 8

Blackfeet	7,208	.	.	.	.	.	5	1	.	159	159
Crow	2,816	.	.	.	.	.	15	.	.	.	.
Devils Lake	4,240	1	.	228,805	228,805	228,805	.	.	.	.	.
Flathead	7,667	.	.	.	.	.	27	.	.	.	.
Fort Belknap	2,407	.	.	.	.	.	10	.	.	.	.
Fort Berthold	3,776	.	.	.	.	.	8	.	.	.	.
Fort Peck	6,699	.	.	.	.	.	14	.	.	.	.
Navajo	2,109	.	.	.	.	.	4	3	.	600	600
Northern Cheyenn	4,458	.	.	.	.	.	11	.	.	.	.
Pine Ridge	20,806	.	.	.	.	.	1	.	.	.	.
Sisseton	2,991	.	4	.	.	60,073	.	.	.	.	.
Southern Ute	1,286	.	.	.	.	.	3	1	.	223	223
Standing Rock	5,860	.	.	.	.	.	2	.	.	.	.
Turtle Mountains	10,829	.	1	.	.	16,103	.	.	.	.	.
Unitah And Ouray	3,170	1	.	57,474	57,474	57,474	17	18	.	21,145	21,145
Ute Mountain	1,243	.	1	.	.	3,192	8	.	.	.	.
Wind River	7,255	1	.	6,263	6,263	6,263	3	2	.	2,590	2,590
Total - Region 8	94,820	3	6	292,542	292,542	371,910	128	25	0	24,717	24,717

Region- 9

Agua Caliente	278	.	.	.	.	.	1	.	.	.	.
Battle Mountain	.	.	2	.	.	2,800	2	.	.	.	.
Big Pine	384	.	.	.	.	.	1	.	.	.	.
Bishop	1,350	.	.	.	.	.	5	.	1	.	173
Cabazon	25	1	.	1,421	1,421	1,421	2	.	.	.	.
Camp Verde	650	.	.	.	.	.	1	.	.	.	.
Capitan Grande	36	.	.	.	.	.	1	.	.	.	.
Carson	?	.	2	.	.	13,021	3	.	.	.	.
Cedarville	18	.	.	.	.	.	1	.	.	.	.

Table 2
Facility, Monitor, and Release Summary Information by Region and Tribal Land

Tribe	Popn.	TRI Facilities		TRI Air Release	TRI Total Release	TRI Air Release	Air Quality Monitors	NAAQS Sources		NAAQS Pollutant Air Release	NAAQS Pollutant Air Release
		(Inside Border)	(Near Border)	(lbs)	(lbs)	(lbs)		(Inside Border)	(Near Border)	(tons)	(tons)
Chemehuevi	107	2		34,085	34,085	34,085					
Colorado River	2,361						1		1		3,210
Cortina	150		1			421	3				
Dresslerville-Wash	822		1			6,998	1				
Ely Colony	271						1				
Fallon	885		2			14,760	1				
Fort Apache	12,503						1				
Fort Independence	123						1				
Fort Mohave	310						2		1		958
Fort Yuma	1,446						4	1		239	239
Gila River	11,700	4	20	129,140	129,140	656,188	2				
Hoope Valley	2,936						1	1		214	214
Hopi	9,395						4				
Hualapai	1,400						1				
Jackson	28						1				
Kaibab	84		2			45,056	1		1		1,131
Las Vegas	52		1			32,205	6				
Lone Pine	296						1				
Moapa	186								1		19,128
Morongo	1,017						2				
Navajo	165,086	1		52,794	52,794	52,794	10	1	1	130,194	130,424
Pyramid Lake	930						2		1		1,226
Reno-Sparks	724		2			40	16		1		281
Rincon	651	1		6,400	6,400	6,400					
Salt River	4,328	1	9	19,380	19,380	382,791	6		1		233
San Carlos	7,562						1				
San Xavier	?	2	7	125,259	139,889	203,366	3				
Santa Ynez	312						1				
Shingle Spring	263						1				
Shoshone	?						3				

Table 2
Facility, Monitor, and Release Summary Information by Region and Tribal Land

Tribe	Popn.	TRI Facilities (Inside Border)	TRI Facilities (Near Border)	TRI Air Release Inside Border (lbs)	TRI Total Release Inside Border (lbs)	TRI Air Release Inside or Near Border (lbs)	Air Quality Monitors (Inside or Near)	NAAQS Sources Inside Border	NAAQS Sources Near Border	NAAQS Pollutant Air Release Inside Border (tons)	NAAQS Pollutant Air Release Inside or Near Border (tons)
Toulumine	285	.	.	.	.	.	1	.	.	.	.
Twentynine Palms	16	.	.	.	.	.	2	.	.	.	.
Unknown	?	.	1	.	.	.	6	.	1	.	788
Winnemucca	161	.	.	.	.	.	2	.	.	.	.
XI Ranch	?	.	.	.	.	.	3	.	1	.	267
Yavapai	130	.	.	.	.	.	1	.	.	.	.
Yerington	445	.	.	.	.	.	2	.	.	.	.
Total - Region 9	229,706	12	50	368,479	383,109	1,452,346	111	3	11	130,647	158,272
Region- 10											
Coeur D'Alene	803	.	.	.	.	.	.	.	1	.	764
Colville	4,470	.	.	.	.	.	2	.	.	.	.
Fort Hall	7,288	.	5	.	.	628,982	11	1	1	2,997	11,339
Kalispell	141	.	1	.	.	5	.	.	.	.	.
Lower Elwah	1,149	.	1	.	.	12,300	.	.	.	.	.
Lummi	3,253	.	3	.	.	189,634	5	.	3	.	50,700
Muckleshoot	3,144	.	6	.	.	568,243	2	.	2	.	1,271
Nez Perce	1,834	.	1	.	.	1,052,800	3	.	.	.	.
Puyallup	8,640	13	9	674,550	675,025	1,336,127	18	8	2	18,676	30,208
Quinault	2,845	.	.	.	.	.	.	1	.	114	114
Swinomish	764	.	3	.	.	514,674	5	.	2	.	26,726
Tulalip	1,710	.	2	.	.	70,797	6	.	2	.	2,971
Umatilla	1,691	.	.	.	.	.	3	.	.	.	.
Yakima	13,331	1	5	70,632	70,632	176,531	9	2	2	153	245
Total - Region 10	51,063	14	36	745,182	745,657	4,550,093	64	12	15	21,940	124,338
All Regions	475,184	41	173	2,438,948	2,475,589	14,183,118	439	55	58	372,535	732,291

Table 6

Industry Breakout for Facilities On or Near Tribal Lands Nationwide and by Region

			Release Quantity (lbs)			
SIC Code	Industry	Facilities	Air	Land	Water	Offsite
Nationwide						
10	Metal Mining	1	346,000		.	.
13	Oil & Gas	19	12,580,000			.
20	Food Products	8	75,378	.	.	260,585
22	Textile Mills	2	22,010	.		35,600
24	Lumber	22	17,807,678	.	55	47,178
25	Furniture and Fixtures	3	159,487		.	3,181
26	Paper and Allied Products	19	85,352,968	5,907	153,432	3,115,250
27	Printing and Publishing	1	29,680			1,000
28	Chemicals and Allied Products	36	147,594,243	395,780	418	364,540
29	Petroleum and Coal Products	27	123,328,797	11,923	139,285	63,374,558
30	Rubber and Plastic	19	1,489,773		.	82,016
31	Leather and Leather Products	2	643,706	.	499	81,156
32	Stone, Clay, and Glass	9	15,635,902	.	250	47,598
33	Primary Metals	30	120,470,188	223,006	8,169	13,245,560
34	Fabricated Metal Products	21	421,782	14,550	269	1,455,163
35	Industrial Machinery	7	42,191	1,000	27	889,817
36	Electronic & Electrical Equipmen	15	647,597	.	.	749,665
37	Transportation Equipment	21	2,182,076	908	21	1,187,845
39	Miscellaneous Manufacturing	5	153,162	.		33,358
45	Airport	1	1,346,000	.	.	.
46	Pipeline	2	2,214,000	.	.	.
49	Utilities	23	937,112,000			.
51	Wholesale	2	2,824,000	.	.	.
80	Health Services	1	626,000	.		.
	Bad or missing SIC Code	5	5,660,500			.

Region - 2

25	Furniture and Fixtures	1	64,150	.	.	3,181
31	Leather and Leather Products	2	643,706	.	499	81,156
33	Primary Metals	4	1,326,810	.	7,899	126,164
37	Transportation Equipment	2	82,330	.	.	239
80	Health Services	1	626,000	.	.	.

Region - 4

20	Food Products	1	10,868	.	.	.
28	Chemicals and Allied Products	3	7,846	.	.	8,643
37	Transportation Equipment	1	24,500	.	.	.
49	Utilities	2	5,224,000	.	.	.

Region - 5

20	Food Products	1	1,500	.	.	10,577
24	Lumber	2	186,739	.	.	1,750

Table 6

Industry Breakout for Facilities On or Near Tribal Lands Nationwide and by Region

SIC Code	Industry	Facilities	Release Quantity (lbs)			
			Air	Land	Water	Offsite
25	Furniture and Fixtures	1	74,200	.	.	.
26	Paper and Allied Products	13	56,342,400	.	15,777	3,114,780
28	Chemicals and Allied Products	2	822	.	.	.
30	Rubber and Plastic	4	158,450	.	.	2,200
32	Stone, Clay, and Glass	2	612,500	.	.	.
33	Primary Metals	2	849,255	2,220	.	11,382
34	Fabricated Metal Products	2	15,050	.	.	6,373
35	Industrial Machinery	3	2,900	.	20	243,350
37	Transportation Equipment	2	66,750	750	.	10,255
39	Miscellaneous Manufacturing	2	31,213	.	.	12,711
49	Utilities	3	70,468,000	.	.	.

Region - 6

13	Oil & Gas	3	1,678,000	.	.	.
20	Food Products	1	14,174	.	.	27,199
24	Lumber	2	9,394,000	.	.	750
25	Furniture and Fixtures	1	21,137	.	.	.
27	Printing and Publishing	1	29,680	.	.	1,000
28	Chemicals and Allied Products	9	114,097,581	.	.	348,690
29	Petroleum and Coal Products	11	40,912,560	8,102	17,348	192,856
30	Rubber and Plastic	4	861,489	.	.	13,951
32	Stone, Clay, and Glass	1	252,196	.	.	47,098
33	Primary Metals	10	9,435,762	31,686	.	2,920,895
34	Fabricated Metal Products	8	86,317	250	269	193,648
35	Industrial Machinery	2	18,009	1,000	7	434,468
36	Electronic & Electrical Equipmen	3	96,375	.	.	123,554
46	Pipeline	1	1,212,000	.	.	.
49	Utilities	9	373,114,000	.	.	.
	Bad or missing SIC Code	2	5,442,500	.	.	.

Region - 7

20	Food Products	1	11,000	.	.	200,090
28	Chemicals and Allied Products	1	6,860,000	.	.	.
49	Utilities	1	157,380,000	.	.	.

Region - 8

13	Oil & Gas	16	10,902,000	.	.	.
28	Chemicals and Allied Products	3	1,959,455	.	.	.
29	Petroleum and Coal Products	6	12,635,474	.	.	75,217
30	Rubber and Plastic	2	249,805	.	.	3,820
34	Fabricated Metal Products	1	19,102	.	.	19,102
35	Industrial Machinery	1	1,482	.	.	9,693
36	Electronic & Electrical Equipmen	1	18,489	.	.	1,380

Table 6

Industry Breakout for Facilities On or Near Tribal Lands Nationwide and by Region

SIC Code	Industry	Facilities	Release Quantity (lbs)			
			Air	Land	Water	Offsite
39	Miscellaneous Manufacturing	1	16,103	.	.	.
46	Pipeline	1	1,002,000	.	.	.
49	Utilities	2	23,002,000	.	.	.

Region - 9

10	Metal Mining	1	346,000	.	.	.
20	Food Products	2	13,500	.	.	.
22	Textile Mills	2	22,010	.	.	35,600
24	Lumber	7	3,091,061	.	.	7,650
28	Chemicals and Allied Products	6	12,298	330	.	2,730
29	Petroleum and Coal Products	1	31,600	.	.	.
30	Rubber and Plastic	6	153,788	.	.	42,840
32	Stone, Clay, and Glass	2	2,454,800	.	250	.
33	Primary Metals	9	198,260	189,100	.	10,173,841
34	Fabricated Metal Products	7	156,914	14,300	.	746,565
35	Industrial Machinery	1	19,800	.	.	202,306
36	Electronic & Electrical Equipment	11	532,733	.	.	624,731
37	Transportation Equipment	7	204,762	158	.	314,079
39	Miscellaneous Manufacturing	1	10,820	.	.	4,620
49	Utilities	6	307,924,000	.	.	.
51	Wholesale	2	2,824,000	.	.	.

Region - 10

20	Food Products	2	24,336	.	.	22,719
24	Lumber	11	5,135,878	.	55	37,028
26	Paper and Allied Products	6	29,010,568	5,907	137,655	470
28	Chemicals and Allied Products	12	24,656,241	395,450	418	4,477
29	Petroleum and Coal Products	9	69,749,163	3,821	121,937	63,106,485
30	Rubber and Plastic	3	66,241	.	.	19,205
32	Stone, Clay, and Glass	4	12,316,406	.	.	500
33	Primary Metals	5	108,660,101	.	270	13,278
34	Fabricated Metal Products	4	144,399	.	.	489,475
37	Transportation Equipment	9	1,803,734	.	21	863,272
39	Miscellaneous Manufacturing	2	95,026	.	.	16,027
45	Airport	1	1,346,000	.	.	.
99	Bad or missing SIC Code	3	218,000	.	.	.

IV. Refinements of Methodologies and Data Sources

Improvements to both the methodology and data sources used in this analysis could 1) improve the accuracy of the results as well as 2) create opportunities for further analytic work in areas such as exposure assessments and non-compliance targeting. Some of these suggested areas for future work are applicable to using TRI data in general. The accuracy of the analysis could be refined in one of several ways, such as further verification of location information. In addition, linking this data to other types of data, such as chemical hazard or population location, could facilitate a variety of risk analyses.

IV.A. Refinements of the Current Analysis

As geographic analysis become more popular, the accuracy of longitude/latitude information is surely to increase. As such data enhancement procedures are developed in the future, more accurate latitude/longitude information will be available for TRI and AIRS facilities. Individual review of the facilities' reported latitude/longitude (compared with facility address, Publicly Owned Treatment Works (POTW) location, or the knowledge of tribal or EPA regional staff) could provide independent verification of their locations and might be relevant to further augmenting the latitude/longitude data.

Similarly, definition of the tribal land borders could also be improved; finer resolution of tribal borders would increase the accuracy of the facility identification procedure and ensure that smaller land tracts are included in the analysis. The current analysis uses border definitions translated from GIS format at 1:2,000,000 scale. Region I GIS staff reported that the 1:2,000,000 scale may be too crude to identify tribal lands in Region I where lands are relatively small. Greater resolution of tribal border locations would enable review of smaller land tracts and more accurate identification of facility location (a number of facilities were identified as within a few hundred meters of a tribal border).

IV.B. Linkages with Other Data

There are a number of other analyses which could be undertaken if the TRI and tribal border data are linked with other currently available data on place, population, and chemical hazard information. In this section we describe details of making such linkages and the relevant data sources. The development of additional analyses using the data linkages described are presented in Table 7.

Link with chemical hazard information to estimate possible impacts on human health and ecosystems. Such an analysis would be similar to the TRI Indicators Project being conducted by U.S. EPA's Office of Pollution Prevention and Toxics (OPPT). In cruder form, releases could be categorized according to both their health effects (carcinogenicity, acute toxicity, morbidity) and scored according to the likelihood of exposure (e.g., likelihood of exposure underground injection is small).

Link with population information to make exposure estimates from release points. Analysis of releases and transfers to surface water also requires, at a minimum, information on the direction of surface water flow. Population information is available from the Bureau of the Census' Topographically Integrated Geographic Encoding and Referencing (TIGER) files but would have to be linked via place information.

Link with health status information from Centers for Disease Control (CDC) such as the Birth Defects Monitoring Program (which monitors over one million births per year) or state surveillance programs (three-quarters of states have or are developing reproductive outcome surveillance programs).

Risk-Based Priority Setting

One more complex analysis is an assessment of the relative exposures and risks of the various environmental releases identified above. Using generic exposure modeling it is possible to rank releases according to their potential for adverse impact in order to select a case study or pilot project. There are several approaches the analysis could follow. Releases (across media) of individual facilities selected to represent the types of manufacturers located on tribal lands defined by SIC code (from above) could be ranked. Assuming similar manufacturing processes for facilities with the same SIC code, releases and transfers of the same chemicals can be projected at other such facilities (in proportion to their production). For example, if a secondary copper smelter in TRI reports releases of twelve chemicals, it is reasonable to assume that other smelters, even if they do not meet the chemical use or employment thresholds might release those chemicals as well.

Another use of the exposure model might be to identify releases of concern to a particular geographic area. In addition to manufacturing facilities in the immediate area reporting under EPCRA Section 313, the TRI analysis could be used to examine other potential sources: nonreporters, those not meeting the reporting thresholds, and transport of pollutants across tribal boundaries. In situations where physical transport of pollutants is expected to be significant, direct discharges to water, stack air and land disposal are of greatest concern. A similar analysis could be used to identify hotspots of potential high exposure and high risk. Another application of such risk-based priority ranking could also be used to target enforcement review of potential nonreporters. The U.S. EPA's *Risk Screening Guide* (EPA 560/2-89-002) offers guidance on how to carry out risk-based analyses such as those described above.

TABLE 7
Potential Further Applications

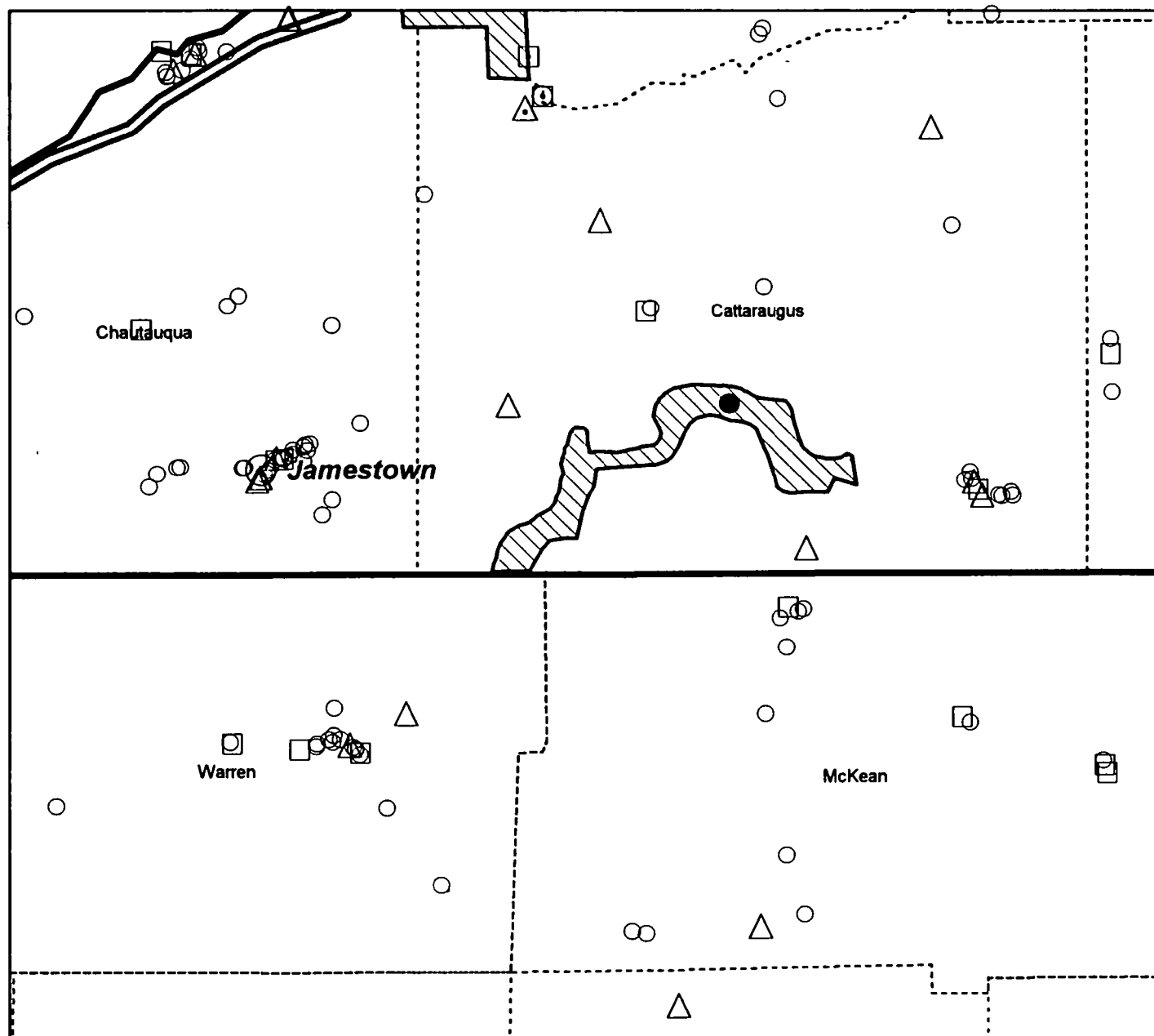
DATA LINKS AND ANALYSIS	APPLICATIONS
Link with Place Information	To identify TRI transfers brought onto tribal lands -- from tribal-based TRI facilities as well as nonreservation facilities.
Link with Chemical Hazard Information	To estimate associated hazard by media of release. Prioritize further investigations based on the <u>potential</u> for adverse health effects, a function of probable exposure and hazard.
Link with Population Information	To identify potential geographic hotspots for exposures of concern.
Link with County Business Pattern Data	To profile releases of TRI facilities which are similar to smaller (below thresholds) nonreporting facilities located on or near tribal lands. Identify potential noncomplying facilities.
Link with Other EPCRA Data (e.g., from sections 304, 311, and 312)	To obtain a better profile of chemical handling at facilities and to assist in the development of emergency response and preparation programs.
Link with Other Environmental Program Information (e.g., water permits)	To identify noncomplying facilities.

APPENDIX A

Maps of Tribal Lands Affected by TRI Facilities or NAAQS Sources

Map 2.A

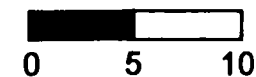
Map of Allegany Tribal Land



Legend

- County Boundaries
- State Boundaries
- Interstate Highways
- Top 1000 US cities
- Tribal Land
- TRI Facilities
- TRI Fac. Inside Border
- TRI Fac. Near Border
- Air monitors
- Air monitors inside border
- Air monitors near border
- Facility releasing NAAQP
- NAAQP source inside border
- NAAQP source near border

Miles

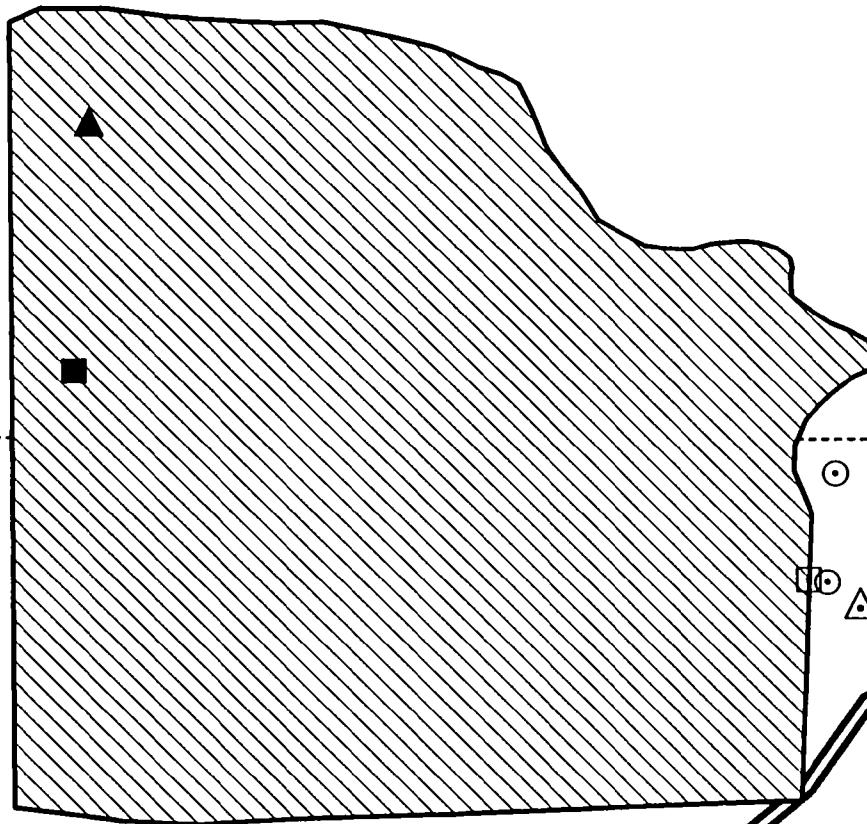


Map 5.A

Map of Fond Du Lac Tribal Land

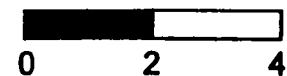
Legend

-  County Boundaries
-  State Boundaries
-  Interstate Highways
-  Top 1000 US cities
-  Tribal Land
-  TRI Facilities
-  TRI Fac. Inside Border
-  TRI Fac. Near Border
-  Air monitors
-  Air monitors inside border
-  Air monitors near border
-  Facility releasing NAAQP
-  NAAQP source inside border
-  NAAQP source near border



Carlton

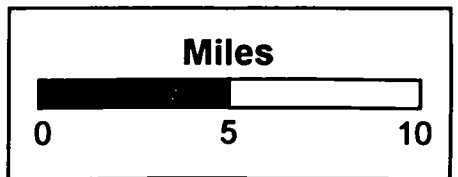
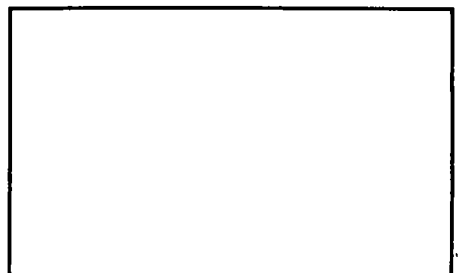
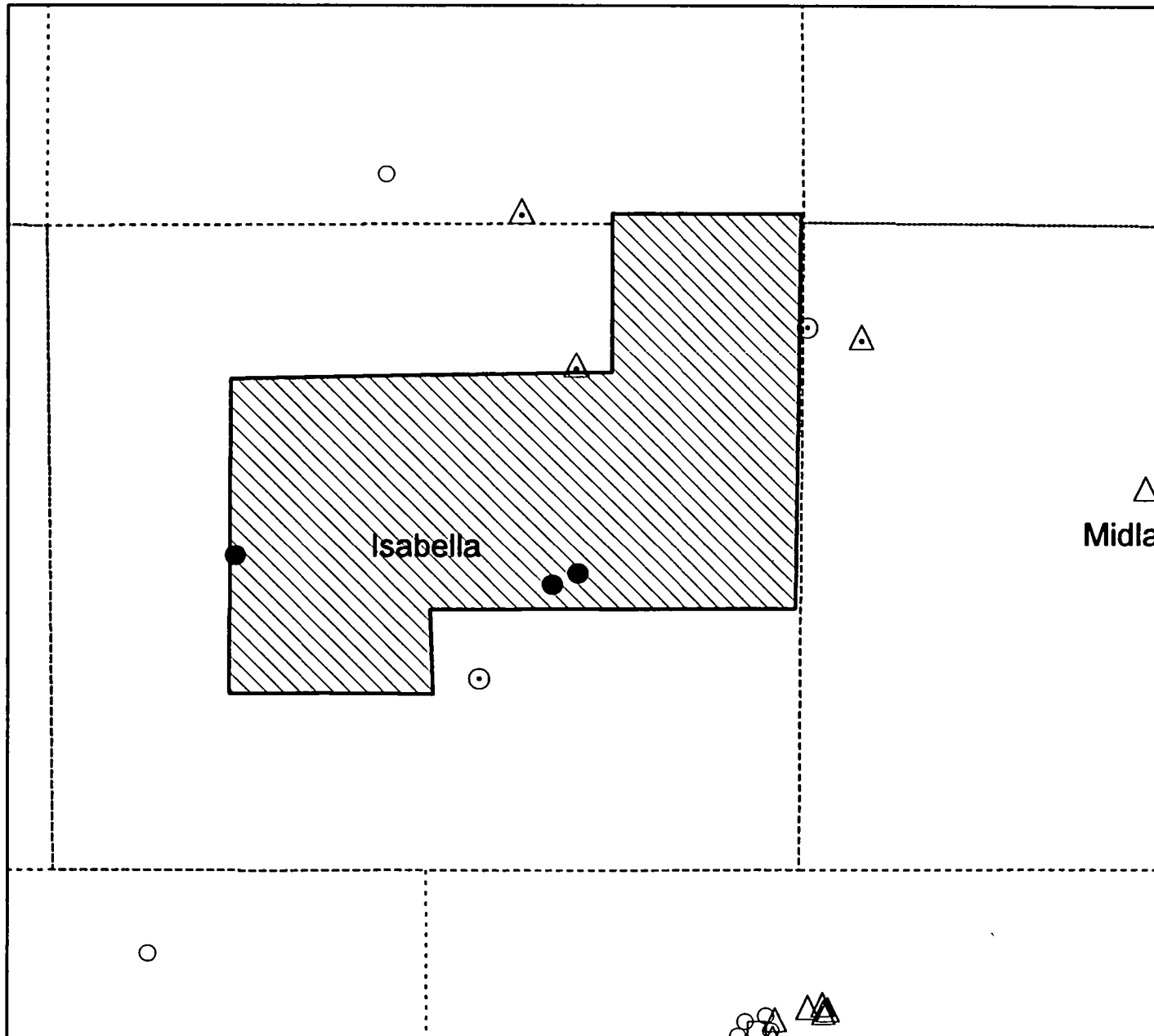
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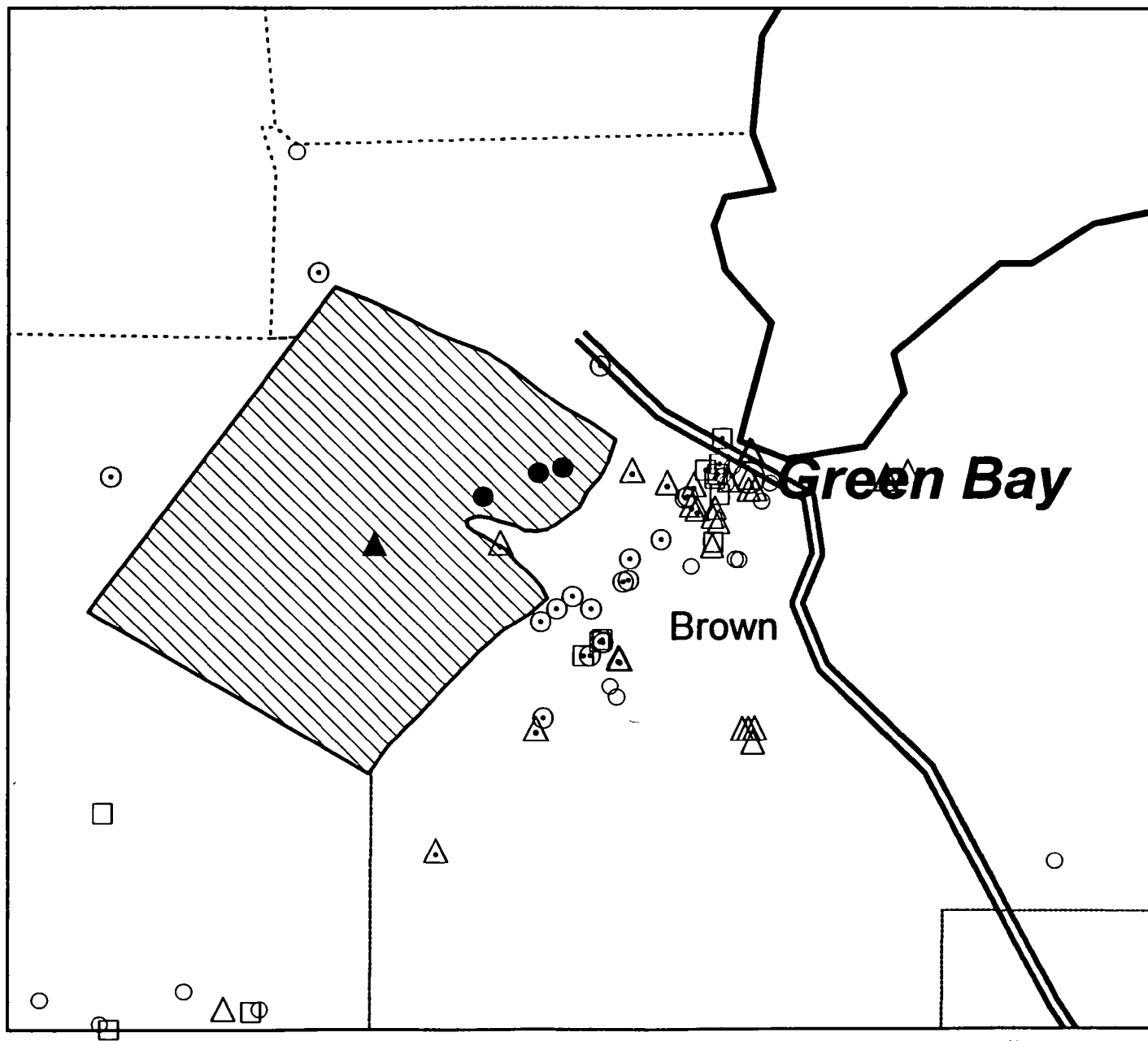
Map 5.B
Map of Isabella Tribal Land

Legend

-  County Boundaries
-  State Boundaries
-  Interstate Highways
-  Top 1000 US cities
-  Tribal Land
-  TRI Facilities
-  TRI Fac. Inside Border
-  TRI Fac. Near Border
-  Air monitors
-  Air monitors inside border
-  Air monitors near border
-  Facility releasing NAAQP
-  NAAQP source inside border
-  NAAQP source near border



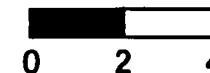
Map 5.C
Map of Oneida Tribal Land



Legend

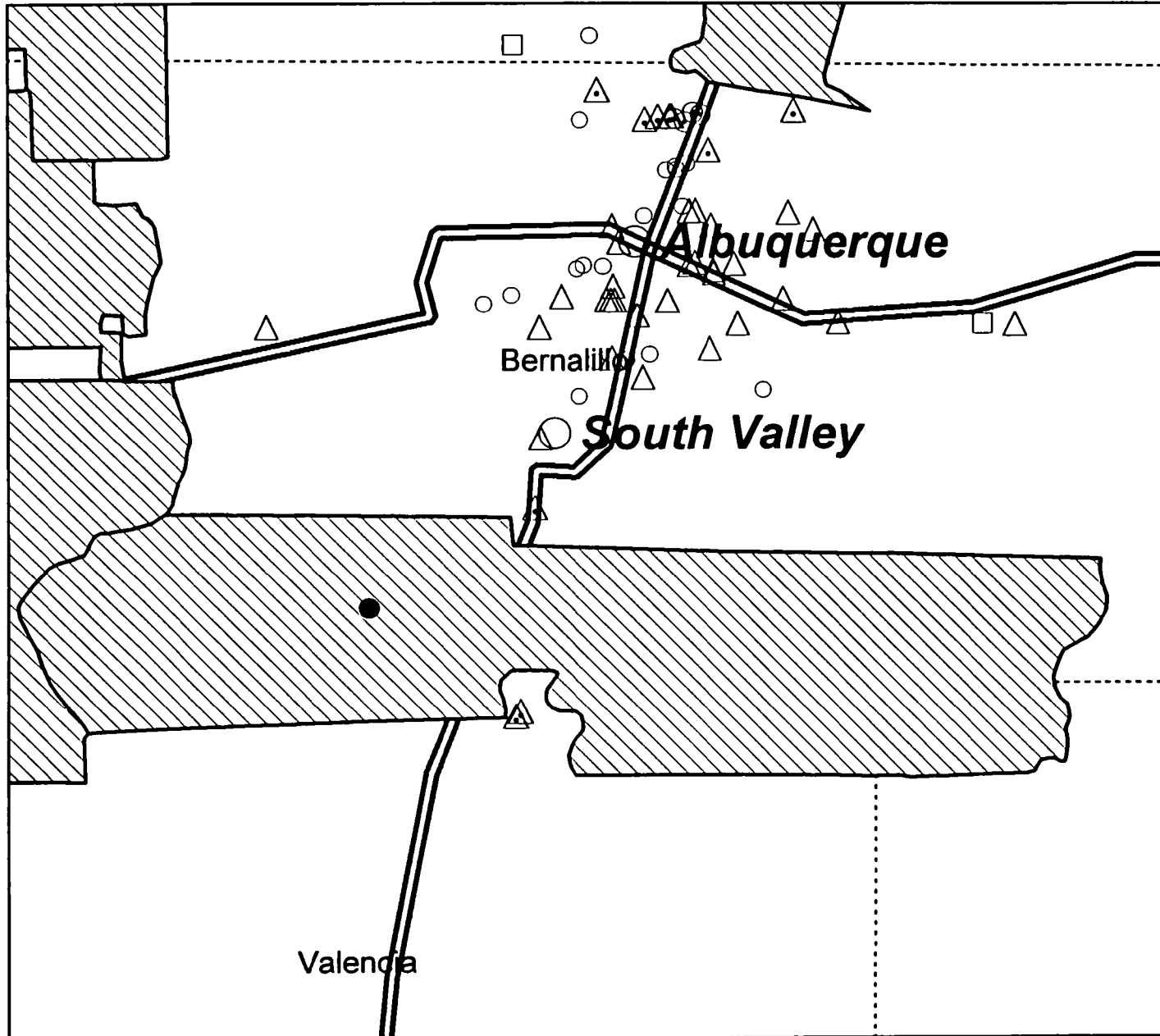
- County Boundaries
- State Boundaries
- Interstate Highways
- Top 1000 US cities
- Tribal Land
- TRI Facilities
- TRI Fac. Inside Border
- TRI Fac. Near Border
- Air monitors
- Air monitors inside border
- Air monitors near border
- Facility releasing NAAQP
- NAAQP source inside border
- NAAQP source near border

Miles



Map 6.A

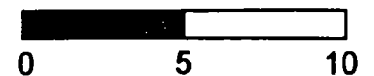
Map of Isleta Tribal Land



Legend

- County Boundaries
- State Boundaries
- Interstate Highways
- Top 1000 US cities
- Tribal Land
- TRI Facilities
- TRI Fac. Inside Border
- TRI Fac. Near Border
- Air monitors
- Air monitors inside border
- Air monitors near border
- Facility releasing NAAQP
- NAAQP source inside border
- NAAQP source near border

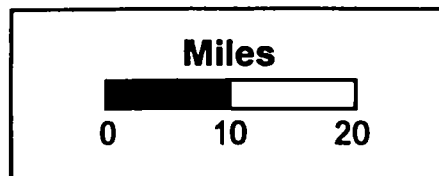
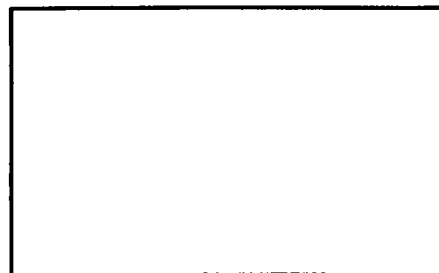
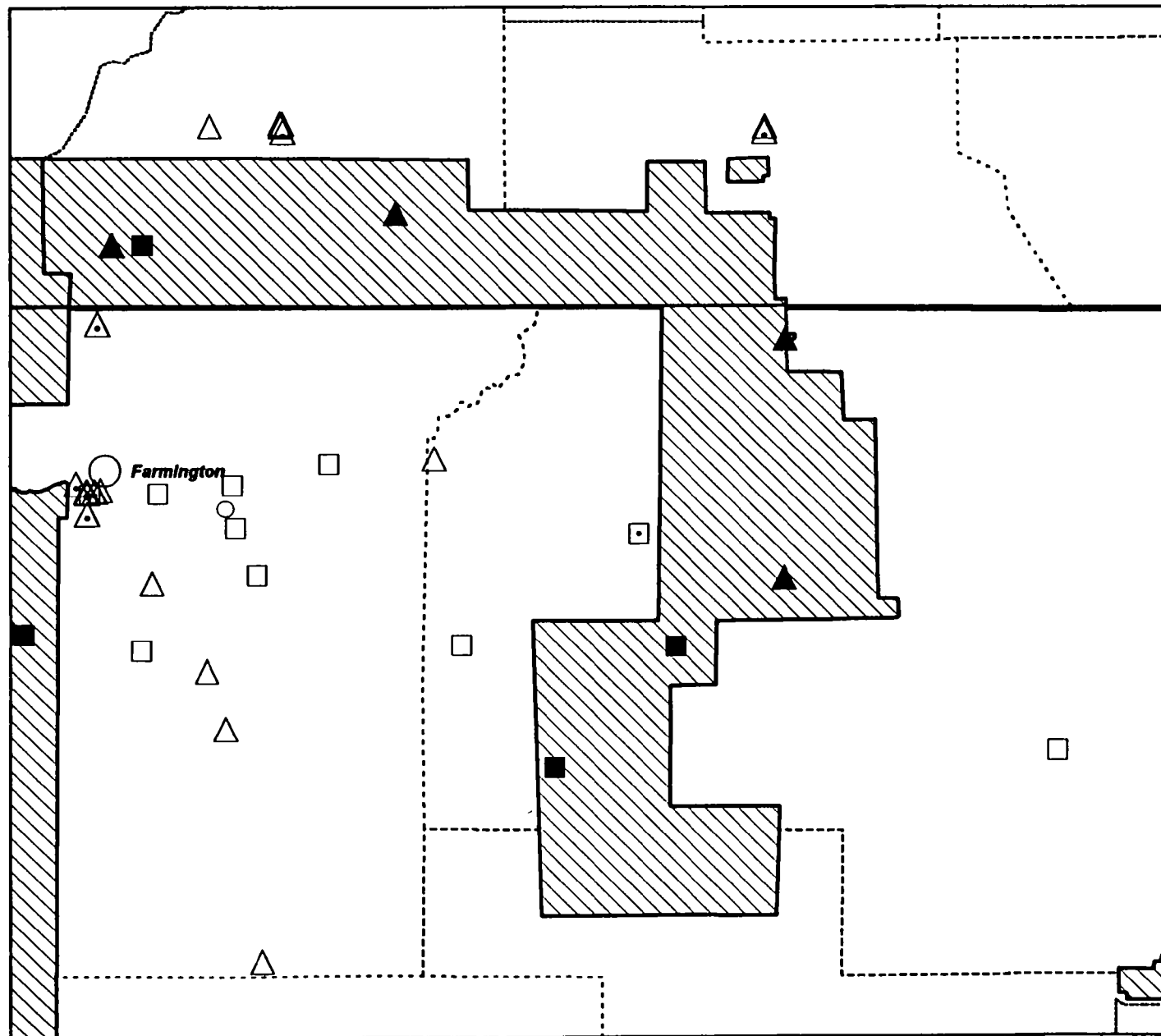
Miles



Map 6.B
Map of Jicarilla Tribal Land

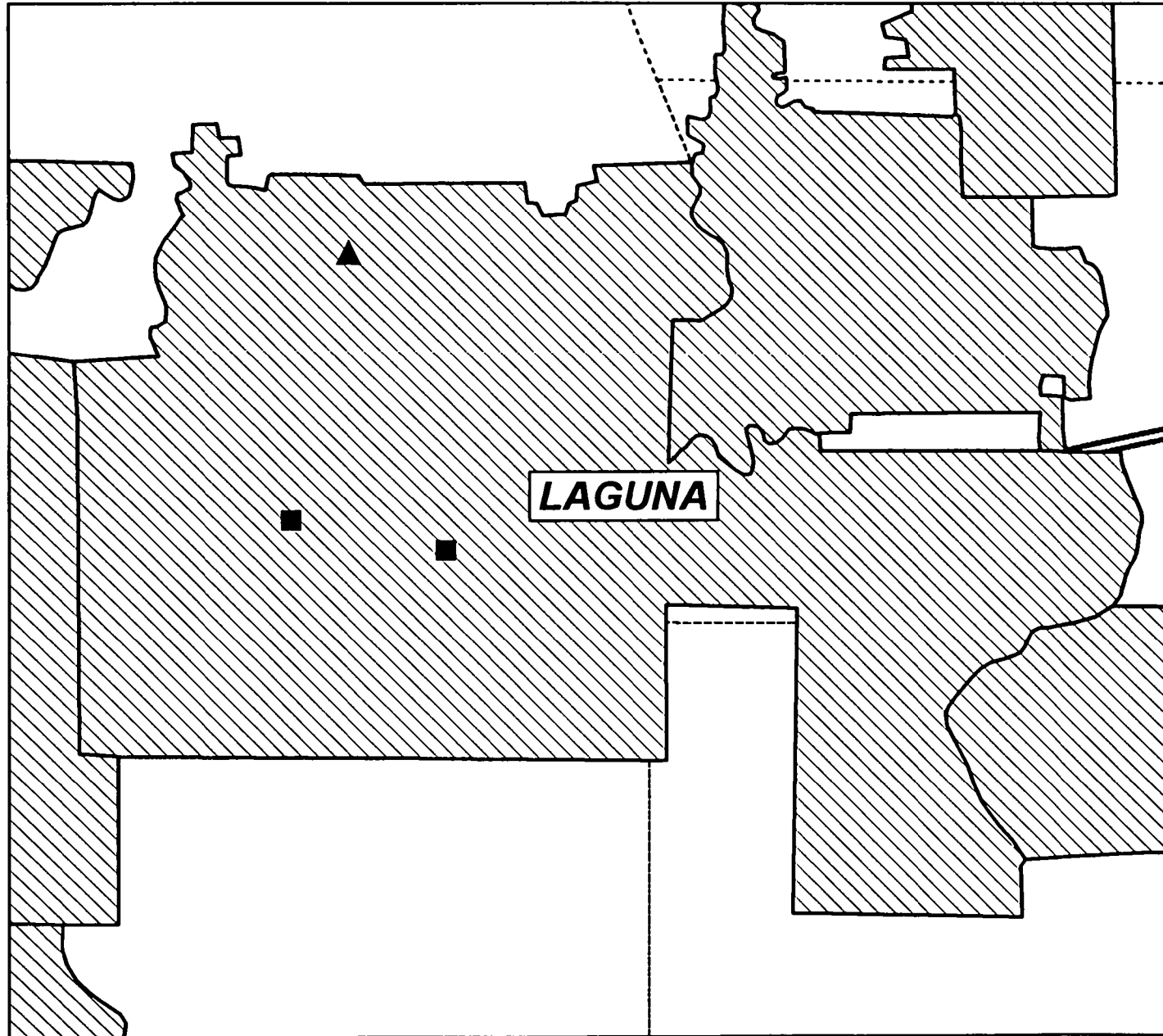
Legend

-  County Boundaries
-  State Boundaries
-  Interstate Highways
-  Top 1000 US cities
-  Tribal Land
-  TRI Facilities
-  TRI Fac. Inside Border
-  TRI Fac. Near Border
-  Air monitors
-  Air monitors inside border
-  Air monitors near border
-  Facility releasing NAAQP
-  NAAQP source inside border
-  NAAQP source near border



Map 6.C

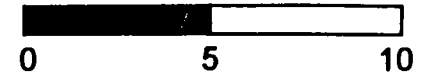
Map of Laguna Tribal Land



Legend

- County Boundaries
- State Boundaries
- Interstate Highways
- Top 1000 US cities
- Tribal Land
- TRI Facilities
- TRI Fac. Inside Border
- TRI Fac. Near Border
- Air monitors
- Air monitors inside border
- Air monitors near border
- Facility releasing NAAQP
- NAAQP source inside border
- NAAQP source near border

Miles

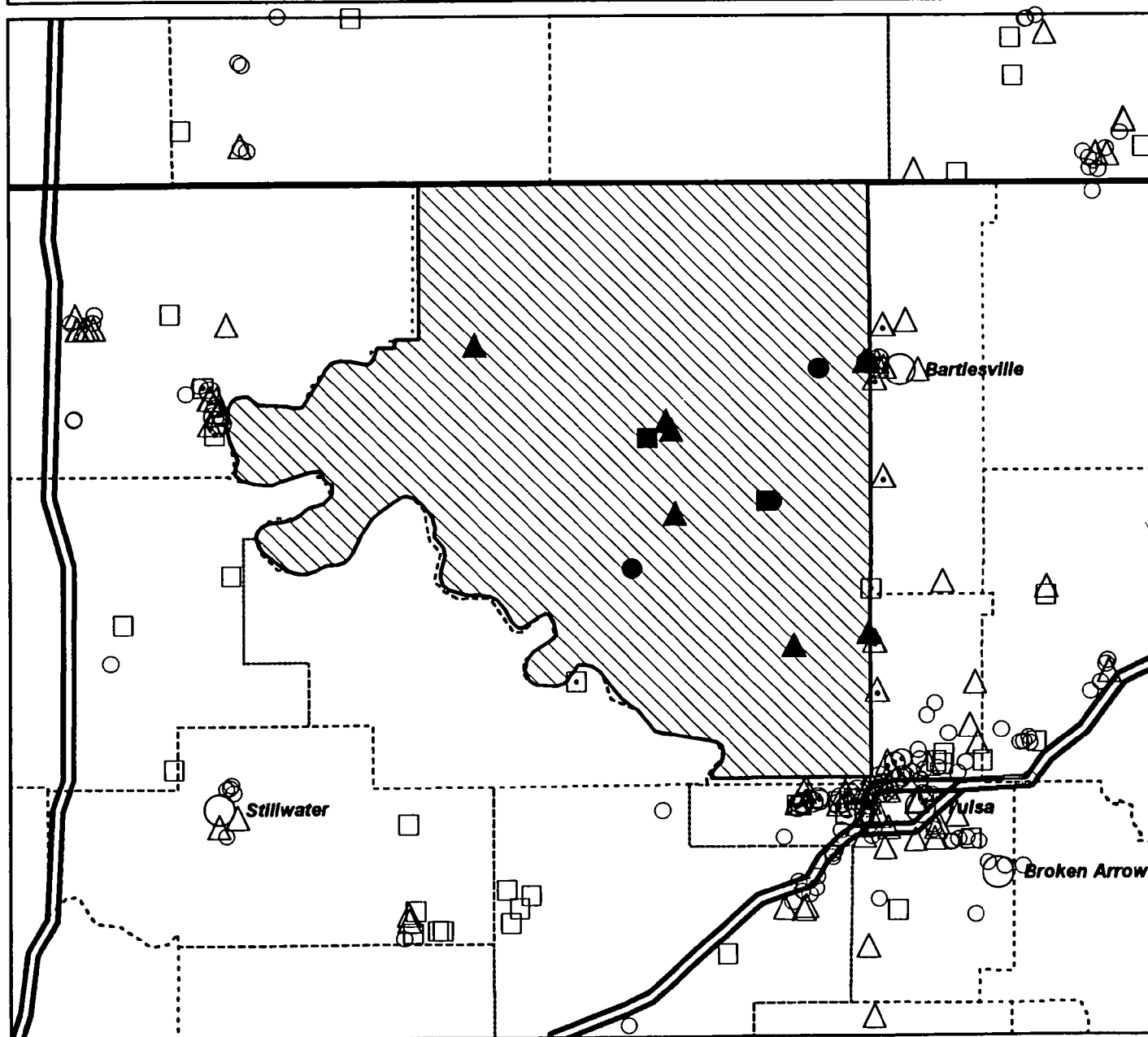


Map 6.D

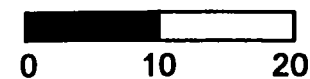
Map of Osage Tribal Land

Legend

-  County Boundaries
-  State Boundaries
-  Interstate Highways
-  Top 1000 US cities
-  Tribal Land
-  TRI Facilities
-  TRI Fac. Inside Border
-  TRI Fac. Near Border
-  Air monitors
-  Air monitors inside border
-  Air monitors near border
-  Facility releasing NAAQP
-  NAAQP source inside border
-  NAAQP source near border

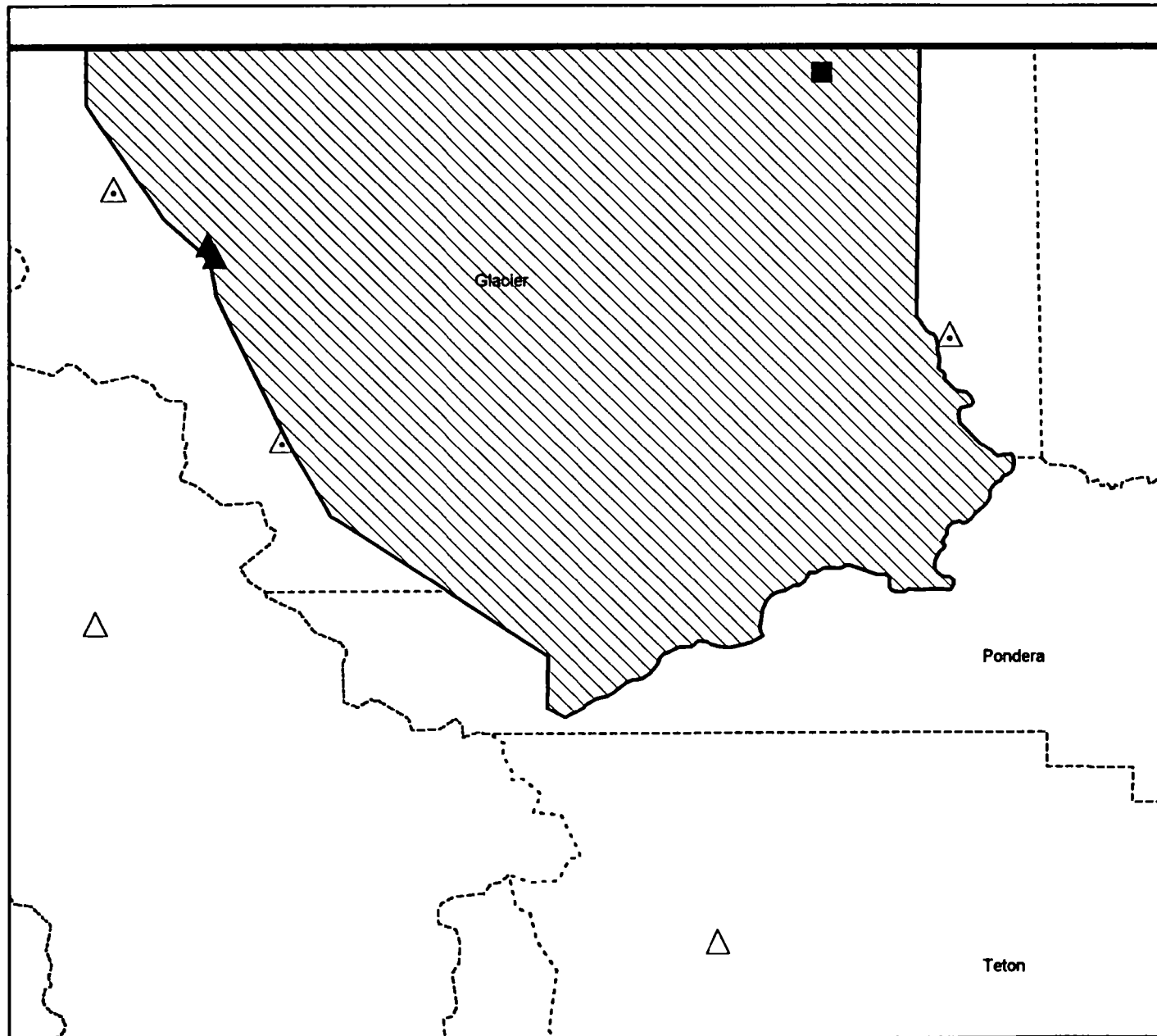


Miles



Map 8.A

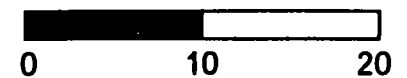
Map of Blackfoot Tribal Land



Legend

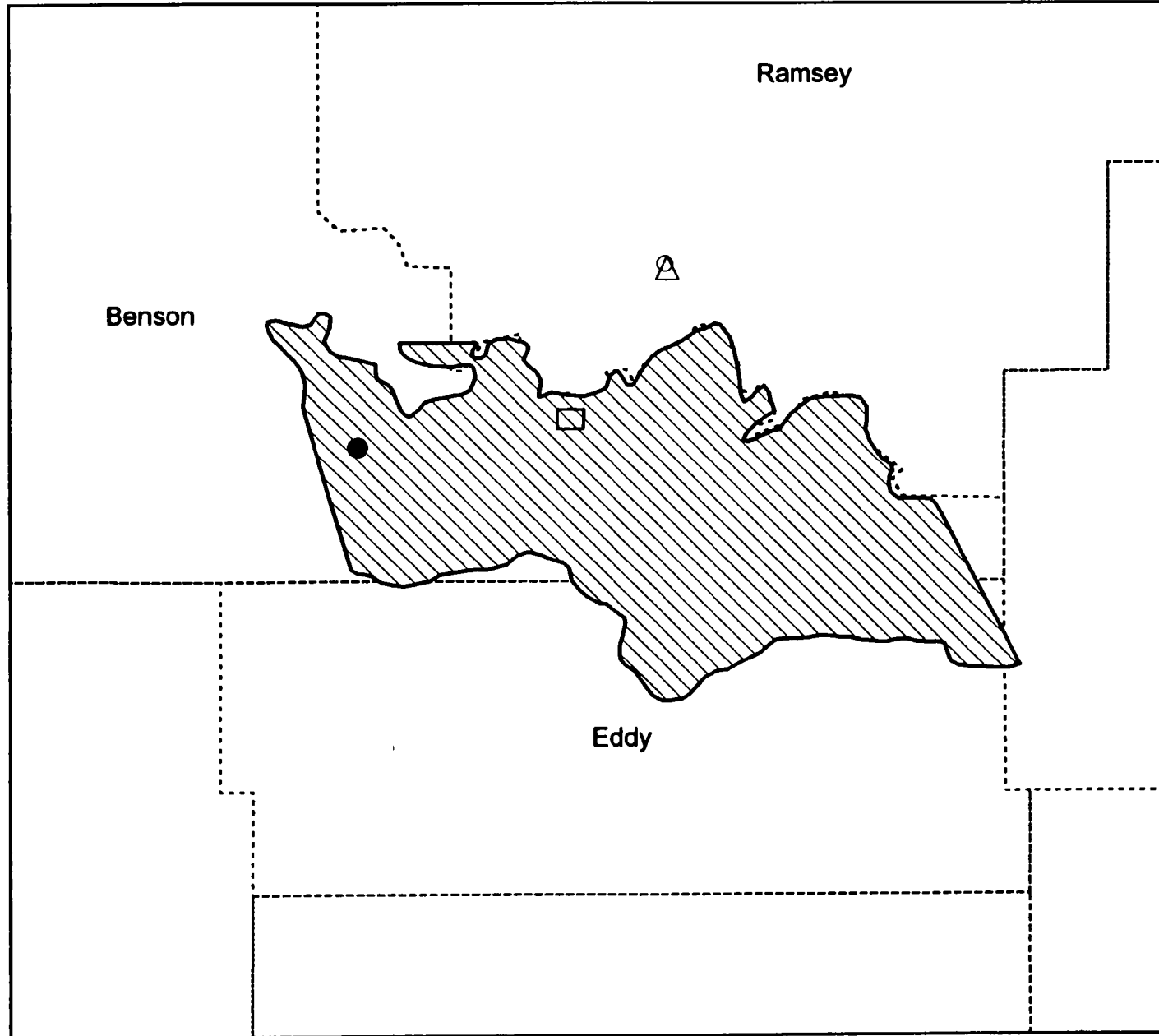
- County Boundaries
- State Boundaries
- Interstate Highways
- Top 1000 US cities
- Tribal Land
- TRI Facilities
- TRI Fac. Inside Border
- TRI Fac. Near Border
- Air monitors
- Air monitors inside border
- Air monitors near border
- Facility releasing NAAQP
- NAAQP source inside border
- NAAQP source near border

Miles



Map 8.B

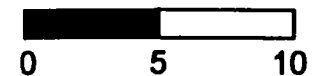
Map of Devil's Lake Tribal Land



Legend

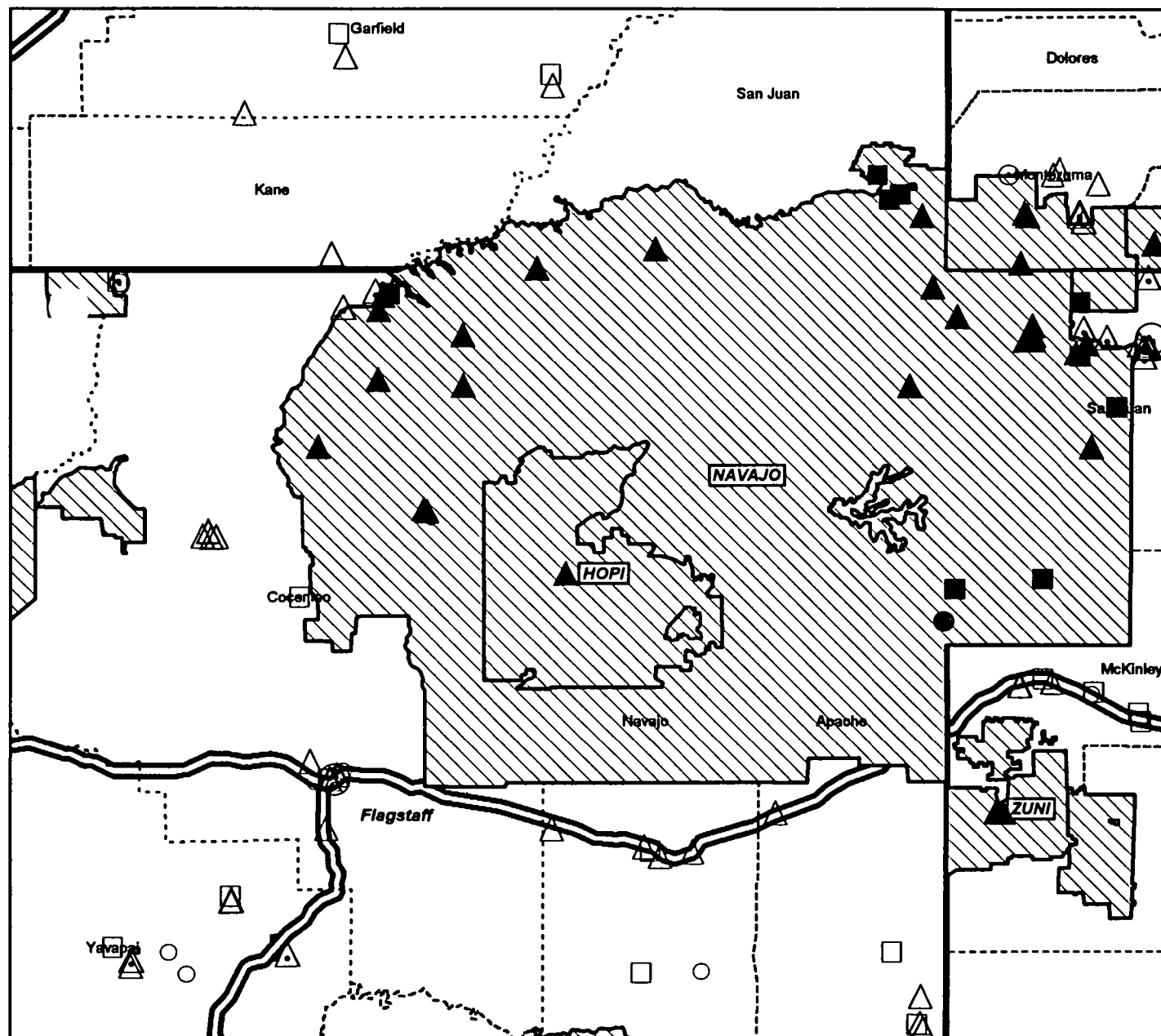
- County Boundaries
- State Boundaries
- Interstate Highways
- Top 1000 US cities
- Tribal Land
- TRI Facilities
- TRI Fac. Inside Border
- TRI Fac. Near Border
- Air monitors
- Air monitors inside border
- Air monitors near border
- Facility releasing NAAQP
- NAAQP source inside border
- NAAQP source near border

Miles



Map 8.C

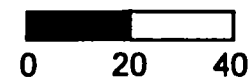
Map of Navajo Tribal Land



Legend

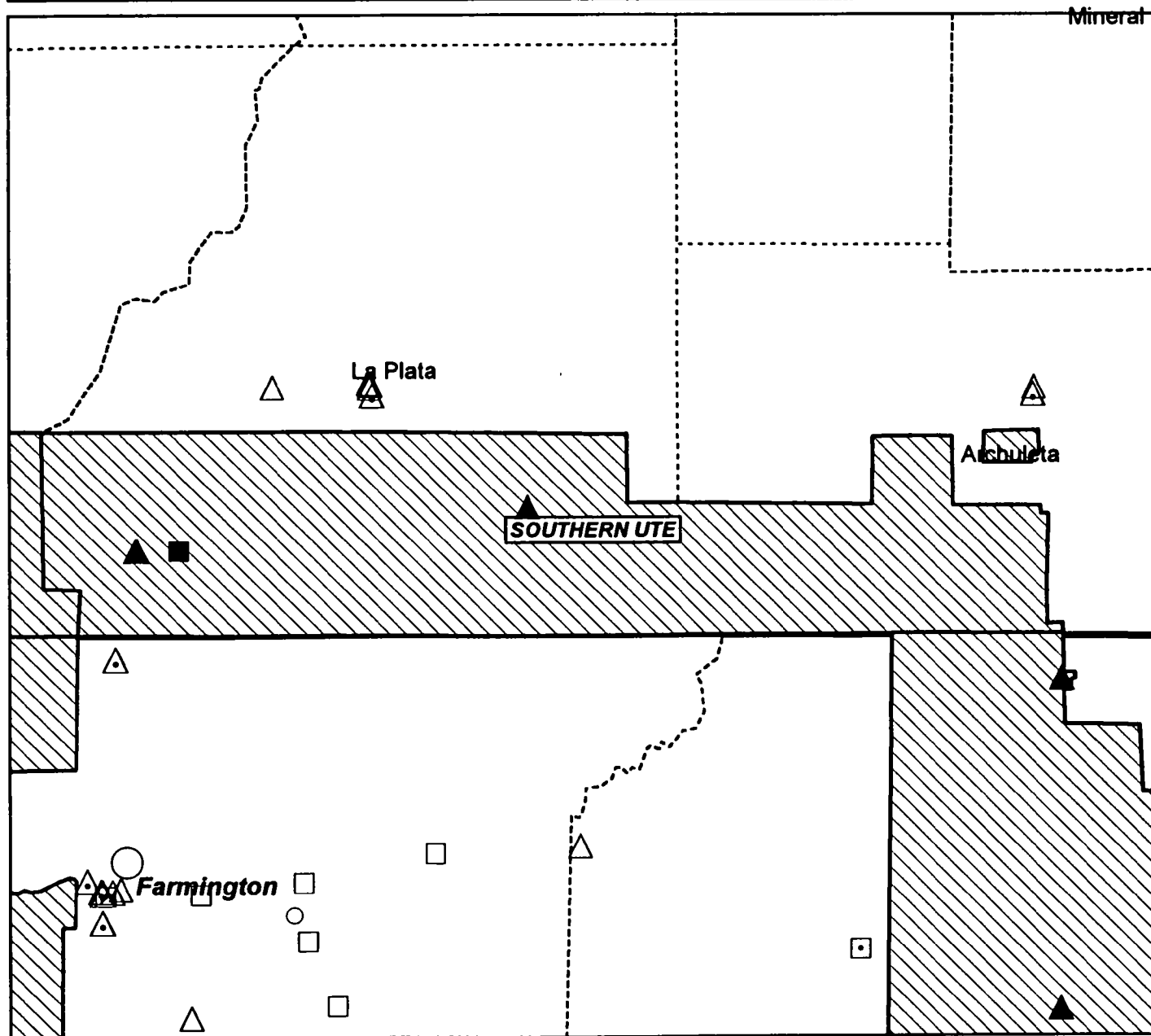
- County Boundaries
- State Boundaries
- Interstate Highways
- Top 1000 US cities
- Tribal Land
- TRI Facilities
- TRI Fac. Inside Border
- TRI Fac. Near Border
- Air monitors
- Air monitors inside border
- Air monitors near border
- Facility releasing NAAQP
- NAAQP source inside border
- NAAQP source near border

Miles



Map 8.D

Map of Southern Ute Tribal Land



Legend

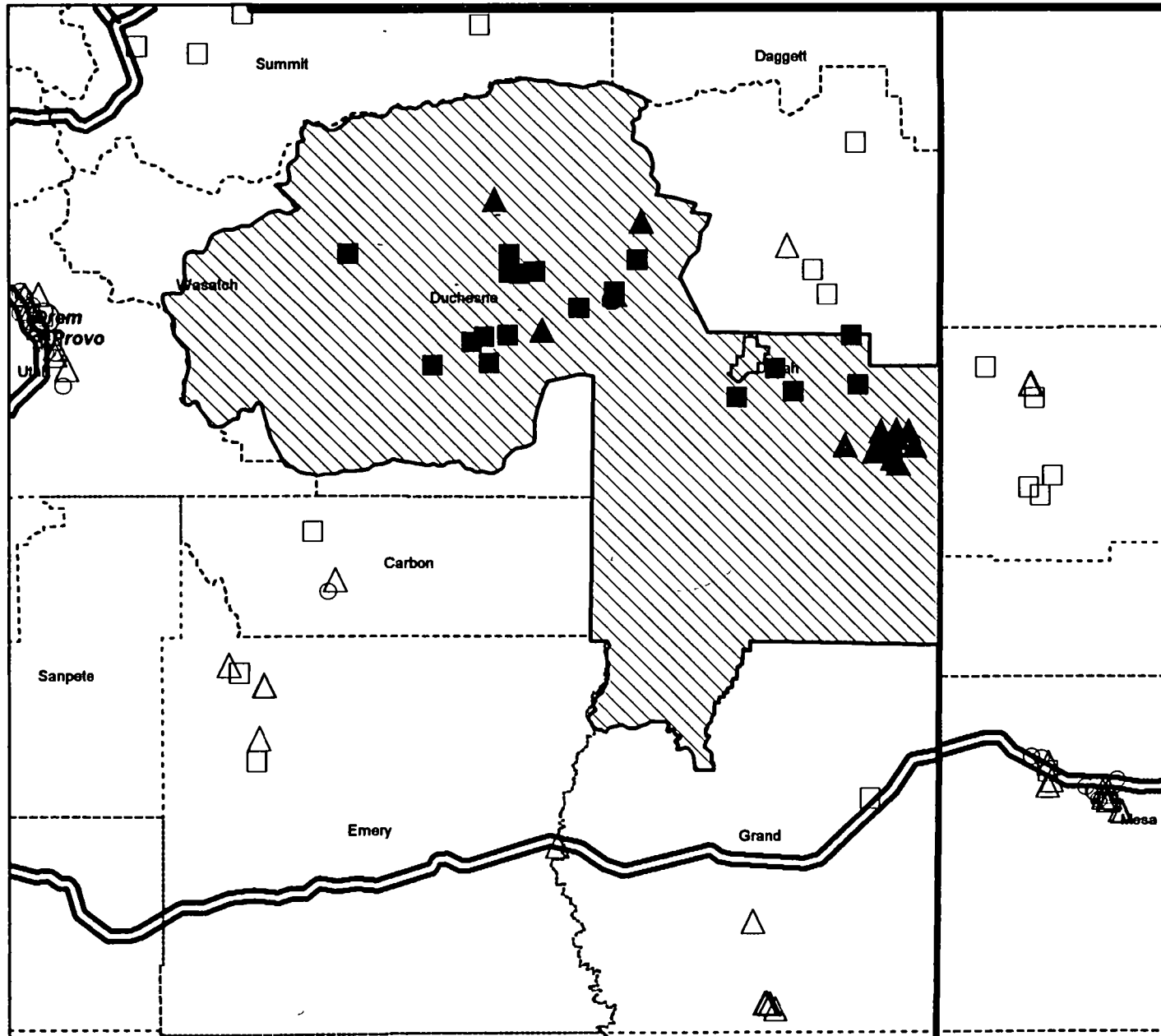
- County Boundaries
- State Boundaries
- Interstate Highways
- Top 1000 US cities
- Tribal Land
- TRI Facilities
- TRI Fac. Inside Border
- TRI Fac. Near Border
- Air monitors
- Air monitors inside border
- Air monitors near border
- Facility releasing NAAQP
- NAAQP source inside border
- NAAQP source near border

Miles



Map 8.E

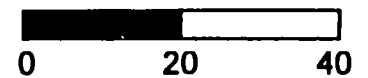
Map of Utah and Ouray Tribal Land



Legend

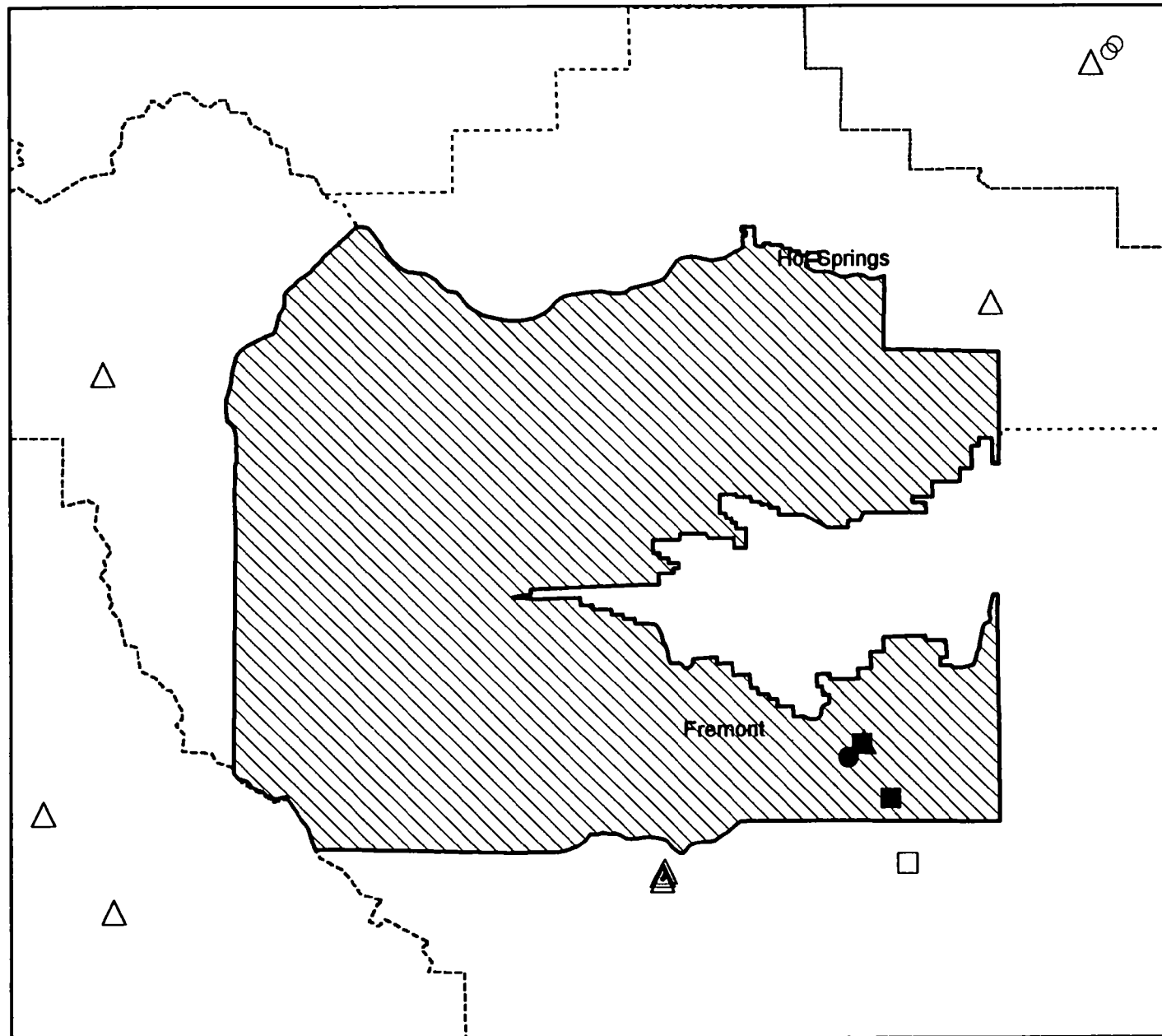
- County Boundaries
- State Boundaries
- Interstate Highways
- Top 1000 US cities
- Tribal Land
- TRI Facilities
- TRI Fac. Inside Border
- TRI Fac. Near Border
- Air monitors
- Air monitors inside border
- Air monitors near border
- Facility releasing NAAQP
- NAAQP source inside border
- NAAQP source near border

Miles



Map 8.F

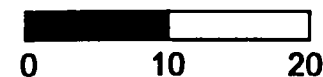
Map of Wind River Tribal Land



Legend

- County Boundaries
- State Boundaries
- Interstate Highways
- Top 1000 US cities
- Tribal Land
- TRI Facilities
- TRI Fac. Inside Border
- TRI Fac. Near Border
- Air monitors
- Air monitors inside border
- Air monitors near border
- Facility releasing NAAQP
- NAAQP source inside border
- NAAQP source near border

Miles

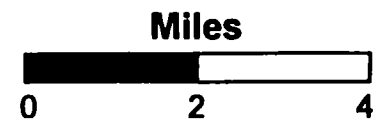
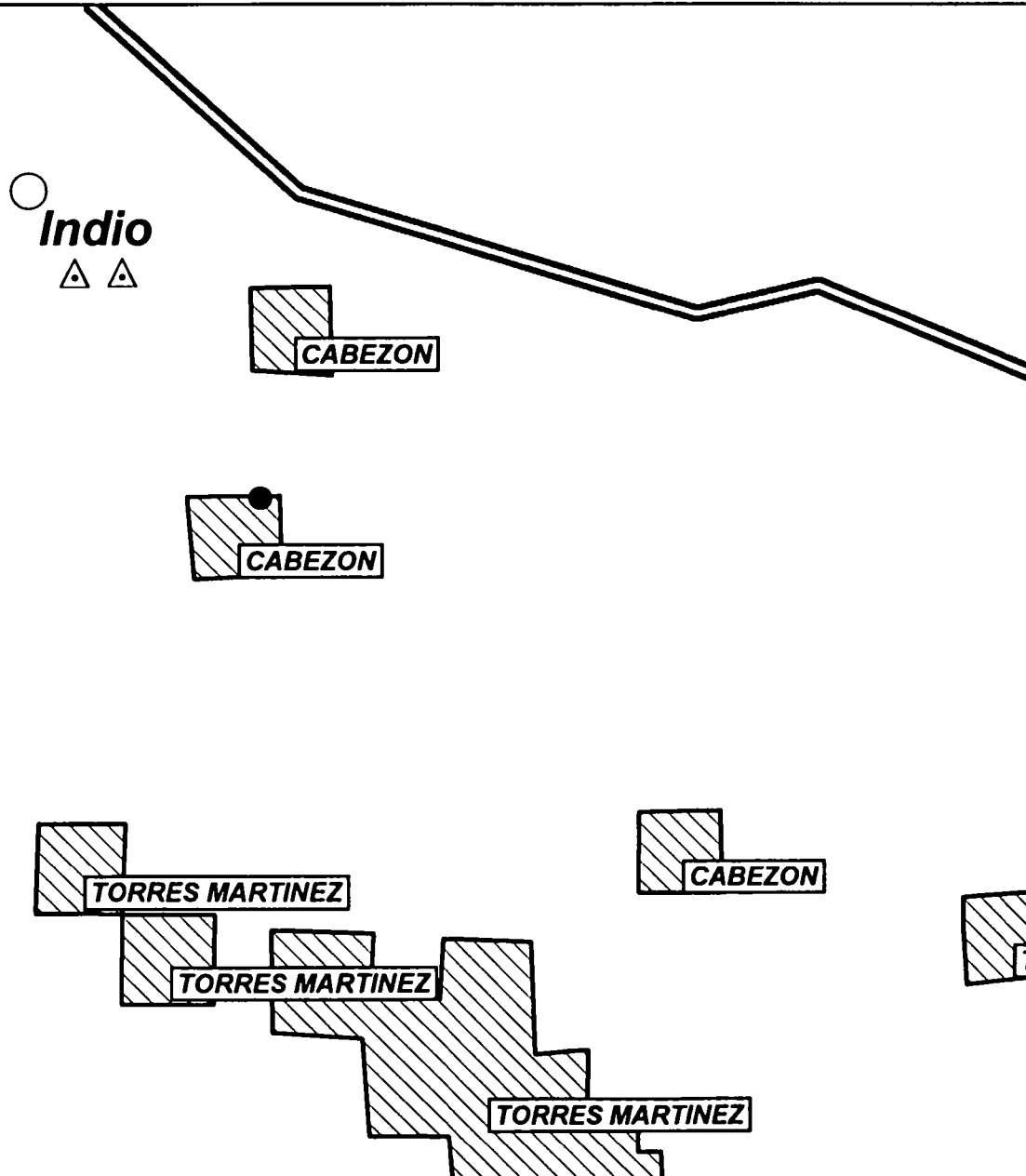


Map 9.A

Map of Cabezón Tribal Land

Legend







- County Boundaries
- State Boundaries
- Interstate Highways
- Top 1000 US cities
- Tribal Land
- TRI Facilities
 - TRI Fac. Inside Border
 - TRI Fac. Near Border
- Air monitors
 - Air monitors inside border
 - Air monitors near border
- Facility releasing NAAQP
- NAAQP source inside border
- NAAQP source near border



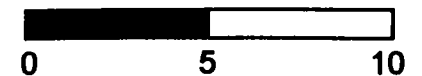
Map 9.B

Map of Chemehuevi Tribal Land

Legend

-  County Boundaries
-  State Boundaries
-  Interstate Highways
-  Top 1000 US cities
-  Tribal Land
-  TRI Facilities
-  TRI Fac. Inside Border
-  TRI Fac. Near Border
-  Air monitors
-  Air monitors inside border
-  Air monitors near border
-  Facility releasing NAAQP
-  NAAQP source inside border
-  NAAQP source near border

Miles

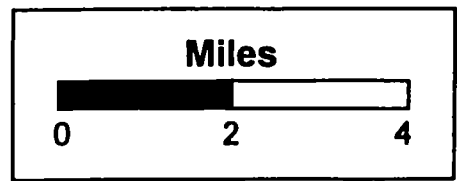
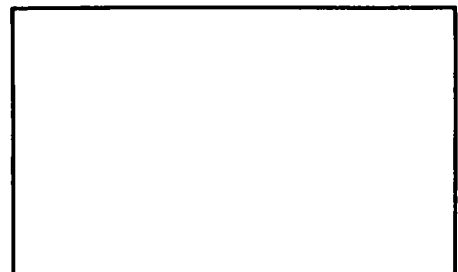
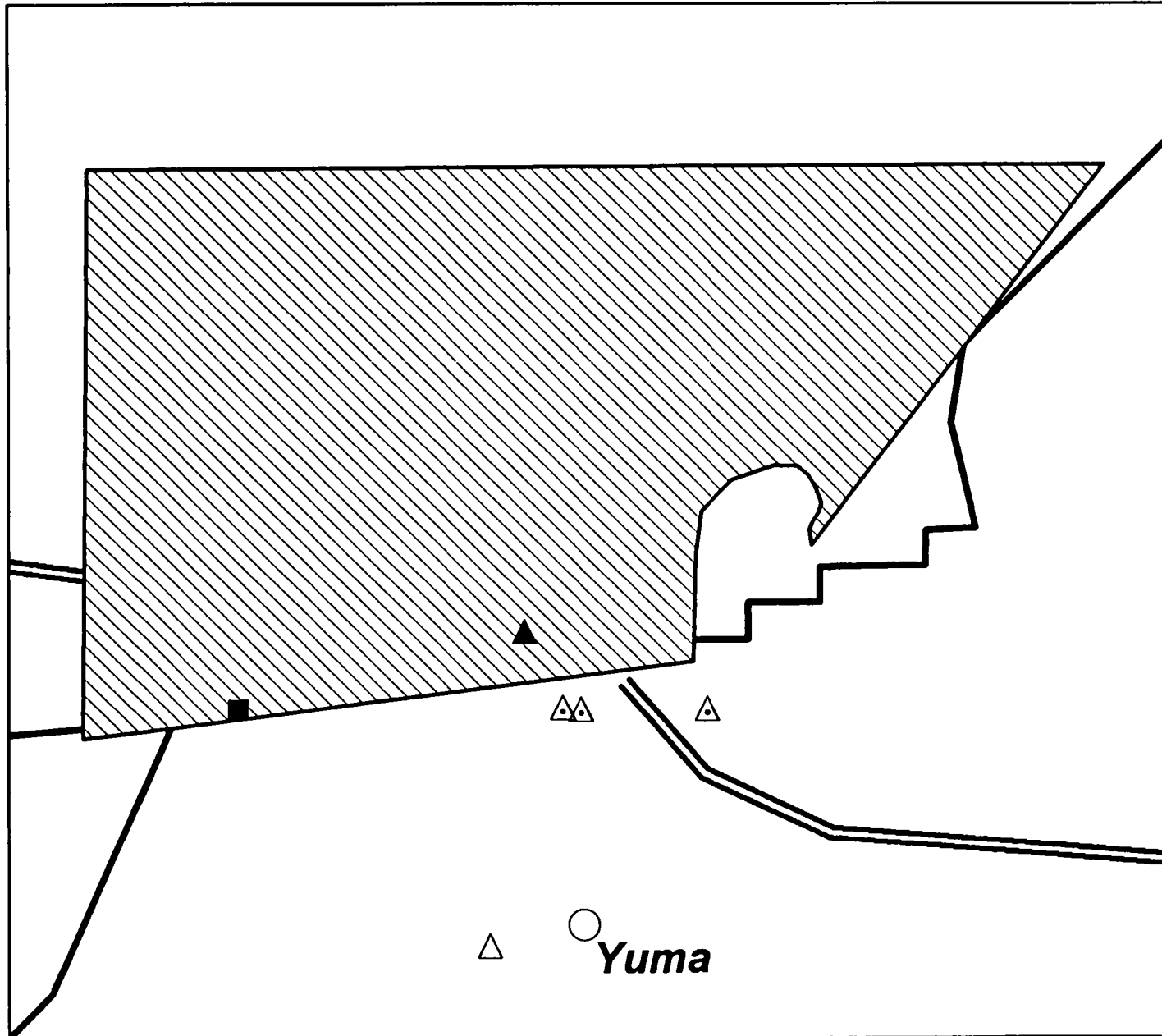


Map 9.C

Map of Fort Yuma Tribal Land

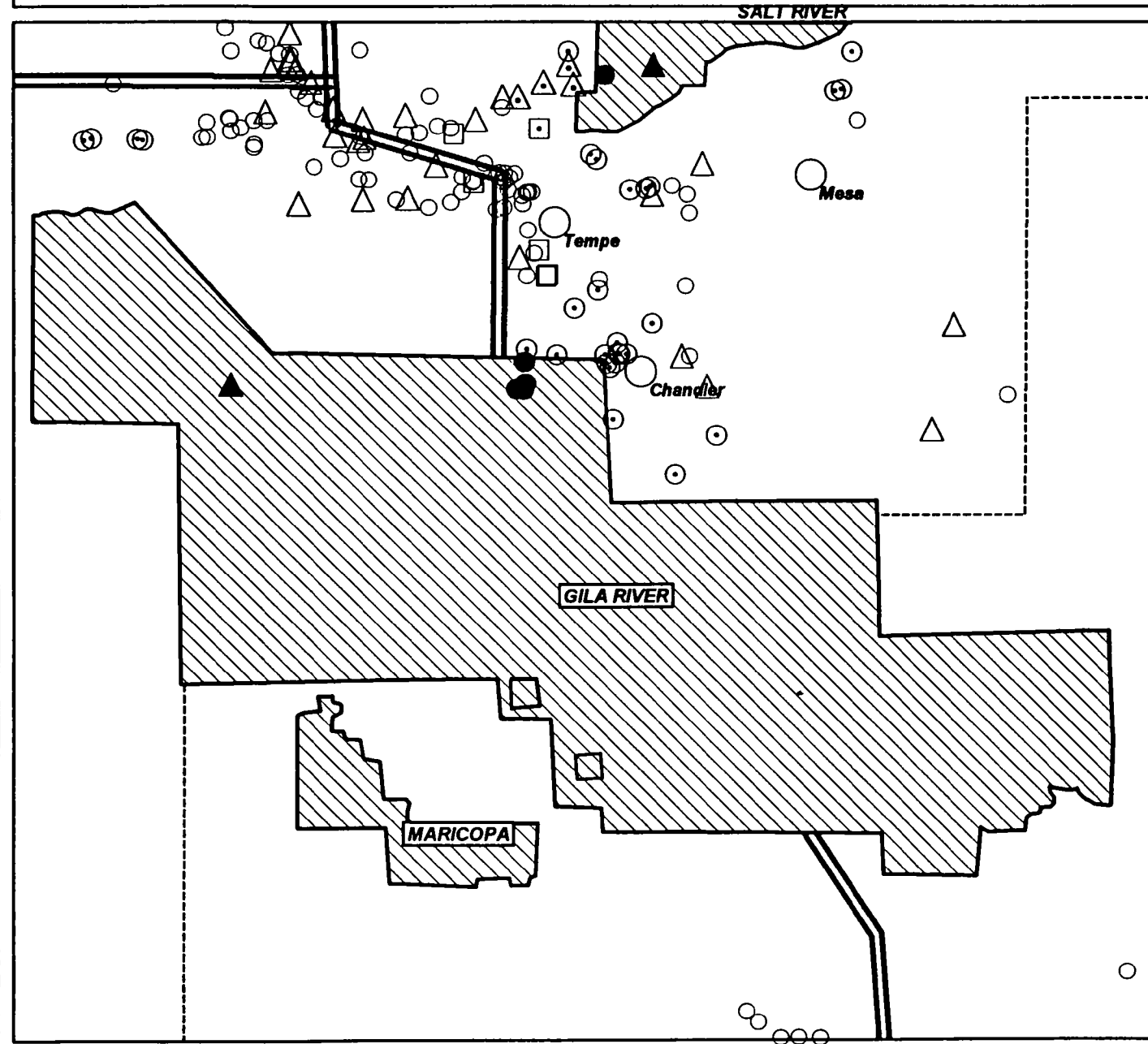
Legend

-  County Boundaries
-  State Boundaries
-  Interstate Highways
-  Top 1000 US cities
-  Tribal Land
-  TRI Facilities
-  TRI Fac. Inside Border
-  TRI Fac. Near Border
-  Air monitors
-  Air monitors inside border
-  Air monitors near border
-  Facility releasing NAAQP
-  NAAQP source inside border
-  NAAQP source near border



Map 9.D

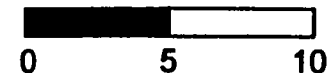
Map of Gila River Tribal Land



Legend

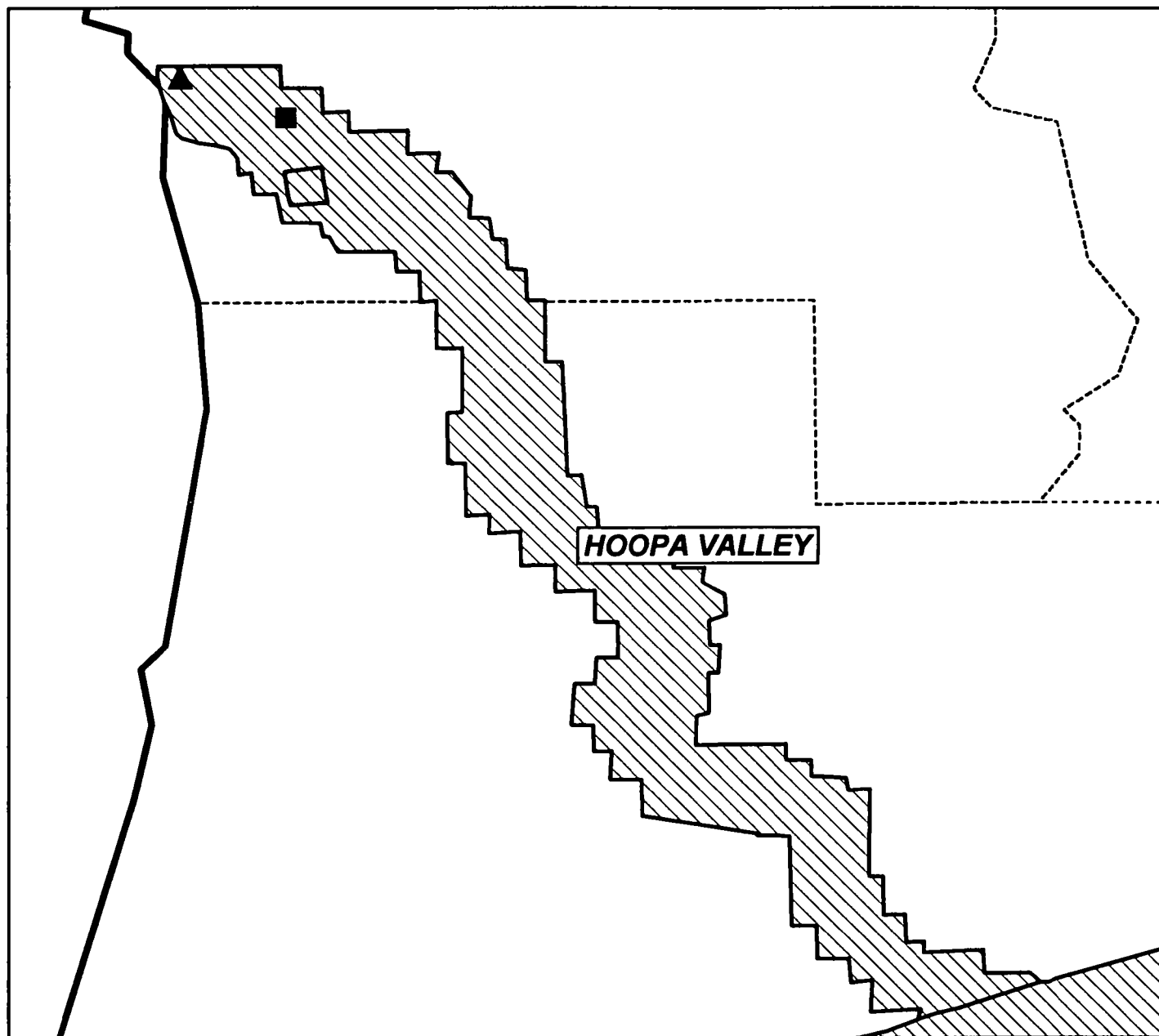
- County Boundaries
- State Boundaries
- Interstate Highways
- Top 1000 US cities
- Tribal Land
- TRI Facilities
- TRI Fac. Inside Border
- TRI Fac. Near Border
- Air monitors
- Air monitors inside border
- Air monitors near border
- Facility releasing NAAQP
- NAAQP source inside border
- NAAQP source near border

Miles



Map 9.E

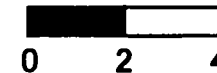
Map of Hoopa Valley Tribal Land



Legend

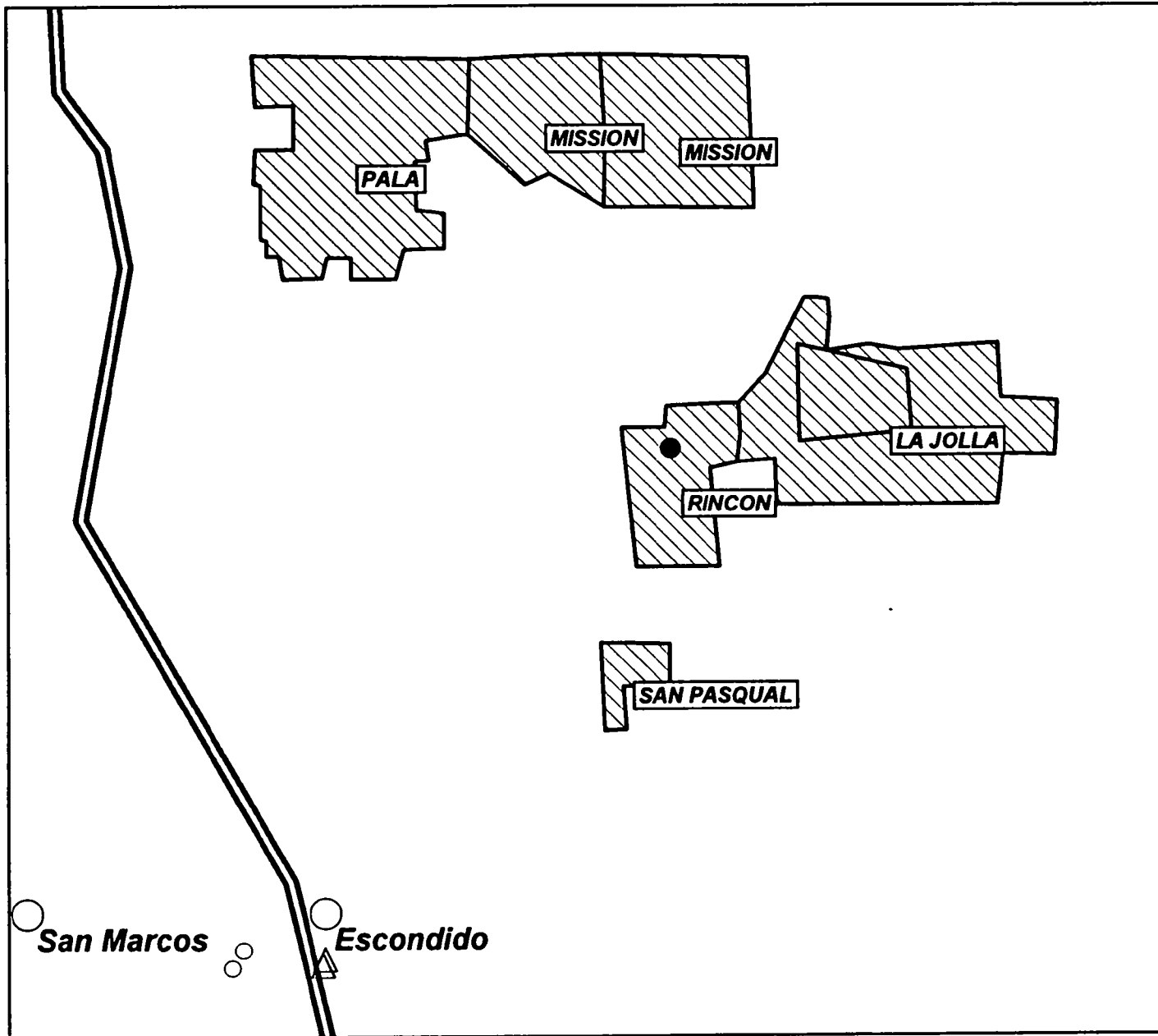
- County Boundaries
- State Boundaries
- Interstate Highways
- Top 1000 US cities
- Tribal Land
- TRI Facilities
- TRI Fac. Inside Border
- TRI Fac. Near Border
- Air monitors
- Air monitors inside border
- Air monitors near border
- Facility releasing NAAQP
- NAAQP source inside border
- NAAQP source near border

Miles



Map 9.F

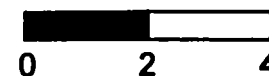
Map of Rincon Tribal Land



Legend

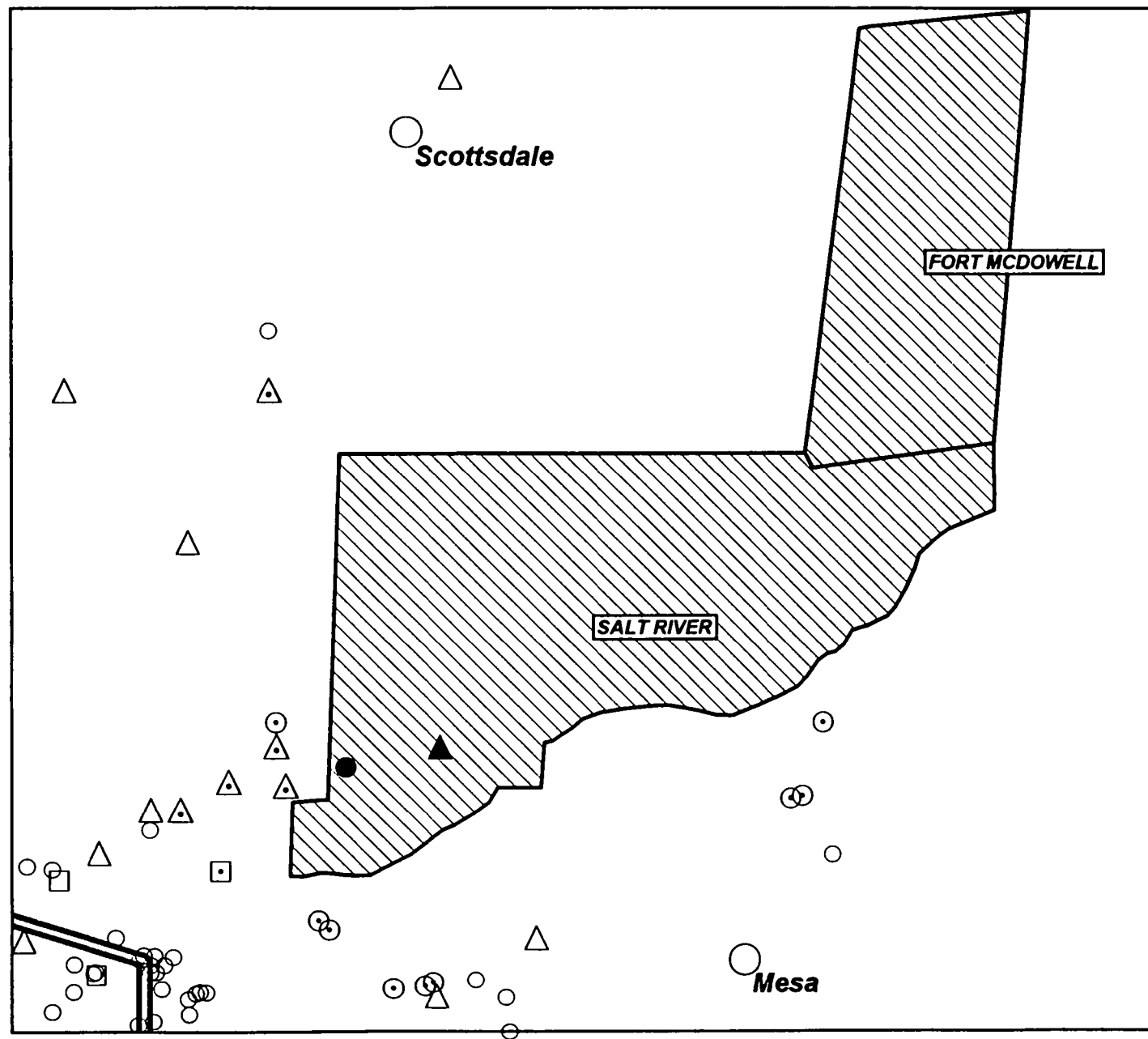
- County Boundaries
- State Boundaries
- Interstate Highways
- Top 1000 US cities
- Tribal Land
- TRI Facilities
- TRI Fac. Inside Border
- TRI Fac. Near Border
- Air monitors
- Air monitors inside border
- Air monitors near border
- Facility releasing NAAQP
- NAAQP source inside border
- NAAQP source near border

Miles



Map 9.G

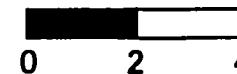
Map of Salt River Tribal Land



Legend

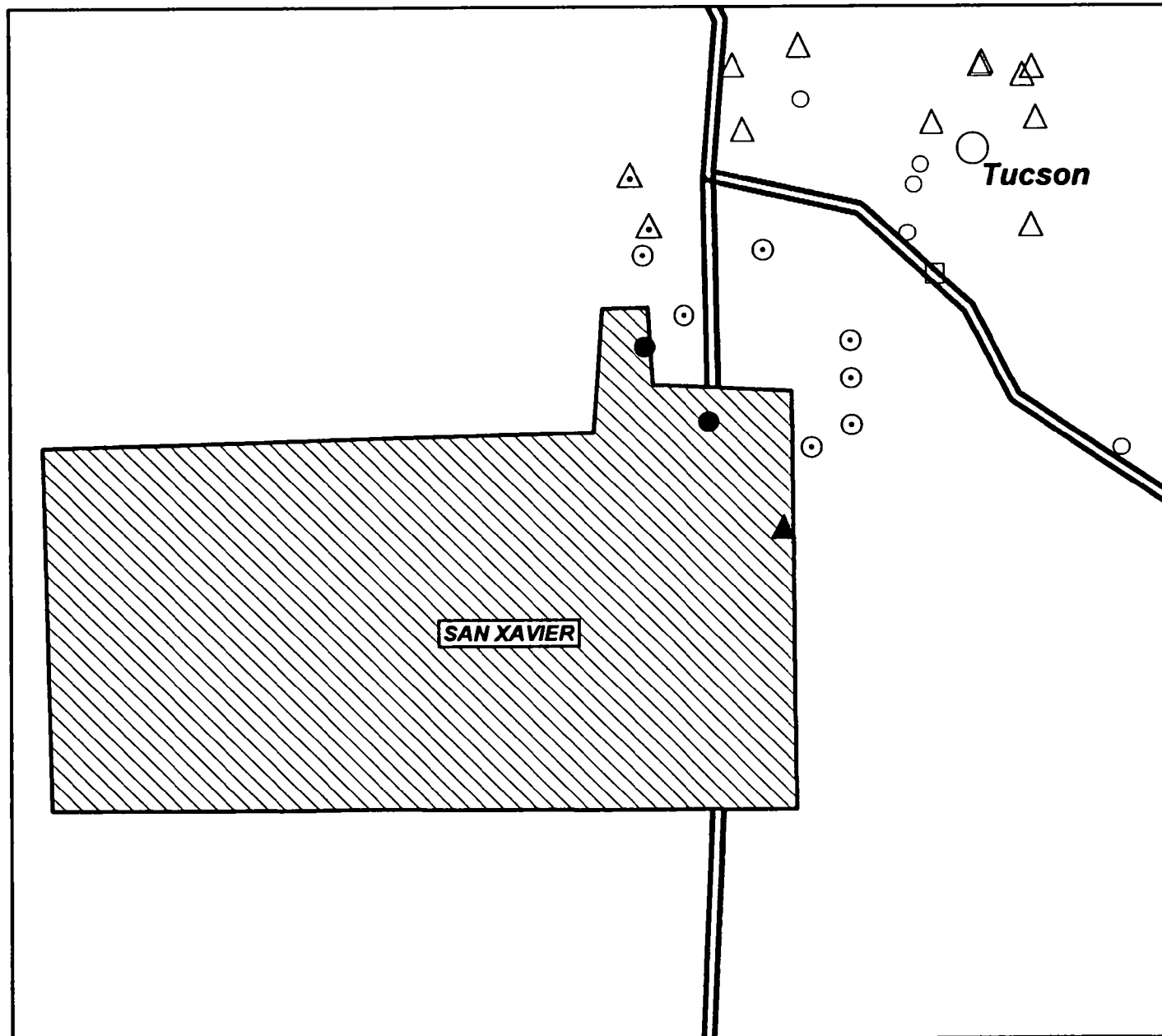
- County Boundaries
- State Boundaries
- Interstate Highways
- Top 1000 US cities
- Tribal Land
- TRI Facilities
- TRI Fac. Inside Border
- TRI Fac. Near Border
- Air monitors
- Air monitors inside border
- Air monitors near border
- Facility releasing NAAQP
- NAAQP source inside border
- NAAQP source near border

Miles



Map 9.H

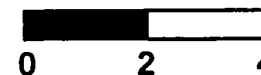
Map of San Xavier Tribal Land



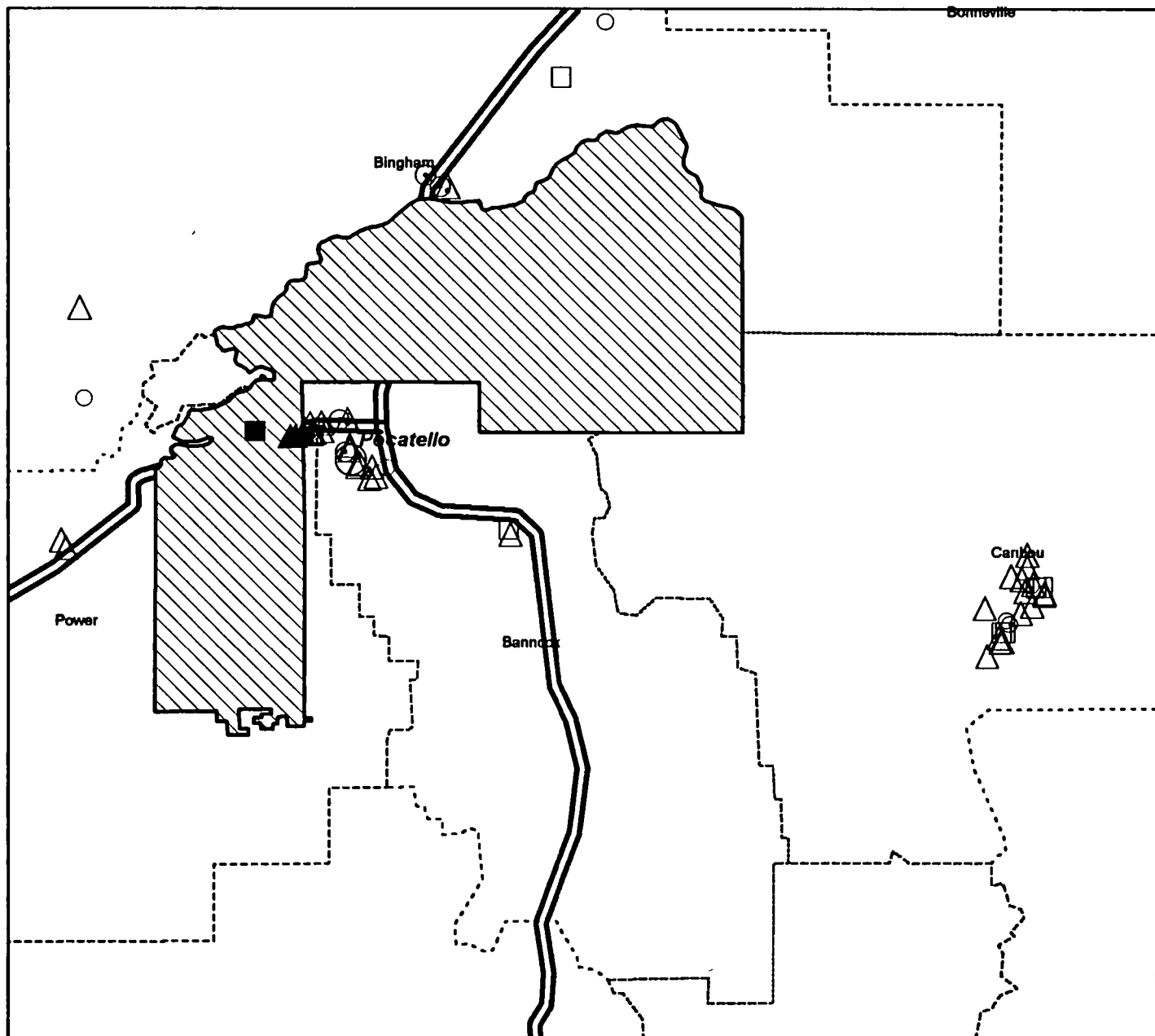
Legend

- County Boundaries
- State Boundaries
- Interstate Highways
- Top 1000 US cities
- Tribal Land
- TRI Facilities
- TRI Fac. Inside Border
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- Air monitors
- Air monitors inside border
- Air monitors near border
- Facility releasing NAAQP
- NAAQP source inside border
- NAAQP source near border

Miles



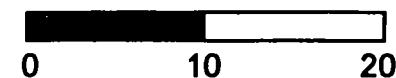
Map 10.A
Map of Fort Hall Tribal Land



Legend

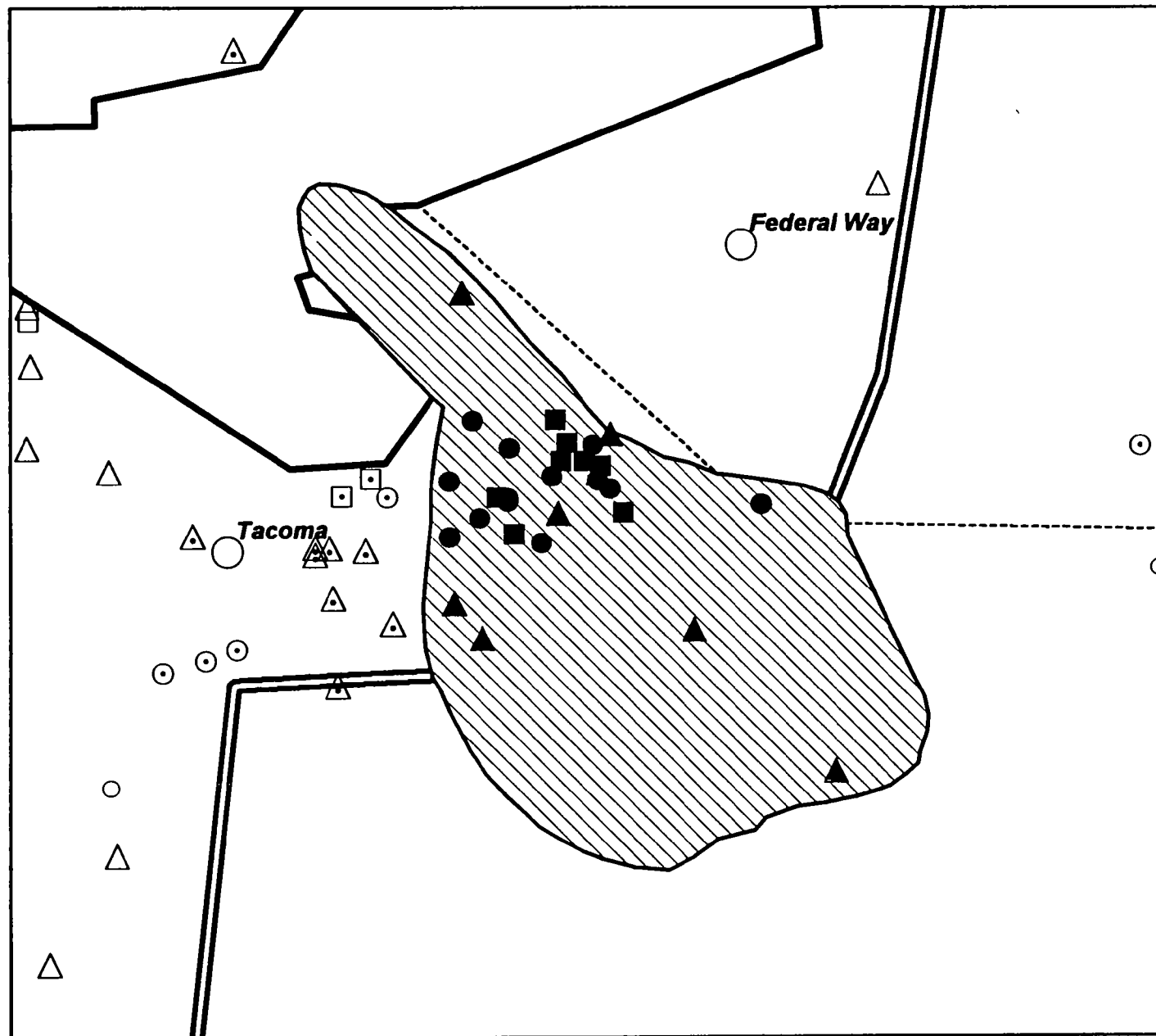
- County Boundaries
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- Top 1000 US cities
- Tribal Land
- TRI Facilities
- TRI Fac. Inside Border
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- Air monitors
- Air monitors inside border
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- Facility releasing NAAQP
- NAAQP source inside border
- NAAQP source near border

Miles



Map 10.B

Map of Puyallup Tribal Land



Legend

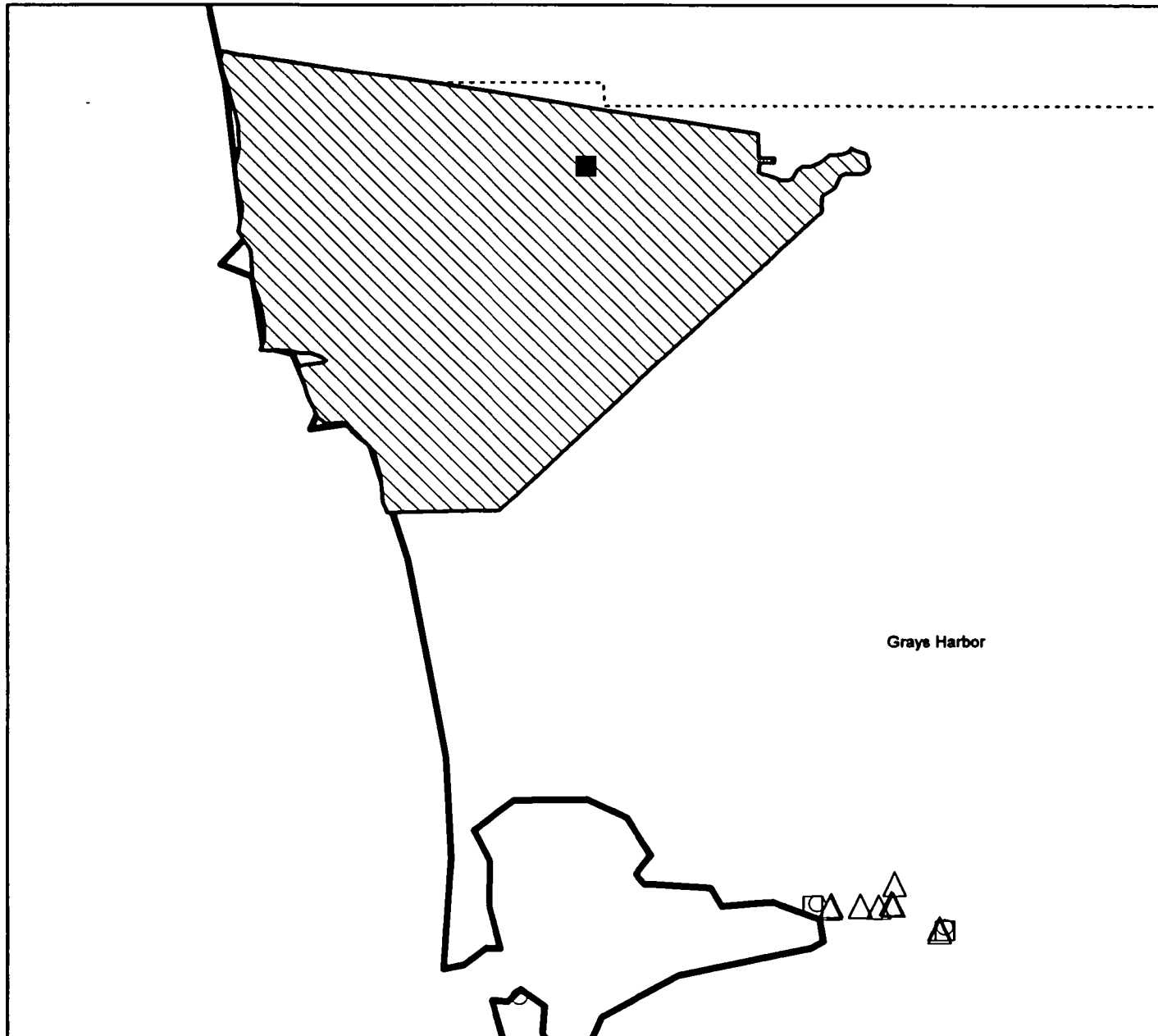
- County Boundaries
- State Boundaries
- Interstate Highways
- Top 1000 US cities
- Tribal Land
- TRI Facilities
- TRI Fac. Inside Border
- TRI Fac. Near Border
- Air monitors
- Air monitors inside border
- Air monitors near border
- Facility releasing NAAQP
- NAAQP source inside border
- NAAQP source near border

Miles



Map 10.C

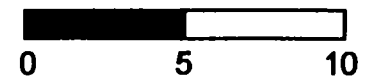
Map of Guinault Tribal Land



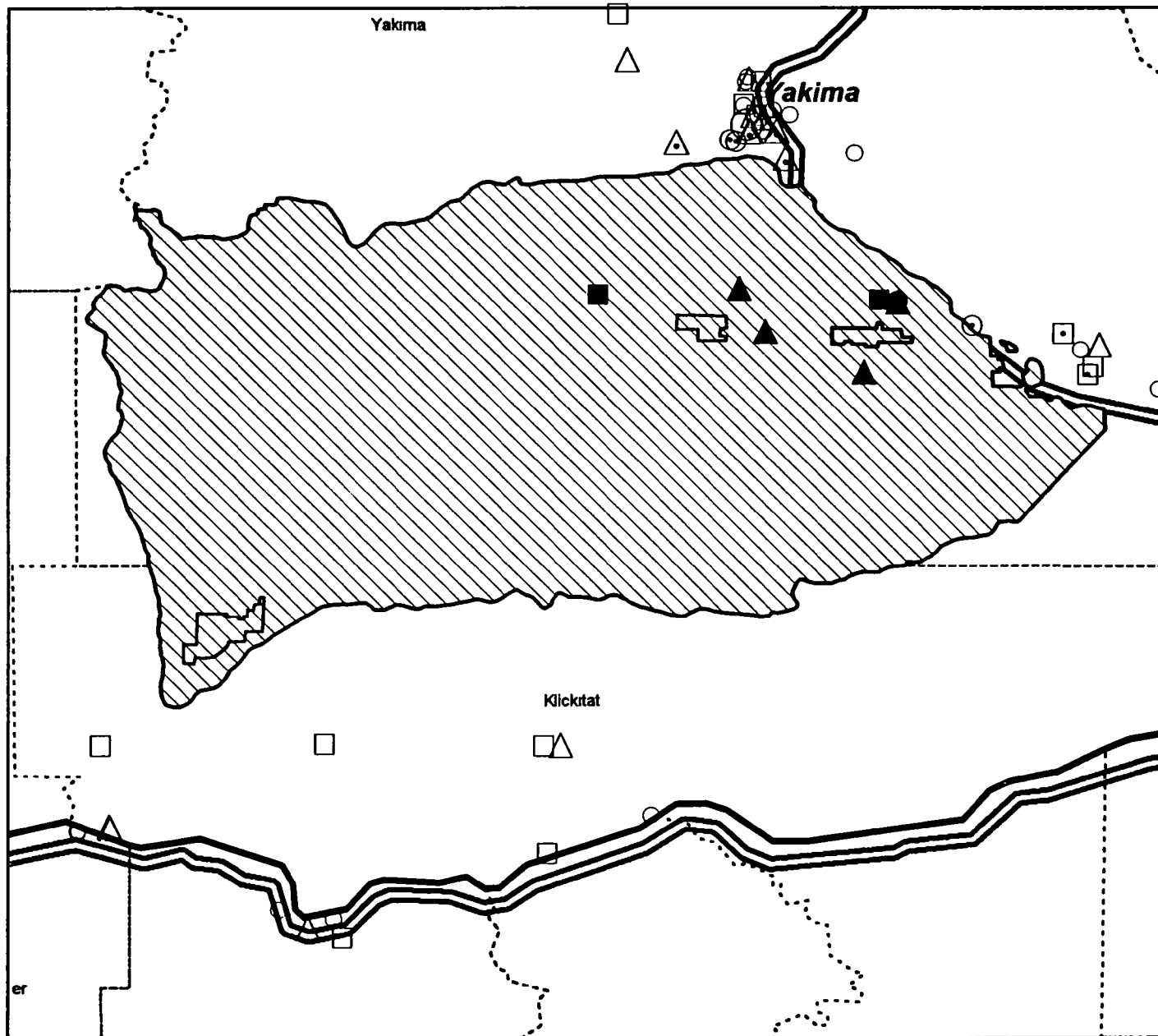
Legend

-  County Boundaries
-  State Boundaries
-  Interstate Highways
-  Top 1000 US cities
-  Tribal Land
-  TRI Facilities
-  TRI Fac. Inside Border
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-  Air monitors
-  Air monitors inside border
-  Air monitors near border
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-  NAAQP source inside border
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Miles



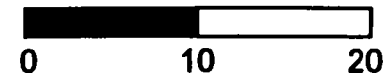
Map 10.D
Map of Yakima Tribal Land



Legend

- County Boundaries
- State Boundaries
- Interstate Highways
- Top 1000 US cities
- Tribal Land
- TRI Facilities
- TRI Fac. Inside Border
- TRI Fac. Near Border
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- Air monitors inside border
- Air monitors near border
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- NAAQP source inside border
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Miles



APPENDIX B

Table 3 - Detail of TRI Facilities On or Near Tribal Lands

Table 3
Detail of TRI Facilities On or Near Tribal Lands by Region and Tribe

TRI ID	Name	SIC Code	Inside?	Release Quantity (lbs)				
				Chemical	Air	Land	Water	Offsite
Region-2 Tribal Land-Allegany								
14779FNCHR100	Fancher Furniture Co. Inc.	2511	Y	Acetone	5,040	.	.	750
				Methanol	10,530	.	.	5
				Methyl ethyl ketone	5,460	.	.	250
				Toluene	34,860	.	.	750
				Xylene (mixed isome	8,260	.	.	1,426
Region-2 Tribal Land-Cattaraugus								
14070MNCHT265	Moench Tanning Co	3111	N (1.4)	Ammonium sulfate (s	3,444	.	.	.
				Chromium compound	.	.	499	41,766
				Glycol Ethers	21,895	.	.	.
				Sulfuric acid	6,790	.	.	.
				Xylene (mixed isome	17,577	.	.	39,390
Region-2 Tribal Land-St. Regis								
13662GNRLMPO	Gmc Powertrain Massena Plant	3365	N (0.7)	Chlorine	250	.	.	.
				Copper	255	.	250	103,184
				Styrene	16,400	.	.	6,580
13662RYNLDSOU	Reynolds Metals Co	3334	N (0.9)	Zinc Compounds	.	.	4,649	.
				Chlorine	1,405	.	3,000	.
				Copper	250	.	.	13,400
				Hydrogen fluoride	88,000	.	.	.
				Manganese	250	.	.	3,000
Region-2 Tribal Land-Tonawanda								
14001WHTNG135	Whiting Met-L-Wood/Whiting Spr	3714	N (1.5)	Methyl ethyl ketone	10,000	.	.	.
14001WHTNG113	Whiting Roll-Up Door Mfg. Corp	3714	N (2)	Acetone	10,000	.	.	.
				Toluene	23,400	.	.	78
				Xylene (mixed isome	38,930	.	.	161
Region-4 Tribal Land-Choctaw								
39051CHCTWHW	Choctaw Maid Farms Inc. Cartha	2015	N (1.7)	Ammonia	10,868	.	.	.
39350PHLDLHWY	Marshall Durbin Farms Inc.	2048	N (2.6)		.	.	.	.

Table 3**Detail of TRI Facilities On or Near Tribal Lands by Region and Tribe**

				Release Quantity (lbs)				
TRI ID	Name	SIC Code	Inside?	Chemical	Air	Land	Water	Offsite
Region-4 Tribal Land-Hollywood								
33020MRCNN360	American Industries Inc.	3732	N (2.6)	Acetone	21,000	.	.	.
				Styrene	3,500	.	.	.
33020GLDCS3301	Gold Coast Chemical Corp.	2841	N (2.6)	1,1,1-Trichloroethane	250	.	.	.
				Hydrochloric acid	250	.	.	.
33317RCKSN235	Lilly Ind. Inc. Erickson Div.	2851	N (2.9)	Methyl methacrylate	774	.	.	455
				Styrene	5,817	.	.	8,188
33020LQDCR291	Liquid Carbonic Ind. Corp.	2813	N (2.6)	Acetone	755	.	.	.
Region-5 Tribal Land-Bad River								
54806JMSRV23R	James River Paper Co. Inc. Ash	2621	N (2.1)	Ammonia	250	.	5	5
				Chlorine	250	.	5	5
Region-5 Tribal Land-Fond Du Lac								
55718CHMST131	Chemstar Products Co.	2046	N (2.3)	Propylene oxide	1,500	.	.	.
55720PTLTCNOR	Potlatch Corp. Northwest Paper	2611	N (0.7)	Acetone	17,299	.	.	27,044
				Catechol	.	.	.	14,600
				Chlorine	19,047	.	.	.
				Chlorine dioxide	35,305	.	.	.
				Chloroform	38,500	.	.	18,540
				Hydrochloric acid	186,580	.	.	.
				Methanol	275,224	.	.	2,711,020
				Sulfuric acid	15,880	.	.	.
55720ZRNC EAS	Specialty Minerals Inc.	2819	N (0.7)		.	.	.	.
55720SGNTR35A	Usg Interiors Inc.	3296	N (1.4)	1,1,1-Trichloroethane	250	.	.	.
				Formaldehyde	250	.	.	.
Region-5 Tribal Land-Greater Leech Lake								
56601PTLTCRT3	Potlatch Corp. Osb Plant	2493	N (2.6)	Formaldehyde	167,739	.	.	.
Region-5 Tribal Land-Hannahville								
49896RBNSNN14	Robinson Furniture Mfg. Inc.	2519	N (1.7)	Methyl isobutyl keton	15,600	.	.	.

Table 3**Detail of TRI Facilities On or Near Tribal Lands by Region and Tribe**

TRI ID	Name	SIC Code	Inside?	Chemical	Release Quantity (lbs)			
					Air	Land	Water	Offsite
				Toluene	43,000	.	.	.
				Xylene (mixed isome	15,600	.	.	.

Region-5 Tribal Land-Isabella

48858THDLF980S Delfield Co.	3585	Y	CFC-11	250	.	.	2,670
			CFC-12	1,600	.	.	250
			Chromium	10	.	.	149,280
			Copper	.	.	.	2,000
			Manganese	10	.	.	15,400
			Nickel	5	.	.	72,750
48858MPLRL1011 Maple Roll Leaf Inc.	3955	Y	Acetone	7,614	.	.	1,000
			Methanol	5,092	.	.	500
			Methyl ethyl ketone	5,928	.	.	3,779
			Toluene	12,579	.	.	7,177
49340NTDST7839 United States Marble Inc.	3089	Y	Styrene	5,900	.	.	.
48858CMCRP294 CME Corp.	3714	N (1.6)	1,1,1-Trichloroethane	66,500	.	.	8,500
48618PCKGN570 Packaging Resources Inc.	3089	N (4.3)	Acetone	21,000	.	.	.

Region-5 Tribal Land-Lac Corte Oreille

54843NRSNN121 Dyno Overlays Inc.	2672	N (2.8)	Formaldehyde	2,732	.	.	.
			Methanol	46,078	.	.	.
			Phenol	4,959	.	.	750

Region-5 Tribal Land-Oneida

54303CLWSC901 Calwis Co. Inc.	2842	Y	Methanol	572	.	.	.
54307MDLCR266 Medalcraft Mint Inc.	3911	Y	Copper compounds	.	.	.	255
54313TRWLN973 Trowelon Inc.	2821	Y	Styrene	250	.	.	.
54115MPMRN339 Ampi-Morning Glory Farms De Pe	2026	N (0.4)	Phosphoric acid	.	.	.	10,577
54304STRND810 Astro Ind. Inc.	3741	N (1.2)	Chromium compound	250	.	.	755
			Manganese compoun	.	750	.	1,000
54303BDGRS420 Badger Sheet Metal Works	3444	N (2.3)	Aluminum (fume or d	500	.	.	2,549
			Chromium	500	.	.	3,824
54165BTRCC124 Beatrice Cheese Inc.	2022	N (4.2)		.	.	.	.

Table 3
Detail of TRI Facilities On or Near Tribal Lands by Region and Tribe

TRI ID	Name	SIC Code	Inside?	Release Quantity (lbs)				
				Chemical	Air	Land	Water	Offsite
54304BRWNC998	Brown County Cabinets Inc.	2434	N (0.4)	Xylene (mixed isome	19,000	.	.	250
54313CRRSN214	Corrosion Technology Inc.	3089	N (1.6)	Dichloromethane	11,400	.	.	.
				Styrene	11,700	.	.	.
54115DPRFN805	De Pere Fndy. Inc.	3321	N (2.1)	Aluminum (fume or d	500	250	.	6,849
				Copper	500	750	.	3,063
				Manganese	255	1,220	.	1,470
54307FRTHW191	Fort Howard Corp.	2621	N (2.4)	Zinc Compounds	250	.	.	260,000
				1,2,4 Trimethylbenze	22,250	.	.	.
				Ammonia	8,750	.	8,600	.
				Barium compounds	21	.	5,300	42,200
				Chlorine	2,950	.	.	.
				Chlorine dioxide	255	.	.	.
				Chloroform	185,800	.	250	1,000
				Copper compounds	250	.	750	38,200
				Glycol Ethers	6,200	.	250	.
				Hydrochloric acid	460,000	.	.	.
				Sulfuric acid	470,000	.	.	.
				Xylene (mixed isome	5,205	.	.	255
54162NDSTRRO	Industrial Engraving & Mfg. Co	3554	N (0.6)	Nitric acid	5	.	.	.
54115NCLTP200	Nicolet Paper Co.	2621	N (2)	Chlorine	.	.	530	140
				Hydrochloric acid	63,200	.	.	.
				Xylene (mixed isome	10,100	.	87	23
54304PPRCN230	Paper Converting Machine Co.	3554	N (2.1)	Chromium	255	.	5	250
				Cobalt	255	.	5	250
				Manganese	255	.	5	250
				Nickel	255	.	5	250
54304PNRNR486	Pioneer Metal Finishing	3471	N (2.2)	Methyl ethyl ketone	11,250	.	.	.
				Nitric acid	1,500	.	.	.
				Sulfuric acid	1,300	.	.	.
54303PRCHM306	Pro Chemicals Inc.	2842	N (2.4)		.	.	.	.
54115GRNBY140	Richardson Wood Preserving	2491	N (2.7)	Arsenic compounds	.	.	.	500
				Chromium compound	.	.	.	500
				Copper compounds	.	.	.	500

Table 3
Detail of TRI Facilities On or Near Tribal Lands by Region and Tribe

TRI ID	Name	SIC Code	Inside?	Chemical	Release Quantity (lbs)			
					Air	Land	Water	Offsite
54304STRBL995	Straubel Paper	2671	N (0 7)	Trichloroethylene	7,065	.	.	.
54307TPNC 2612	Tape Inc.	2672	N (2 1)	Acrylamide	.	.	.	998

Region-5 Tribal Land-Prairie Isle

55066DRKTW407	Pirelli Power Transmission Cor	3052	N (2.8)	1,1,1-Trichloroethane	84,000	.	.	2,200
				Dichloromethane	20,400	.	.	.
				Formaldehyde	450	.	.	.
				Toluene	3,600	.	.	.

Region-6 Tribal Land-Isleta

87022WLLCLCO	Wall Colmonoy Corp Isleta Pla	3399	Y	1,1,1-Trichloroethane	250	.	.	1,200
				Chromium	500	5	.	.
				Cobalt	10	5	.	.
				Nickel	500	250	.	.

Region-6 Tribal Land-Osage

74035KLHMSPOB	Oklahoma State Ind. Dick Conne	3499	Y	Xylene (mixed isome	34,000	.	.	.
74002PTRLTBIRC	Petrolite Polymers Div.	2999	Y	Ethylene	140,000	.	.	.
				Propylene (Propene)	6,600	.	.	.
				Toluene	581,200	750	.	.
74004PHLLPPAW	Phillips Research Center	2869	Y	1,3-Butadiene	267	.	.	.
				1,4-Dichlorobenzene	127	.	.	.
				Acetone	543	.	.	.
				Ammonia	455	.	.	2,250
				Cyclohexane	16,467	.	.	328,950
				Ethylene	46,630	.	.	.
				Propylene (Propene)	41,201	.	.	.
				Styrene	991	.	.	.
				Toluene	1,508	.	.	36
74003ZNCCR11T	Zinc Corp. Of America	3339	Y	Zinc Compounds	35,053	15,951	.	1,005
				Cadmium compound	273	1,211	.	760
				Copper compounds	188	147	.	1,005
				Lead compounds	2,805	910	.	1,005

Table 3
Detail of TRI Facilities On or Near Tribal Lands by Region and Tribe

TRI ID	Name	SIC Code	Inside?	Chemical	Release Quantity (lbs)			
					Air	Land	Water	Offsite
				Manganese compound	513	2,307	.	760
				Sulfuric acid	17,176	.	.	.
				Zinc (fume or dust)	1,528	.	.	.
74063LLDST8232	Allied Stamp Corp.	2754	N (5.2)	Methanol	12,980	.	.	500
				Methyl ethyl ketone	16,700	.	.	500
74110LPHNV2441	Alpha Investment Castings Co.	3324	N (2.3)	Chromium	250	.	.	.
				Nickel	250	.	.	.
74110PCHFX2400	Apache Fixture Co.	2541	N (2.6)	Toluene	21,137	.	.	.
74003BWMCR11	B & W Micronutrients Inc.	2898	N (0.8)	Zinc Compounds	2,623	.	.	.
74063CHMLN910	Baker Performance Chemicals In	2899	N (6.9)	2-Ethoxyethanol	357	.	.	.
				Ethylene glycol	73	.	.	46
				Ethylene oxide	13,986	.	.	.
				Formaldehyde	907	.	.	303
				Glycol Ethers	188	.	.	75
				Maleic anhydride	238	.	.	.
				Methanol	1,593	.	.	1,025
				Methyl isobutyl keton	346	.	.	82
				Propylene oxide	9,454	.	.	.
				Toluene	2,059	.	.	4,344
				Xylene (mixed isome	4,095	.	.	11,579
74120CNTRL1007	Center Line	3494	N (1.4)	Copper	5	250	.	13,000
74101CHRM412	Chromium Plating Co.	3471	N (0.9)	Sulfuric acid	250	.	.	28,000
				Tetrachloroethylene (	500	.	.	6,930
74603CNCPN100	Conoco Ponca City Refinery	2911	N (2.2)	Zinc Compounds	18	.	.	.
				1,1,1-Trichloroethane	1,200	.	44	5,600
				1,2,4 Trimethylbenze	2,900	1	44	690
				1,3-Butadiene	860	.	.	.
				2-Methoxyethanol	5,700	.	.	.
				Ammonia	10,900	11	13,000	320
				Benzene	27,800	.	44	303
				CFC-12	11,000	.	.	.
				Carbon tetrachloride	750	.	.	.
				Chlorine	530	.	.	.

Table 3

Detail of TRI Facilities On or Near Tribal Lands by Region and Tribe

TRI ID	Name	SIC Code	Inside?	Chemical	Release Quantity (lbs)			
					Air	Land	Water	Offsite
				Chromium compound	.	3,000	400	.
				Cresol (mixed isomer)	313	.	50	9,100
				Cumene	9,600	8	44	1,400
				Cyclohexane	17,800	1	44	250
				Ethylbenzene	4,600	1	44	269
				Ethylene	20,900	.	.	.
				Hydrogen fluoride	2,100	.	.	.
				Lead	190	.	.	.
				Methanol	5,680	.	.	.
				Methyl ethyl ketone	20	.	44	.
				Methyl tert-butyl ethe	70,000	.	44	.
				Molybdenum trioxide	380	.	.	138,000
				Naphthalene	3,909	3,400	44	5,300
				Nickel compounds	40	40	.	17,000
				Phenol	1,252	.	280	9,000
				Propylene (Propene)	100,000	.	.	.
				Toluene	44,000	4	44	1,061
				Xylene (mixed isome	17,100	16	44	375
				Zinc (fume or dust)	410	.	.	.
74145CNTNN410	Continental Industries Inc.	3399	N (2)	Tetrachloroethylene (	4,849	.	.	9,697
74110THCRS2801	Crosby Group Mckissick	3499	N (2.8)	Sulfuric acid	12,660	.	.	78,383
				Toluene	2,517	.	.	4,879
74107WSTSD520	Electronic Chemicals Inc.	2819	N (3.9)	Sulfuric acid	2,200	.	.	.
74063FBRCs25S	Fibercast Co.	3084	N (6.7)	4,4'-Isopropylidenedi	67	.	.	.
				4,4'-Methylenedianili	643	.	.	.
				Acetone	25,219	.	.	12,342
				Styrene	66,056	.	.	1,609
74121FRDMT555	Ford Motor Co. Tulsa Glass Pla	3211	N (2)	Chromium compound	.	.	.	1,403
				Cobalt compounds	1,706	.	.	26,230
				Dichloromethane	250,490	.	.	1,700
				Lead compounds	.	.	.	17,765
74127GNRLW180	General Wire & Supply Inc.	3496	N (5.2)	Hydrochloric acid	250	.	.	15,456
74127NDSTR3633	Industrial Oils Unlimited Inc.	2992	N (2.5)	Zinc Compounds	5	.	.	.

Table 3**Detail of TRI Facilities On or Near Tribal Lands by Region and Tribe**

TRI ID	Name	SIC Code	Inside?	Chemical	Release Quantity (lbs)			
					Air	Land	Water	Offsite
74150NTRST1044 Interstate Tool & Mfg.		3469	N (2.7)	1,1,1-Trichloroethane	10	.	.	.
				Ethylene glycol	10	.	.	.
				Copper compounds	250	.	.	.
				Manganese compoun	250	.	.	.
74602JPTRC14MI Jupiter Sulfur Inc.		2873	N (1.2)	Ammonia	7,611	.	.	.
74127MJSTC515 Majestic Lubricating Co.		2992	N (3.4)	Toluene	250	.	.	.
				Xylene (mixed isome	250	.	.	.
74101MDWGL215 Meadow Gold Dairy Inc.		2026	N (1)	Ammonia	14,174	.	.	.
				Phosphoric acid	.	.	.	27,199
74106MTLDY1145 Metal Dynamics Inc.		3369	N (0.9)	Copper	10,665	.	.	.
74602MDRNNPO Modern Investment Casting Co.		3324	N (1)	Chromium	250	.	.	.
				Nickel	250	.	.	.
74120NRDMC105 Nordam Inc. Casting Transparen		3081	N (1.3)	Methyl methacrylate	1,000	.	.	.
74110PRGRS292 Progressive Brass Manufacturin		3366	N (3.3)	Copper	1,120	10,150	.	67,060
				Manganese	250	750	.	6,020
74003TRWNC509 Reda		3561	N (1.6)	1,1,1-Trichloroethane	11,851	.	.	4,588
				Chromium	34	.	.	4,500
				Copper	74	.	5	3,047
				Nickel	65	.	2	6,118
74107RGRSG180 Rogers Galvanizing Co. Plant 1		3479	N (2.8)	Zinc Compounds	8,080	.	264	.
				Lead	5	.	5	.
				Sulfuric acid	250	.	.	.
74127RYLMF320 Royal Mfg. Co. Inc.		2992	N (1.8)	Zinc Compounds	.	250	.	.
74063SHFFL2300 Sheffield Steel Corp. Sand Spr		3312	N (7.3)	Zinc Compounds	3,358	.	.	14,943
				Aluminum oxide (fibr	250	.	.	55,289
				Cadmium compound	5	.	.	14,943
				Chromium compound	5	.	.	5,678
				Copper compounds	5	.	.	6,575
				Lead compounds	250	.	.	427,371
				Manganese compoun	750	.	.	448,291
				Nickel compounds	250	.	.	10,460
				Toluene	15,804	.	.	.
				Xylene (mixed isome	8,405	.	.	.

Table 3

Detail of TRI Facilities On or Near Tribal Lands by Region and Tribe

TRI ID	Name	SIC Code	Inside?	Chemical	Release Quantity (lbs)			
					Air	Land	Water	Offsite
74063STHWS201	Southwest Tube Southwest Tube	3317	N (5.8)	Zinc Compounds	.	.	.	159,475
				Sulfuric acid	.	.	.	1,689,358
74120STHWS422	Southwest United Ind. Inc. Inc	3471	N (1.9)	1,1,1-Trichloroethane	19,000	.	.	.
				Sulfuric acid	8,300	.	.	47,000
74107SNRFN1700	Sun Refining & Marketing Co.	2911	N (2.5)	Zinc Compounds	3	620	220	1,280
				1,1,1-Trichloroethane	.	.	.	31
				1,2,4 Trimethylbenze	2,500	.	15	870
				1,3-Butadiene	8	.	.	.
				Ammonia	.	.	2,800	.
				Benzene	38,000	.	15	34
				Cyclohexane	41,700	.	15	.
				Ethylbenzene	2,330	.	15	170
				Ethylene	290	.	.	.
				Hydrogen fluoride	490	.	.	.
				Methanol	.	.	1	.
				Methyl ethyl ketone	1,591,434	.	.	.
				Naphthalene	487	.	15	370
				Propylene (Propene)	1,100	.	.	.
				Toluene	625,841	.	23	361
				Xylene (mixed isome	12,100	.	15	1,072
74101NTRQQ540	Terex Corp. Unit Rig Div.	3532	N (2)	Chromium	250	250	.	143,270
				Copper	5	250	.	20,470
				Manganese	5	250	.	41,000
				Nickel	250	250	.	205,000
				Xylene (mixed isome	5,475	.	.	6,475
74063TXCRP307	Texo Corp.	2841	N (6.7)	Glycol Ethers	500	.	.	.
				Nitric acid	500	.	.	.
				Phosphoric acid	500	.	.	.
74602WTCCR1MI	Witco Corp. Concarb Div.	2895	N (0.7)	Carbon disulfide	592,954	.	.	.
				Carbonyl sulfide	121,208	.	.	.

Region-6 Tribal Land-San Ildefonso

87545LSLMSLOS	Los Alamos Natl. Laboratory		N (1.2)	Nitric acid	500	.	.	.
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Table 3
Detail of TRI Facilities On or Near Tribal Lands by Region and Tribe

TRI ID	Name	SIC Code	Inside?	Chemical	Release Quantity (lbs)			
					Air	Land	Water	Offsite
Region-6 Tribal Land-Sandia								
87174FRMCV506	Form-Cove Mfg. Co. Inc.	3079	N (2.5)	Acetone	31,146	.	.	.
				Styrene	5,358	.	.	.
87113HNYWL920	Honeywell Inc. Defense Avionic	3699	N (1.3)	Freon 113	46,726	.	.	11,870
				Toluene	15,594	.	.	10,396
87113MTRLN4800	Motorola Ceramic Products	3679	N (1.8)	Barium compounds	250	.	.	9,705
				Lead compounds	30	.	.	30,130
				Silver compounds	250	.	.	14,900
				Toluene	12,700	.	.	5,880
87004SHLLNNOR	Shollenbarger Wood Treating In	2491	N (0.3)	Arsenic compounds	.	.	.	250
				Chromium compound	.	.	.	250
				Copper compounds	.	.	.	250
87113SGNTC920	Signetics Co.	3674	N (1.3)	Acetone	684	.	.	10,644
				Hydrochloric acid	11,419	.	.	7,856
				Hydrogen fluoride	7,160	.	.	2,537
				Nitric acid	1,312	.	.	2,249
				Sulfuric acid	250	.	.	17,367
87113TRGSN820	Tri-Gas Inc.	2813	N (1.8)		.	.	.	.
Region-6 Tribal Land-Tesuque								
87574SHDNFBIS	Shidoni Fndy. Inc.	3336	N (1.6)		.	.	.	.
Region-7 Tribal Land-Sac And Fox								
52339TMMTPHW	Tama Meat Packing Inc.	2011	N (1.9)	Phosphoric acid	11,000	.	.	.
Region-7 Tribal Land-Winnebago								
68784MLTNG105	Milton G. Waldbaum Co.	2015	N (2.2)	Nitric acid	.	.	.	16,508
				Phosphoric acid	.	.	.	183,582
Region-8 Tribal Land-Devils Lake								
58335DVLSLBOX	Sioux Mfg. Corp.	3009	Y	Methanol	13,650	.	.	.
				Methyl ethyl ketone	215,155	.	.	3,000

Table 3**Detail of TRI Facilities On or Near Tribal Lands by Region and Tribe**

TRI ID	Name	SIC Code	Inside?	Release Quantity (lbs)				
				Chemical	Air	Land	Water	Offsite
Region-8 Tribal Land-Sisseton								
57201NGSND315	Angus Ind. Inc.	3537	N (1.7)	Xylene (mixed isome	1,482	.	.	9,693
57201MDCMN121	Midcom Inc.	3677	N (1.8)	Freon 113	18,489	.	.	1,380
57201TLLCT2813	Simon-Telelect Inc. Fgi Div.	3089	N (1.7)	Acetone	15,000	.	.	820
				Styrene	6,000	.	.	.
57201SMTHQ260	Smith Equipment	3400	N (1.8)	1,1,1-Trichloroethane	19,102	.	.	19,102
Region-8 Tribal Land-Turtle Mountains								
58367WLLML213	Wm. Langer Jewel Bearing Plant	3915	N (2.9)	1,1,1-Trichloroethane	16,103	.	.	.
Region-8 Tribal Land-Unitah And Ouray								
84066PNNZLWES	Pennzoil Products Co. Roosevel	2911	Y	1,2,4 Trimethylbenze	4,570	.	.	121
				Ammonia	.	.	.	67,000
				Benzene	5,900	.	.	711
				Cresol (mixed isomer	1,400	.	.	.
				Cumene	800	.	.	2
				Cyclohexane	6,600	.	.	3,497
				Ethylbenzene	1,670	.	.	1
				Ethylene	4,700	.	.	.
				Methyl tert-butyl ethe	3,290	.	.	.
				Naphthalene	1,444	.	.	.
				Phosphoric acid	.	.	.	2,600
				Propylene (Propene)	2,700	.	.	.
				Toluene	11,600	.	.	1,053
				Xylene (mixed isome	12,800	.	.	232
				Region-8 Tribal Land-Ute Mountain				
81321RC 14207	Airco Carbon Dioxide Plant	2813	N (1.4)	Ammonia	3,192	.	.	.
Region-8 Tribal Land-Wind River								
82501RVRTN140	Koch Sulfur Prods. Co.	2819	Y	Sulfuric acid	6,263	.	.	.

Table 3**Detail of TRI Facilities On or Near Tribal Lands by Region and Tribe**

TRI ID	Name	SIC Code	Inside?	Release Quantity (lbs)				
				Chemical	Air	Land	Water	Offsite
Region-9 Tribal Land-Battle Mountain								
89820MDRLLWE	M-I Drilling Fluids Co. Battle	3295	N (1.4)	Barium compounds	2,800	.	250	- .
89820SRRCH530	Sierra Chemical Co.	2800	N (1.9)		.	.	.	
Region-9 Tribal Land-Cabezon								
92236RMTCD859	Armtec Defense Prods. Co.	3082	Y	Xylene (mixed isome	1,421	.	.	1,958
Region-9 Tribal Land-Carson								
89701MLLRY550	Mallory Inc. Nevada Corp.	3694	N (0.8)	Ammonia	501	.	.	22
89701MNCNC961	Thiokol Omneco Inc.	3764	N (0.8)	1,1,1-Trichloroethane	12,520	.	.	4,770
Region-9 Tribal Land-Chemehuevi								
86403MCCLL900L	Mcculloch Corp.	3519	Y	Zinc Compounds	250	.	.	28,873
				1,1,1-Trichloroethane	16,550	.	.	11,599
				Chromium compound	500	.	.	23,446
				Copper	250	.	.	38,100
				Glycol Ethers	1,000	.	.	88,838
				Nickel	250	.	.	10,700
				Nitric acid	500	.	.	.
				Toluene	500	.	.	750
86403NRDCB770	Nordic Boats Inc.	3732	Y	Acetone	14,285	.	.	.
Region-9 Tribal Land-Cortina								
95932PRLLC1480	Pirelli Cable Corp.	3357	N (2.6)	Copper	421	.	.	729,171
				Lead compounds	.	.	.	648
Region-9 Tribal Land-Dresslerville-Washoe								
89410RVPCF1198	Aervoe-Pacific Co. Inc. Nevada	2851	N (1)	Acetone	2,821	.	.	.
				Methanol	112	.	.	.
				Toluene	1,018	.	.	.
				Xylene (mixed isome	3,047	.	.	.

Region-9 Tribal Land-Fallon

Table 3
Detail of TRI Facilities On or Near Tribal Lands by Region and Tribe

TRI ID	Name	SIC Code	Inside?	Chemical	Release Quantity (lbs)			
					Air	Land	Water	Offsite
89406NVDRF347	Kennametal Inc. Fallon Plant	3399	N (1.5)	Cobalt	500	.	.	.
89406NVDRF11M	Kennametal Inc. Nevada Refiner	3399	N (1.5)	Cobalt	255	.	.	.
				Hydrochloric acid	500	1,100	.	.
				Manganese	1,000	99,000	.	.
				Sulfuric acid	255	89,000	.	.
				Toluene	12,250	.	.	.

Region-9 Tribal Land-Gila River

85226BRGRZ208	Oberg-Arizona Inc.	3469	Y	Zinc Compounds	.	.	.	82,311
				1,1,1-Trichloroethane	9,140	.	.	2,860
				Copper compounds	.	.	.	249,000
				Nickel compounds	.	.	.	17,289
85226PMVLV6525	Pima Valve Inc.	3494	Y	Copper	.	.	.	60,833
85226PMLC 6833	Pimalco	3354	Y	Chromium	.	.	.	5
				Copper	.	.	.	250
				Manganese	.	.	.	5
85226PLYMT6573	Plymouth Tube Co	3355	Y	Trichloroethylene	120,000	.	.	20,000
85224RPRDC275	Air Products & Chemicals Inc.	2813	N (0.3)	Sulfuric acid	2	.	.	.
85284LLDSG1300	Allied-Signal Aerospace Co. Ga	3728	N (2.5)	1,1,1-Trichloroethane	68,895	.	.	82,354
				Freon 113	46,179	.	.	10,112
				Hydrochloric acid	10	.	.	.
				Sulfuric acid	10	.	.	.
85043TTTCH505	At&T Phoenix Works	3357	N (2.7)	1,1,1-Trichloroethane	10,400	.	.	20,000
				Copper compounds	.	.	.	9,230,821
				Lead compounds	.	.	.	58,900
				Methyl ethyl ketone	40,300	.	.	10,700
85244CPTLC2405	Capitol Castings Inc.	3325	N (3)	Bis(2-ethylhexyl)adip	3,600	.	.	.
				Methylenebis(phenyli	99	.	.	.
				Naphthalene	1,200	.	.	.
				Phenol	6,200	.	.	.
85244CLMNS258	Coleman Spas Inc.	3089	N (5.4)	Acetone	19,578	.	.	2,910
				CFC-11	25,739	.	.	.
				Styrene	36,483	.	.	.

Table 3**Detail of TRI Facilities On or Near Tribal Lands by Region and Tribe**

TRI ID	Name	SIC Code	Inside?	Release Quantity (lbs)				
				Chemical	Air	Land	Water	Offsite
85226GLRVR6615	Courtaulds Performance Films I	3086	N (0.9)	Dichloromethane	6,388	.	.	14,422
				Methyl ethyl ketone	13,511	.	.	10,000
				Xylene (mixed isome	315	.	.	250
85353BRDNN495	Creamette Co. Borden Pasta Gro	2098	N (3)	Bromomethane (Met	13,000	.	.	.
85224GLDLC2929	Gould Inc. Foil Div.	3497	N (0.2)	Chlorine	50	.	.	20
				Chromium compound	56	.	.	7,275
				Copper compounds	85	.	.	121,818
				Cyanide compounds	25	.	.	137
				Sulfuric acid	120	.	.	.
85226HRSNC301	Heraeus Inc. Materials Technol	3999	N (3.3)	1,1,1-Trichloroethane	9,820	.	.	4,620
				Chromium	750	.	.	.
				Cobalt	250	.	.	.
85224HXCLC2500	Hexcel Chandler	2295	N (0.6)	2-Ethoxyethanol	1,370	.	.	11,500
				Acetone	7,540	.	.	9,800
				Phenol	100	.	.	750
85284CCMPS205	Ici Composites Inc. Ici Compos	2295	N (3)	Acetone	13,000	.	.	13,550
85226NTLCR5000	Intel Corp. Chandler Campus	3679	N (2)	Acetone	48,750	.	.	26,750
				Ammonia	500	.	.	15,800
				Ethylene glycol	255	.	.	17,800
				Glycol Ethers	9,250	.	.	15,905
				Hydrochloric acid	255	.	.	.
				Hydrogen fluoride	255	.	.	250
				Nitric acid	250	.	.	.
				Phosphoric acid	5	.	.	.
				Sulfuric acid	255	.	.	55,050
85224MCRCH235	Microchip Technology Inc.	3674	N (0.8)	Ammonia	255	.	.	250
				Hydrochloric acid	500	.	.	.
				Hydrogen fluoride	250	.	.	.
				Phosphoric acid	250	.	.	.
				Sulfuric acid	255	.	.	.
85248MTRLN2501	Motorola Inc.	3663	N (2.6)	.	.	.	.	.
				Sulfuric acid	1	.	.	.
85224RGRSC200	Rogers Corp. Cig	3679	N (1)	Chlorine	5	.	.	.

Table 3**Detail of TRI Facilities On or Near Tribal Lands by Region and Tribe**

TRI ID	Name	SIC Code	Inside?	Chemical	Release Quantity (lbs)			
					Air	Land	Water	Offsite
				Copper	10	.	.	60,150
				Dichloromethane	41,100	.	.	5,200
				Freon 113	63,300	.	.	550
				Hydrochloric acid	2,250	.	.	6,500
				Methyl ethyl ketone	13,800	.	.	31,000
				Sulfuric acid	2,005	.	.	2,400
85224RGRSC100	Rogers Corp. Circuit Materials	3083	N (0.7)	Methyl ethyl ketone	8,887	.	.	12,300
85353SMTHS500	Smith'S Food & Drug Centers Da	2026	N (2.9)	Ammonia	500	.	.	.
85224WLB RM323	Walbar Inc. Arizona Div.	3724	N (0.5)	1,1,1-Trichloroethane	8,600	.	.	1,278
				Nickel	200	.	.	5,000
85043WRLDR811	World Resources Co.	3339	N (2.7)	Zinc Compounds	5	.	.	.
				Cadmium compound	5	.	.	.
				Chromium compound	5	.	.	.
				Copper compounds	5	.	.	.
				Lead compounds	5	.	.	.
				Nickel compounds	5	.	.	.

Region-9 Tribal Land-Kaibab

86022NTRMN134	Intermountain Refining Co. Inc	2911	N (2.3)	Benzene	17,200	.	.	.
				Naphthalene	1,800	.	.	.
				Styrene	1,800	.	.	.
				Toluene	8,100	.	.	.
				Xylene (mixed isome	2,700	.	.	.
86022KBBFRHIG	Kaibab Forest Prods.	2429	N (2.8)	Ammonia	13,456	.	.	.

Region-9 Tribal Land-Las Vegas

89030CPTLC3645	Capital Cabinet Corp	2434	N (0.3)	Toluene	10,195	.	.	.
				Xylene (mixed isome	22,010	.	.	.

Region-9 Tribal Land-Navajo

86504GNRLDCO	Hughes Missile Sys. Co. Navajo	3679	Y	Freon 113	52,794	.	.	.
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Region-9 Tribal Land-Reno-Sparks

Table 3
Detail of TRI Facilities On or Near Tribal Lands by Region and Tribe

TRI ID	Name	SIC Code	Inside?	Chemical	Release Quantity (lbs)			
					Air	Land	Water	Offsite
89431FLDC 245C	Flood Co.	2851	N (0.8)	Ethylene glycol	5	.	.	.
89431MRCNL760	Thomas & Betts Corp. Sparks Fa	3471	N (1.7)	Zinc Compounds	10	.	.	2,241
				Chromium compound	10	.	.	63
				Copper compounds	10	.	.	12,344
				Nickel	.	.	.	1,813
				Sulfuric acid	5	.	.	13,453

Region-9 Tribal Land-Rincon

92082SRVVL3414	Survival Sys. Intl.	3732	Y	Styrene	6,400	.	.	.
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Region-9 Tribal Land-Salt River

85252MCRSM870	Microsemi Corp.	3674	Y	1,1,1-Trichloroethane	11,118	.	.	12,110
				Freon 113	7,757	.	.	10,075
				Hydrochloric acid	5	.	.	.
				Nitric acid	250	.	.	.
				Sulfuric acid	250	.	.	.
85281RZNCS115	Arizona Castings Inc.	3369	N (1.1)	Copper	250	.	.	66,000
85281MPCRP305	Mapei Corp.	2899	N (1.3)	Barium compounds	250	.	.	.
85202WHRLP305	Mastercraft Industries Div.	2434	N (2.8)	Acetone	16,000	.	.	250
				Methyl ethyl ketone	10,100	.	.	3,400
				Toluene	21,300	.	.	4,000
85205MCDNN500	Mcdonnell Douglas Helicopter C	3489	N (2.2)	1,1,1-Trichloroethane	1,781	.	.	3,269
				Toluene	3,237	.	.	4,879
				Xylene (mixed isome	1,500	.	.	755
85252MTRLN8201	Motorola Inc.	3661	N (1.8)	1,1,1-Trichloroethane	88,000	.	.	64,000
				Acetone	41,000	.	.	27,800
				Ethylene glycol	.	.	.	25,180
				Freon 113	11,900	.	.	1,050
				Glycol Ethers	2,500	.	.	43,570
				Hydrochloric acid	13,900	.	.	10
				Hydrochloric acid	11	.	.	.
				Hydrogen fluoride	1,650	.	.	200
				Methanol	21,560	.	.	1,770

Table 3
Detail of TRI Facilities On or Near Tribal Lands by Region and Tribe

TRI ID	Name	SIC Code	Inside?	Chemical	Release Quantity (lbs)			
					Air	Land	Water	Offsite
				Nitric acid	4,630	.	.	10,000
				Phosphoric acid	80	.	.	.
				Sulfuric acid	4,120	.	.	.
				Xylene (mixed isome	58,800	.	.	173,101
85205TLLYD4301	Talley Defense Sys.Inc. Plant	3483	N (1)	1,1,1-Trichloroethane	20,664	.	.	11,547
85205TRWSF405	TRW Vehicle Safety Sys. Mesa I	3714	N (2 2)	Chromium	5	.	.	84,795
				Copper compounds	1,168	.	.	56,478
				Manganese	.	.	.	9,211
				Nickel	5	.	.	38,990
				Sulfuric acid	.	.	.	598
85202LTRNS245S	Ultra Installations Inc.	3087	N (2.8)	Acetone	27,000	.	.	500
				Methyl ethyl ketone	.	.	.	250
				Styrene	12,000	.	.	250

Region-9 Tribal Land-San Xavier

85706MNRCN300	Minerec Inc.	2869	Y	Carbon disulfide	1,257	.	.	.
				Ethyl chloroformate	931	.	.	.
				Isopropyl alcohol	2,830	330	.	.
				n-Butyl alcohol	20	.	.	.
85746WSRLC666	Weiser Lock Co.	3429	Y	Zinc Compounds	190	4,600	.	65,726
				1,1,1-Trichloroethane	119,636	.	.	5,101
				Copper compounds	390	9,700	.	83,831
				Sulfuric acid	5	.	.	.
85706BRSHW610	Brush Wellman Inc.	3679	N (1.5)	Beryllium compounds	.	.	.	8,720
85706BRRBR673	Burr-Brown Corp.	3674	N (1.2)	Acetone	7,650	.	.	3,000
				Freon 113	10,450	.	.	3,600
				Hydrochloric acid	5	.	.	.
				Phosphoric acid	5	.	.	.
				Sulfuric acid	250	.	.	.
85706DSTNC5333	Distinctive Marble	3087	N (1.4)	Methyl ethyl ketone	224	.	.	.
				Styrene	2,242	.	.	.
85706LMBDL1150	Lambda Electronics Corp.	3679	N (0.8)	1,1,1-Trichloroethane	9,791	.	.	2,918
85706LRJTC1255	Learjet Inc.	3721	N (1.2)	1,2,4 Trimethylbenze	61	94	.	1,062

Table 3**Detail of TRI Facilities On or Near Tribal Lands by Region and Tribe**

TRI ID	Name	SIC Code	Inside?	Chemical	Release Quantity (lbs)			
					Air	Land	Water	Offsite
				Benzene	13	20	.	221
				Dichloromethane	30,826	.	.	5,851
				Methyl ethyl ketone	14,229	.	.	12,717
				Xylene (mixed isome	1,356	44	.	642
85714PLYPR4601	Polypore Inc.	2893	N (2.6)	Acetone	.	.	.	1,090
				Dibutyl phthalate	.	.	.	5
				Glycol Ethers	.	.	.	5
				Isopropyl alcohol	5	.	.	1,630
85714KNGHT420	Tucson Fndy. & Mfg. Inc. Dba T	3366	N (1)	Copper	500	.	.	33,678
				Lead	500	.	.	3,663

Region-9 Tribal Land-Unknown

96130SRRPCSUN	Sierra Pacific Ind.	2421	N (1.1)	
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Region-10 Tribal Land-Fort Hall

83221BSCMR419	Basic American Foods Inc.	2034	N (1.8)	Ammonia	584	.	.	.
				Chlorine	2	.	.	.
83202FMCCR3MI	FMC Corp. Pocatello Plant	2819	N (4)	Zinc Compounds	1,194	48,170	.	.
				Cadmium compound	7,772	3,596	.	5
				Chromium compound	2,439	11,937	.	5
				Nickel compounds	5	.	.	.
				Phosphoric acid	33,846	.	.	.
				Phosphorus (yellow o	.	319,828	.	.
83204GRTWS166	Great Western Malting Co.	2083	N (4.5)		.	.	.	.
83201JRSMPDON	J. R. Simplot Co. Don Siding	2819	N (4)	Ammonia	492,000	1,919	.	.
				Hydrogen fluoride	23,300	.	.	.
				Phosphoric acid	.	10,000	.	.
				Sulfuric acid	67,840	.	.	.
83221KRFTN295	Kraft General Foods Inc.	2022	N (1.1)	Phosphoric acid	.	.	.	890

Region-10 Tribal Land-Kallspell

99180PNDRY422	Ponderay Newsprint Co.	2611	N (1.2)	Ammonia	5	74	120	.
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Table 3
Detail of TRI Facilities On or Near Tribal Lands by Region and Tribe

TRI ID	Name	SIC Code	Inside?	Release Quantity (lbs)					
				Chemical	Air	Land	Water	Offsite	
Region-10 Tribal Land-Lower Elwah									
98362RGRSN214	Rogerson Hiller Corp.	3721	N (2 1)	Acetone	12,300	.	.	2,382	
Region-10 Tribal Land-Lummi									
98248MBLLC3901	B P Oil Co. Ferndale Refinery	2911	N (1)	1,2,4 Trimethylbenze	5,655	.	11	.	
				1,3-Butadiene	97	.	.	.	
				Ammonia	366	.	13,039	.	
				Anthracene	34	.	11	.	
				Benzene	8,624	.	11	.	
				Chromium compound	.	1,007	52	.	
				Cresol (mixed isomer	89	.	11	.	
				Cumene	2,886	.	11	.	
				Cyclohexane	17,876	.	11	.	
				Diethanolamine	1,573	.	.	.	
				Ethylbenzene	5,707	.	11	.	
				Ethylene	1,800	.	.	.	
				Hydrogen fluoride	4,763	.	.	.	
				Lead compounds	.	216	32	.	
				Manganese compoun	452	.	1,232	.	
				Naphthalene	1,691	.	11	.	
				Phenol	34	.	32	.	
				Propylene (Propene)	1,950	.	.	.	
				Toluene	36,204	.	11	.	
				Xylene (mixed isome	35,857	.	11	.	
98248NTLCL4050	Intalco Aluminum Corp.	3334	N (2.3)	Chlorine	5	.	.	.	
				Chromium	5	.	.	.	
				Copper	5	.	.	.	
				Ethylene glycol	.	.	.	11,768	
				Hydrogen fluoride	63,951	.	.	.	
				Manganese	5	.	.	.	
98225THSRC730	Oeser Co.	2491	N (2.4)	Pentachlorophenol	5	.	.	250	

Region-10 Tribal Land-Muckleshoot

Table 3
Detail of TRI Facilities On or Near Tribal Lands by Region and Tribe

TRI ID	Name	SIC Code	Inside?	Chemical	Release Quantity (lbs)			
					Air	Land	Water	Offsite
98002RMMRN473	Arima Marine	3732	N (2.4)	Styrene	4,200	.	.	.
98002BNGCM700	Boeing Co. BCAG Fabrication	3728	N (1.6)	1,1,1-Trichloroethane	185,000	.	.	193,532
				2-Ethoxyethanol	21,100	.	.	2,246
				Acetone	19,000	.	.	42,441
				Chromium compound	73	.	21	96,327
				Ethylbenzene	4,570	.	.	5,627
				Freon 113	12,700	.	.	295
				Glycol Ethers	3,400	.	.	8,103
				Hydrochloric acid	.	.	.	17,026
				Hydrogen fluoride	.	.	.	10,600
				Methyl ethyl ketone	129,000	.	.	128,397
				Methyl isobutyl keton	11,700	.	.	12,100
				Nitric acid	.	.	.	191,200
				Phosphoric acid	.	.	.	35,310
				Sulfuric acid	.	.	.	18,140
				Toluene	17,400	.	.	55,485
				Xylene (mixed isome	31,300	.	.	24,242
98002HTC 3016A	B P Chemicals Inc.	3728	N (1.9)	Acetone	30,697	.	.	6,919
				Methyl ethyl ketone	18,407	.	.	2,615
98002KDDRN322	Kidder Intl.	3949	N (2.1)	Acetone	21,864	.	.	9,954
				Methylenebis(phenyli	780	.	.	3,119
98001LVNGS2537	Livingston Inc.	3713	N (2.5)	Acetone	16,660	.	.	.
				Styrene	38,172	.	.	.
98047SPRGM417	Sprague Metal Co.	3444	N (2.4)	Methyl ethyl ketone	2,220	.	.	.

Region-10 Tribal Land-Nez Perce

83501PTLTC805	Potlatch Corp. Pulp & Paperboa	2611	N (1.8)	Acetone	32,750	250	7,000	.
				Catechol	.	.	9,000	.
				Chlorine	41,250	.	.	.
				Chlorine dioxide	47,750	.	.	.
				Chloroform	159,000	5	2,950	.
				Ethylene glycol	.	2,068	.	.
				Hydrochloric acid	16,200	.	.	.

Table 3
Detail of TRI Facilities On or Near Tribal Lands by Region and Tribe

TRI ID	Name	SIC Code	Inside?	Chemical	Release Quantity (lbs)			
					Air	Land	Water	Offsite
				Manganese	.	.	43,000	.
				Methanol	719,000	2,400	.	.
				Methyl ethyl ketone	8,200	5	1,200	.
				Phenol	1,400	5	750	.
				Sulfuric acid	27,000	.	.	.
				Zinc (fume or dust)	250	1,100	12,000	.

Region-10 Tribal Land-Puyallup

98422MRCNR820	American Reinforced Plastics	3088	Y	Styrene	29,600	.	.	5
98421CSCDP164	Cascade Pole & Lumber Co	2491	Y	Arsenic	.	.	34	210
				Chromium	.	.	8	210
				Copper	.	.	11	91
				Creosote	409	.	.	64
				Pentachlorophenol	2	.	2	394
98421DMTRN124	Domtar Gypsum Inc.	3275	Y	Glycol Ethers	156	.	.	.
98421NRSNN332	Dyno Overlays Inc	2672	Y	Acetone	203,410	.	.	.
				Formaldehyde	767	.	.	327
				Methanol	32,238	.	.	.
				Phenol	2,275	.	2	143
98421PNNWL290	Elf Atochem N.A. Inc.	2812	Y	Chlorine	900	.	5	.
				Chromium compound	.	.	.	150
				Hydrochloric acid	680	.	.	.
				Sulfuric acid	.	.	1	.
98421GRRDC214	Girard Custom Coaters Inc.	2499	Y	Acetone	13,618	.	.	2,403
				Methanol	20,924	.	.	3,692
				Naphthalene	9,078	.	.	1,603
				Toluene	66,156	.	.	11,674
				Xylene (mixed isome	83,811	.	.	14,791
				n-Butyl alcohol	8,735	.	.	.
98422JNSCH1919	Jones Chemicals Inc.	2819	Y	Ammonia	294	.	.	.
				Chlorine	115	.	.	.
				Hydrochloric acid	8	.	.	.
98421KSRLM3400	Kaiser Aluminum & Chemical Cor	3334	Y	Hydrogen fluoride	49,100	.	.	.

Table 3**Detail of TRI Facilities On or Near Tribal Lands by Region and Tribe**

TRI ID	Name	SIC Code	Inside?	Chemical	Release Quantity (lbs)			
					Air	Land	Water	Offsite
98421LNGPC2120	Lianga Pacific Inc.	2431	Y	Methyl ethyl ketone	51,140	.	.	896
98421NRCRP114	Norcore Plastics Inc.	3089	Y	Acetone	22,908	.	.	.
				Ethylene glycol	6,180	.	.	.
				Styrene	4,653	.	.	.
98421CCDNT605	Occidental Chemical Corp.	2812	Y	Ammonia	392	.	284	.
				Asbestos (friable)	1	.	.	.
				CFC-12	28,000	.	.	.
				Chlorine	455	.	.	.
				Hydrochloric acid	859	.	102	2,410
				Sulfuric acid	.	.	26	24
98421THDLC2001	T.C. Prods. Inc.	2842	Y	Chlorine	250	.	.	.
98421SLRFN3001	U.S. Oil & Refining Co.	2911	Y	1,1,1-Trichloroethane	250	.	.	.
				Benzene	6,417	.	.	122
				Ethylbenzene	2,313	.	.	23
				Hydrochloric acid	50	.	.	.
				Toluene	14,296	.	.	95
				Xylene (mixed isome	14,110	.	.	45
98409TLSFN3021	Atlas Foundry & Machine Co.	3325	N (2)	Chromium	500	.	5	255
				Copper	10	.	250	500
				Manganese	10	.	5	255
				Molybdenum trioxide	10	.	5	250
				Nickel	500	.	5	250
98390BTRCC1515	Beatrice Cheese Inc.	2022	N (2.9)		.	.	.	.
98390FLSCH1115	Fleischmann'S Yeast Inc.	2099	N (2.8)	Ammonia	23,750	.	.	.
				Sulfuric acid	.	.	.	21,829
98409NWTCH260	Northwest Etch Tech. Inc.	3479	N (2.4)	Chromium	.	.	.	4,400
				Hydrochloric acid	1,000	.	.	11,400
98409PRKRP3302	Parker Paint Mfg. Co. Inc.	2851	N (2.9)	Ethylene glycol	2,755	.	.	383
				Toluene	586	.	.	750
				Xylene (mixed isome	1,945	.	.	750
98390PRCSN151	Precision Aerospace & Composit	3728	N (2.8)	Acetone	21,438	.	.	750
98421SMPSN801	Simpson Tacoma Kraft Co.	2611	N (0.5)	Acetone	23,905	.	6,595	.
				Ammonia	500	.	44,370	.

Table 3
Detail of TRI Facilities On or Near Tribal Lands by Region and Tribe

TRI ID	Name	SIC Code	Inside?	Chemical	Release Quantity (lbs)			
					Air	Land	Water	Offsite
				Catechol	.	.	3,924	.
				Chlorine	4,352	.	.	.
				Chlorine dioxide	8,446	.	.	.
				Chloroform	19,657	.	6,744	.
				Hydrochloric acid	29,262	.	.	.
				Methanol	483,620	.	.	.
				Sulfuric acid	39,331	.	.	.
98390SNCP180	Sonoco Prods. Co.	2631	N (2.9)		.	.	.	.
98390WSTRN131	Western Wood Preserving Co.	2491	N (2.9)	Arsenic compounds	.	.	.	250
				Chromium compound	.	.	.	250
				Copper compounds	.	.	.	250

Region-10 Tribal Land-Swinomish

98221GNRLC655	General Chemical Corp.	2819	N (1.3)	Sulfuric acid	14,605	.	.	.
98221SHLLWES	Shell Oil Co. Anacortes Refine	2911	N (1.5)	1,1,1-Trichloroethane	42	33	.	.
				1,2,4 Trimethylbenze	1,380	10	.	.
				1,3-Butadiene	502	.	.	.
				Ammonia	500	80	9,700	.
				Antimony compounds	220	25	7,040	7,930
				Benzene	17,500	10	.	40
				Chlorine	2,400	.	.	.
				Cyclohexane	810	80	.	.
				Ethylene	8,060	.	.	.
				Hydrochloric acid	1,325	.	.	.
				Lead compounds	.	5	.	100
				Nickel compounds	1,240	5	.	3,050
				Propylene (Propene)	15,100	.	.	.
				Toluene	28,200	40	.	410
				Xylene (mixed isome	40,700	60	.	860
98221PGTSN600	Texaco Refining & Marketing In	2911	N (1.3)	1,2,4 Trimethylbenze	8,500	250	250	550
				1,3-Butadiene	33,000	.	.	.
				Ammonia	250	.	74,800	.
				Benzene	23,800	250	250	160

Table 3
Detail of TRI Facilities On or Near Tribal Lands by Region and Tribe

TRI ID	Name	SIC Code	Inside?	Chemical	Release Quantity (lbs)			
					Air	Land	Water	Offsite
				Chlorine	5,900	.	12,900	.
				Cyclohexane	3,050	250	250	630
				Ethylbenzene	17,300	250	250	240
				Ethylene	19,600	.	.	.
				Lead compounds	.	250	250	30
				Manganese compound	.	.	750	.
				Methanol	250	.	.	.
				Molybdenum trioxide	.	250	250	81,240
				Naphthalene	3,140	250	250	8,920
				Propylene (Propene)	194,000	.	.	.
				Sulfuric acid	.	.	.	63,000,000
				Toluene	36,500	250	250	690
				Xylene (mixed isome	36,800	250	250	1,350

Region-10 Tribal Land-Tulalip

98270PCFCG131	Pacific Grinding Wheel Co. Inc	3291	N (0.4)	Creosote	250	.	.	500
98201TRCTN1028	T.C. Sys. Inc.	3471	N (1.8)	1,1,1-Trichloroethane	36,369	.	.	.
				Methyl ethyl ketone	34,178	.	.	20,973

Region-10 Tribal Land-Yakima

98948DLMNT49E	Del Monte Foods Plant 122 & 12	3411	Y	Copper	.	.	.	448,587
				Glycol Ethers	39,485	.	.	3,694
				Toluene	10,454	.	.	52
				Xylene (mixed isome	20,693	.	.	369
98909DWTYR272	Dowty Aerospace Yakima	3728	N (1.5)	1,1,1-Trichloroethane	14,000	.	.	1,700
98908SHLDS1009	Shields Bag & Printing Co.	3070	N (2.5)	Toluene	2,900	.	.	19,200
98903WSTRN340	Western Recreational Vehicles	3792	N (1.6)	Acetone	15,571	.	.	7,835
				Styrene	1,046	.	.	.
98932YKMBT21S	Yakima Bail Co.	3949	N (0.3)	Acetone	72,382	.	.	2,954

APPENDIX C

Table 4 - Detail of NAAQS Pollutant Sources On or Near Tribal Lands

Table 4**Detail of NAAQS Pollutant Sources On or Near Tribal Lands by Region and Tribe**

ID	Name	SIC Code	Inside?	Release Quantity (tons)				
				VOC	NO2	CO	PM10	SO2
Region-2 Tribal Land-Cattaraugus								
360298266	Gowanda Psych Center	8063	N (1.4)	8	102	23	0	180
360090107	Moench Tanning Co Inc	3111	N (1.4)	296	0	0	0	1
Region-2 Tribal Land-St. Regis								
360890218	Central Foundry Massena	3361	N (1.1)	89	0	2	0	0
360890090	Reynolds Metals Co Massena	3334	N (1.1)	5	24	8	0	482
Region-4 Tribal Land-Hollywood								
120110037	Florida Power & Light Lauderdale	4911	N (1.4)	0	479	169	0	253
12011 613	Florida Power & Light Lauderdale	4911	N (1.4)	6	1,425	104	0	176
Region-5 Tribal Land-Fond Du Lac								
271370066	Great Lakes Gas Transmison Co	4922	Y	2	221	90	0	0
270170002	Pottlatch Corporation	2621	N (2.4)	248	1,439	1,723	0	2,285
270170006	USG Acoustical Products Co	2661	N (1.3)	120	225	11	0	332
Region-5 Tribal Land-L'Anse								
260131772	Upper Peninsula Power Co	4911	N (2.4)	2	611	18	0	1,256
Region-5 Tribal Land-Oneida								
550090101	De Pere Foundry Inc	3321	N (1.9)	2	3	417	0	2
550090095	Green Bay Packaging Inc	2611	N (2.9)	72	314	111	0	1,340
550090097	James River Corporation	2621	N (2.9)	274	285	44	0	416
550090093	Milprint Inc	2643	N (1.9)	778	0	0	0	0
550090098	Nicolet Paper Company	2621	N (1.9)	18	192	165	0	792
550090096	Procter & Gamble Paper Prod Co	2621	N (2.9)	9	2,304	102	0	13,630
550090100	Western Lime & Cement Co	3274	N (2.6)	0	178	88	0	40
550094072	Wis Public Service Corp	4911	N (2.8)	24	7,162	208	0	25,640
Region-6 Tribal Land-Jicarilla								
350390003	El Paso Natural Gas	1311	Y	51	530	66	0	3
350390007	Northwest Pipeline	4922	Y	1	204	44	0	0

Table 4**Detail of NAAQS Pollutant Sources On or Near Tribal Lands by Region and Tribe**

ID	Name	SIC Code	Inside?	Release Quantity (tons)				
				VOC	NO2	CO	PM10	SO2
350390006	Amoco Production Co	4922	N (3.5)	0	113	11	0	0

Region-6 Tribal Land-Laguna

350060006	El Paso Natural Gas	4922	Y	63	653	83	0	2
350060008	Transwestern Pipe	4922	Y	11	1,171	148	0	20

Region-6 Tribal Land-Navajo

350452465	Animas	4911	Y	1	167	12	0	0
350452442	Arizona Public Serv	4911	Y	306	72,280	2,632	0	36,871
350450010	El Paso Natural Gas	0	Y	59	824	115	0	1,723
350310003	El Paso Natural Gas	4922	Y	6	1,026	131	0	0
350310012	Navajo Forest Prod.	2421	Y	1,308	590	1,779	0	89
350450050	Peter Kiewit Sons	2951	Y	0	0	0	0	166
350452451	Public Serv. Of N.M.	4911	Y	195	33,584	1,671	0	26,363
350450019	El Paso Natural Gas	4612	N (2.3)	606	0	0	0	0

Region-6 Tribal Land-Osage

401130001	Petrolite Specialty Polymers Group	2911	Y	198	18	35	0	0
481473508	Texas Util Generating	4911	Y	26	8,127	593	0	42
400710010	Conoco Inc.	2911	N (2.9)	15	2,011	249	0	6,569
400710011	Conoco Inc.	2911	N (2.9)	1,985	0	0	0	0
401430039	Fibercast Company	3079	N (6.9)	366	0	0	0	0
401170002	Kerr McGee Corp.	1321	N (0.9)	77	0	0	0	0
401470002	National Zinc	3333	N (1)	0	28	7	0	1,206
401470005	Phillips 66 Natural Gas Co.	1321	N (18)	9	91	12	0	0
401430010	Sheffield Steel	3312	N (7.3)	432	35	2,957	0	0
401430022	Sun Petroleum Prod.(Tnk Fm)	2911	N (2.6)	117	0	0	0	0
401430005	Sun Petroleum Products(Refny)	2911	N (2.6)	2,157	1,229	0	0	4,005
401430028	Tulsa Chemical Co.	2819	N (3.8)	6	344	86	0	512
400710004	Witco, Continental Carbon Division	2895	N (1.2)	3,128	21	52,436	0	81

Region-6 Tribal Land-San Juan

350390001	Duke City Lumber	2421	Y	72	7	851	0	1
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Table 4

Detail of NAAQS Pollutant Sources On or Near Tribal Lands by Region and Tribe

ID	Name	SIC Code	Inside?	Release Quantity (tons)				
				VOC	NO2	CO	PM10	SO2
Region-7 Tribal Land-Winnebago								
191931091	George Neal Station	4911	N (3.3)	178	45,359	1,528	0	31,625
191930460	Terra Chemicals International, Inc	2873	N (2.1)	158	3,238	27	0	7
Region-8 Tribal Land-Blackfeet								
300350001	Unocal - Reagan Field Plant	2911	Y	0	10	0	0	149
Region-8 Tribal Land-Navajo								
490370007	Mobil Oil Corp - San Juan County	1311	Y	36	193	24	0	0
490370005	Mountain Fuel Resources	1311	Y	19	117	15	0	0
490370006	Phillips Petroleum Co	1311	Y	16	160	20	0	0
Region-8 Tribal Land-Southern Ute								
80670021	Davis Oil	4922	Y	0	0	0	0	223
Region-8 Tribal Land-Unitah And Ouray								
490477790	Bonanza	4911	Y	44	10,210	376	0	648
490131008	Bow Valley Petroleum	1311	Y	216	0	0	0	0
490130004	Chevron Pipeline Company	4612	Y	118	137	0	0	246
490470053	Chevron USA - Redwash Field	1311	Y	116	393	51	0	0
490470056	Chevron USA - Wonsits Valley Field	1311	Y	230	270	34	0	0
490470008	CNG Producing Company	1311	Y	57	0	0	0	0
490131007	Diamond Shamrock Exploration Co	1311	Y	58	91	12	0	0
490131005	Gary Refining Company	1311	Y	7	67	9	0	0
490130100	Gary Refining Company	1311	Y	30	315	40	0	0
490130006	Graham Resources	2911	Y	269	0	0	0	0
490131003	Koch Hydrocarbons	1321	Y	141	176	22	0	0
490130007	Linmar Energy Corp	1311	Y	482	52	7	0	0
490130104	Lomax Exploration Co	1311	Y	104	63	9	0	0
490470009	Mountain Fuel Resources	1311	Y	5	59	8	0	0
490470052	Natural Gas Corp Of California	1311	Y	7	93	12	0	0
490130005	Pennzoil Exploration & Production Co	2911	Y	953	221	51	0	1

Table 4

Detail of NAAQS Pollutant Sources On or Near Tribal Lands by Region and Tribe

ID	Name	SIC Code	Inside?	Release Quantity (tons)				
				VOC	NO2	CO	PM10	SO2
490131101	Seagull Refining Co	2911	Y	614	159	118	0	18
490131009	Utex Oil	2911	Y	1,539	1,951	236	0	0
Region-8 Tribal Land-Wind River								
560130016	Arco Oil & Gas Co - Riverton Dome	1311	Y	1	126	16	0	1,472
560130005	Chemical Marketing Services - Riverton	2819	Y	0	0	0	0	975
Region-9 Tribal Land-Bishop								
60270007	Umetco Mineral	1061	N (2.6)	5	42	4	0	122
Region-9 Tribal Land-Colorado River								
60650627	So Cal Gas Co	4924	N (2.7)	73	2,785	352	0	0
Region-9 Tribal Land-Fort Mohave								
60710069	Southern Calif	4923	N (1.7)	19	834	105	0	0
Region-9 Tribal Land-Fort Yuma								
40270001	APS Yucca Generating Station	4911	Y	3	169	47	0	20
Region-9 Tribal Land-Hoopa Valley								
60150021	Simpson Redwoo	2421	Y	2	10	202	0	0
Region-9 Tribal Land-Kalbab								
40050001	Intermountain Refining Co.	5171	N (2.1)	946	88	6	0	91
Region-9 Tribal Land-Moapa								
320032324	Nevada Power Co	4911	N (1.5)	57	14,735	482	0	3,844
Region-9 Tribal Land-Navajo								
40054941	Navajo Steam Generating Plant	4911	Y	263	56,332	2,259	0	71,340
40050009	Kaibab Industries	2421	N (2.7)	28	92	90	0	20

Table 4**Detail of NAAQS Pollutant Sources On or Near Tribal Lands by Region and Tribe**

ID	Name	SIC Code	Inside?	Release Quantity (tons)				
				VOC	NO2	CO	PM10	SO2
Region-9 Tribal Land-Pyramid Lake								
320190002	Nevada Cement	3241	N (1.8)	0	747	0	0	479
Region-9 Tribal Land-Reno-Sparks								
320310002	Southern Pacific Pipe Lines	5171	N (0.6)	281	0	0	0	0
Region-9 Tribal Land-Salt River								
04013 116	Ocotillo	4911	N (1.6)	1	200	29	0	3
Region-9 Tribal Land-Unknown								
60350004	Sierra Pacific	2421	N (0.8)	101	113	567	0	7
Region-9 Tribal Land-XI Ranch								
60490001	Calandor Pine	2421	N (1.5)	35	39	193	0	0
Region-10 Tribal Land-Coeur D'Alene								
160090001	Potlatch Corp	2421	N (9.3)	84	274	391	0	15
Region-10 Tribal Land-Fort Hall								
160770005	FMC Corp	2819	Y	0	17	4	0	2,976
160770006	JR Simplot	2874	N (4.4)	0	1,145	16	0	7,181
Region-10 Tribal Land-Lummi								
530730003	Columbia Cement	3241	N (2.4)	0	535	0	0	2,665
530730001	Intalco Aluminum	3334	N (1.8)	2	132	36,555	0	5,295
530730005	Mobil Oil Co	2911	N (1.1)	1,371	894	14	0	3,237
Region-10 Tribal Land-Muckleshoot								
530330179	Auburn Airport	4582	N (1.6)	14	1	658	0	0
530330015	Boeing Commercial	3721	N (1.5)	442	125	31	0	0
Region-10 Tribal Land-Puyallup								
530530009	Buffelen Woodworking	2435	Y	9	28	259	0	0

Table 4**Detail of NAAQS Pollutant Sources On or Near Tribal Lands by Region and Tribe**

ID	Name	SIC Code	Inside?	Release Quantity (tons)				
				VOC	NO2	CO	PM10	SO2
530530085	Girard Custom Co	2491	Y	183	0	0	0	0
530530019	Kaiser Aluminum	3334	Y	34	16	10,456	0	1,783
530530037	Pennwalt Chemical	2819	Y	0	50	7	0	161
530530038	Reichhold Chemicals	2869	Y	190	97	144	0	0
530530021	Sound Refining Inc.	2911	Y	727	0	0	0	0
530530022	U S Oil & Refining	2911	Y	606	480	138	0	350
530530011	United States Gypsum	3296	Y	38	2,329	581	0	10
530530007	Puget Sound Plywood	2436	N (1)	26	20	769	0	1
530530008	Simpson Taco. Kraft	2621	N (0.6)	65	866	8,426	0	1,359

Region-10 Tribal Land-Quinault

530270032	A.E. Erickson	2429	Y	3	3	108	0	0
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Region-10 Tribal Land-Swinomish

530570005	Shell Oil	2911	N (2.5)	1,396	2,145	2,372	0	7,053
530570003	Texaco Inc Box	2911	N (1.2)	4,751	2,161	1	0	6,847

Region-10 Tribal Land-Tulalip

530610017	Nord Co., Inc.	2431	N (1.3)	4	13	115	0	0
530610008	Weyerhaeuser Co	2611	N (0.8)	1	129	1,969	0	740

Region-10 Tribal Land-Yakima

530770039	Ruehl & Arstein	211	Y	0	14	0	0	3
530770007	White Swan Lumber	2421	Y	10	96	16	0	14
530770009	Monson Cattle Co	211	N (3)	0	45	0	0	12
530770022	Van De Graaf Ranch	211	N (2.6)	0	27	0	0	8

APPENDIX D

Table 5 - Chemicals Released On or Near Tribal Lands Nationwide and by Region

Table 5
Chemicals Released On or Near Tribal Lands Nationwide and by Region

Chemical	Facilities	Release Quantity (lbs)			
		Air	Land	Water	Offsite
Nationwide					
1,1,1-Trichloroethane	29	841,092	33	44	462,879
1,2,4 Trimethylbenzene	8	47,816	355	320	3,293
1,3-Butadiene	6	34,734	.	.	.
1,4-Dichlorobenzene	1	127	.	.	.
2-Ethoxyethanol	3	22,827	.	.	13,746
2-Methoxyethanol	1	5,700	.	.	.
4,4'-Isopropylidenediphenol	1	67	.	.	.
4,4'-Methylenedianiline	1	643	.	.	.
Acetone	35	859,427	250	13,595	213,888
Acrylamide	1	.	.	.	998
Aluminum (fume or dust)	2	1,000	250	.	9,398
Aluminum oxide (fibrous forms)	1	250	.	.	55,289
Ammonia	23	590,053	2,084	166,718	85,647
Ammonium sulfate (solution)	1	3,444	.	.	.
Anthracene	1	34	.	11	.
Antimony compounds	1	220	25	7,040	7,930
Arsenic	1	.	.	34	210
Arsenic compounds	3	.	.	.	1,000
Asbestos (fnable)	1	1	.	.	.
Barium compounds	4	3,321	.	5,550	51,905
Benzene	9	145,254	280	320	1,591
Beryllium compounds	1	.	.	.	8,720
Bis(2-ethylhexyl)adipate	1	3,600	.	.	.
Bromomethane (Methyl Bromide)	1	13,000	.	.	.
CFC-11	2	25,989	.	.	2,670
CFC-12	3	40,600	.	.	250
CO	89	274,384,000	.	.	.
Cadmium compounds	4	8,055	4,807	.	15,708
Carbon disulfide	2	594,211	.	.	.
Carbon tetrachlonde	1	750	.	.	.
Carbonyl sulfide	1	121,208	.	.	.
Catechol	2	.	.	12,924	14,600
Chlorine	18	80,116	.	16,440	165
Chlorine dioxide	4	91,756	.	.	.
Chloroform	4	402,957	5	9,944	19,540
Chromium	12	3,309	255	18	390,789
Chromium compounds	13	3,338	15,944	972	177,868
Cobalt	5	1,270	5	5	250
Cobalt compounds	1	1,706	.	.	26,230
Copper	18	14,320	11,400	516	1,662,584
Copper compounds	13	2,351	9,847	750	9,801,327
Creosote	2	659	.	.	564
Cresol (mixed isomers)	3	1,802	.	61	9,100
Cumene	3	13,286	8	55	1,402
Cyanide compounds	1	25	.	.	137

Table 5
Chemicals Released On or Near Tribal Lands Nationwide and by Region

Chemical	Facilities	Release Quantity (lbs)			
		Air	Land	Water	Offsite
Cyclohexane	7	104,303	331	320	333,327
Dibutyl phthalate	1	.	.	.	5
Dichloromethane	6	360,604	.	.	27,173
Diethanolamine	1	1,573	.	.	.
Ethyl chloroformate	1	931	.	.	.
Ethylbenzene	7	38,490	251	320	6,330
Ethylene	8	241,980	.	.	.
Ethylene glycol	6	9,278	2,068	.	55,177
Ethylene oxide	1	13,986	.	.	.
Formaldehyde	6	172,845	.	.	630
Freon 113	9	270,295	.	.	38,932
Glycol Ethers	10	84,574	.	250	160,190
Hydrochloric acid	23	788,519	1,100	102	60,658
Hydrogen fluoride	11	241,019	.	.	13,587
Isopropyl alcohol	2	2,835	330	.	1,630
Lead	3	695	.	5	3,663
Lead compounds	8	3,090	1,381	282	535,949
Maleic anhydride	1	238	.	.	.
Manganese	9	2,040	101,220	43,010	76,611
Manganese compounds	4	1,965	3,057	1,982	450,051
Methanol	16	1,649,103	2,400	1	2,718,512
Methyl ethyl ketone	21	2,200,143	5	1,244	240,777
Methyl isobutyl ketone	3	27,646	.	.	12,182
Methyl methacrylate	2	1,774	.	.	455
Methyl tert-butyl ether	2	73,290	.	44	.
Methylenebis(phenylisocyanate)	2	879	.	.	3,119
Molybdenum trioxide	3	390	250	255	219,490
N982	13	51,039	69,591	5,133	615,854
NO2	96	578,610,000	.	.	.
Naphthalene	8	22,749	3,650	320	16,193
Nickel	11	2,530	500	12	340,871
Nickel compounds	5	1,540	45	.	47,799
Nitric acid	9	9,447	.	.	219,957
Pentachlorophenol	2	7	.	2	644
Phenol	7	16,220	5	1,064	10,643
Phosphoric acid	7	45,686	10,000	.	260,158
Phosphorus (yellow or white)	1	.	319,828	.	.
Propylene (Propene)	8	362,651	.	.	.
Propylene oxide	2	10,954	.	.	.
SO2	68	550,956,000	.	.	.
Silver compounds	1	250	.	.	14,900
Styrene	20	258,568	.	.	16,632
Sulfuric acid	29	697,628	89,000	27	64,971,622
Tetrachloroethylene (Perchloroethylene)	2	5,349	.	.	16,627
Toluene	33	1,720,945	1,044	328	134,000
Trichloroethylene	2	127,065	.	.	20,000

Table 5
Chemicals Released On or Near Tribal Lands Nationwide and by Region

Chemical	Facilities	Release Quantity (lbs)			
		Air	Land	Water	Offsite
VOC	97	60,632,000	.	.	.
Xylene (mixed isomers)	32	566,744	370	407	290,044
Zinc (fume or dust)	3	2,188	1,100	12,000	.
n-Butyl alcohol	2	8,755	.	.	.

Region - 2

Acetone	2	15,040	.	.	750
Ammonium sulfate (solution)	1	3,444	.	.	.
CO	3	66,000	.	.	.
Chlorine	2	1,655	.	3,000	.
Chromium compounds	1	.	.	499	41,766
Copper	2	505	.	250	116,584
Glycol Ethers	1	21,895	.	.	.
Hydrogen fluoride	1	88,000	.	.	.
Manganese	1	250	.	.	3,000
Methanol	1	10,530	.	.	5
Methyl ethyl ketone	2	15,460	.	.	250
N982	1	.	.	4,649	.
NO2	2	252,000	.	.	.
SO2	3	1,326,000	.	.	.
Styrene	1	16,400	.	.	6,580
Sulfuric acid	1	6,790	.	.	.
Toluene	2	58,260	.	.	828
VOC	4	796,000	.	.	.
Xylene (mixed isomers)	3	64,767	.	.	40,977

Region - 4

1,1,1-Trichloroethane	1	250	.	.	.
Acetone	2	21,755	.	.	.
Ammonia	1	10,868	.	.	.
CO	2	546,000	.	.	.
Hydrochloric acid	1	250	.	.	.
Methyl methacrylate	1	774	.	.	455
NO2	2	3,808,000	.	.	.
SO2	2	858,000	.	.	.
Styrene	2	9,317	.	.	8,188
VOC	1	12,000	.	.	.

Region - 5

1,1,1-Trichloroethane	3	150,750	.	.	10,700
1,2,4 Trimethylbenzene	1	22,250	.	.	.
Acetone	3	45,913	.	.	28,044
Acrylamide	1	.	.	.	998
Aluminum (fume or dust)	2	1,000	250	.	9,398
Ammonia	2	9,000	.	8,605	5
Arsenic compounds	1	.	.	.	500

Table 5
Chemicals Released On or Near Tribal Lands Nationwide and by Region

Chemical	Facilities	Release Quantity (lbs)			
		Air	Land	Water	Offsite
Barium compounds	1	21	.	5,300	42,200
CFC-11	1	250	.	.	2,670
CFC-12	1	1,600	.	.	250
CO	11	5,954,000	.	.	.
Catechol	1	.	.	.	14,600
Chlorine	3	22,247	.	535	145
Chlorine dioxide	2	35,560	.	.	.
Chloroform	2	224,300	.	250	19,540
Chromium	3	765	.	5	153,354
Chromium compounds	2	250	.	.	1,255
Cobalt	1	255	.	5	250
Copper	2	500	750	.	5,063
Copper compounds	3	250	.	750	38,955
Dichloromethane	2	31,800	.	.	.
Formaldehyde	4	171,171	.	.	.
Glycol Ethers	1	6,200	.	250	.
Hydrochloric acid	3	709,780	.	.	.
Manganese	3	520	1,220	5	17,120
Manganese compounds	1	.	750	.	1,000
Methanol	4	326,966	.	.	2,711,520
Methyl ethyl ketone	2	17,178	.	.	3,779
Methyl isobutyl ketone	1	15,600	.	.	.
N982	1	250	.	.	260,000
NO2	11	25,868,000	.	.	.
Nickel	2	260	.	5	73,000
Nitric acid	2	1,505	.	.	.
Phenol	1	4,959	.	.	750
Phosphoric acid	1	.	.	.	10,577
Propylene oxide	1	1,500	.	.	.
SO2	10	91,466,000	.	.	.
Styrene	3	17,850	.	.	.
Sulfuric acid	3	487,180	.	.	.
Toluene	3	59,179	.	.	7,177
Trichloroethylene	1	7,065	.	.	.
VOC	11	3,098,000	.	.	.
Xylene (mixed isomers)	4	49,905	.	87	528

Region - 6

1,1,1-Trichloroethane	5	32,311	.	44	11,419
1,2,4 Trimethylbenzene	2	5,400	1	59	1,560
1,3-Butadiene	3	1,135	.	.	.
1,4-Dichlorobenzene	1	127	.	.	.
2-Ethoxyethanol	1	357	.	.	.
2-Methoxyethanol	1	5,700	.	.	.
4,4'-Isopropylidenediphenol	1	67	.	.	.
4,4'-Methylenedianiline	1	643	.	.	.

Table 5
Chemicals Released On or Near Tribal Lands Nationwide and by Region

Chemical	Facilities	Release Quantity (lbs)			
		Air	Land	Water	Offsite
Acetone	4	57,592	.	.	22,986
Aluminum oxide (fibrous forms)	1	250	.	.	55,289
Ammonia	4	33,140	11	15,800	2,570
Arsenic compounds	1	.	.	.	250
Barium compounds	1	250	.	.	9,705
Benzene	2	65,800	.	59	337
CFC-12	1	11,000	.	.	.
CO	20	127,836,000	.	.	.
Cadmium compounds	2	278	1,211	.	15,703
Carbon disulfide	1	592,954	.	.	.
Carbon tetrachloride	1	750	.	.	.
Carbonyl sulfide	1	121,208	.	.	.
Chlorine	1	530	.	.	.
Chromium	5	1,284	255	.	147,770
Chromium compounds	3	5	3,000	400	7,331
Cobalt	1	10	5	.	.
Cobalt compounds	1	1,706	.	.	26,230
Copper	5	11,869	10,650	5	103,577
Copper compounds	3	443	147	.	7,830
Cresol (mixed isomers)	1	313	.	50	9,100
Cumene	1	9,600	8	44	1,400
Cyclohexane	3	75,967	1	59	329,200
Dichloromethane	1	250,490	.	.	1,700
Ethylbenzene	2	6,930	1	59	439
Ethylene	4	207,820	.	.	.
Ethylene glycol	2	83	.	.	46
Ethylene oxide	1	13,986	.	.	.
Formaldehyde	1	907	.	.	303
Freon 113	1	46,726	.	.	11,870
Glycol Ethers	2	688	.	.	75
Hydrochloric acid	2	11,669	.	.	23,312
Hydrogen fluoride	3	9,750	.	.	2,537
Lead	2	195	.	5	.
Lead compounds	4	3,085	910	.	476,271
Maleic anhydride	1	238	.	.	.
Manganese	2	255	1,000	.	47,020
Manganese compounds	3	1,513	2,307	.	449,051
Methanol	3	20,253	.	1	1,525
Methyl ethyl ketone	3	1,608,154	.	44	500
Methyl isobutyl ketone	1	346	.	.	82
Methyl methacrylate	1	1,000	.	.	.
Methyl tert-butyl ether	1	70,000	.	44	.
Molybdenum trioxide	1	380	.	.	138,000
N982	7	49,140	16,821	484	176,703
NO2	21	246,106,000	.	.	.
Naphthalene	2	4,396	3,400	59	5,670

Table 5
Chemicals Released On or Near Tribal Lands Nationwide and by Region

Chemical	Facilities	Release Quantity (lbs)			
		Air	Land	Water	Offsite
Nickel	5	1,315	500	2	211,118
Nickel compounds	2	290	40	.	27,460
Nitric acid	3	2,312	.	.	2,249
Phenol	1	1,252	.	280	9,000
Phosphoric acid	1	500	.	.	27,199
Propylene (Propene)	4	148,901	.	.	.
Propylene oxide	1	9,454	.	.	.
SO2	15	155,306,000	.	.	.
Silver compounds	1	250	.	.	14,900
Styrene	3	72,405	.	.	1,609
Sulfuric acid	7	41,086	.	.	1,860,128
Tetrachloroethylene (Perchloroethylene)	2	5,349	.	.	16,627
Toluene	11	1,322,610	754	67	26,957
VOC	24	22,390,000	.	.	.
Xylene (mixed isomers)	7	81,425	16	59	19,501
Zinc (fume or dust)	2	1,938	.	.	.

Region - 7

CO	2	3,110,000	.	.	.
NO2	2	97,194,000	.	.	.
Nitric acid	1	.	.	.	16,508
Phosphoric acid	1	11,000	.	.	183,582
SO2	2	63,264,000	.	.	.
VOC	2	672,000	.	.	.

Region - 8

1,1,1-Trichloroethane	2	35,205	.	.	19,102
1,2,4 Trimethylbenzene	1	4,570	.	.	121
Acetone	1	15,000	.	.	820
Ammonia	1	3,192	.	.	67,000
Benzene	1	5,900	.	.	711
CO	18	2,120,000	.	.	.
Cresol (mixed isomers)	1	1,400	.	.	.
Cumene	1	800	.	.	2
Cyclohexane	1	6,600	.	.	3,497
Ethylbenzene	1	1,670	.	.	1
Ethylene	1	4,700	.	.	.
Freon 113	1	18,489	.	.	1,380
Methanol	1	13,650	.	.	.
Methyl ethyl ketone	1	215,155	.	.	3,000
Methyl tert-butyl ether	1	3,290	.	.	.
NO2	20	29,726,000	.	.	.
Naphthalene	1	1,444	.	.	.
Phosphoric acid	1	.	.	.	2,600
Propylene (Propene)	1	2,700	.	.	.
SO2	8	7,464,000	.	.	.

Table 5
Chemicals Released On or Near Tribal Lands Nationwide and by Region

Chemical	Facilities	Release Quantity (lbs)			
		Air	Land	Water	Offsite
Styrene	1	6,000	.	.	.
Sulfuric acid	1	6,263	.	.	.
Toluene	1	11,600	.	.	1,053
VOC	22	10,124,000	.	.	.
Xylene (mixed isomers)	2	14,282	.	.	9,925

Region - 9

1,1,1-Trichloroethane	13	386,915	.	.	226,426
1,2,4 Trimethylbenzene	1	61	94	.	1,062
2-Ethoxyethanol	1	1,370	.	.	11,500
Acetone	10	197,624	.	.	85,650
Ammonia	5	15,212	.	.	16,072
Barium compounds	2	3,050	.	250	.
Benzene	2	17,213	20	.	221
Beryllium compounds	1	.	.	.	8,720
Bis(2-ethylhexyl)adipate	1	3,600	.	.	.
Bromomethane (Methyl Bromide)	1	13,000	.	.	.
CFC-11	1	25,739	.	.	.
CO	12	8,692,000	.	.	.
Cadmium compounds	1	5	.	.	.
Carbon disulfide	1	1,257	.	.	.
Chlorine	2	55	.	.	20
Chromium	2	755	.	.	84,800
Chromium compounds	4	571	.	.	30,784
Cobalt	3	1,005	.	.	.
Copper	7	1,431	.	.	988,182
Copper compounds	6	1,658	9,700	.	9,754,292
Cyanide compounds	1	25	.	.	137
Dibutyl phthalate	1	.	.	.	5
Dichloromethane	3	78,314	.	.	25,473
Ethyl chloroformate	1	931	.	.	.
Ethylene glycol	2	260	.	.	42,980
Freon 113	6	192,380	.	.	25,387
Glycol Ethers	4	12,750	.	.	148,318
Hydrochloric acid	9	17,436	1,100	.	6,510
Hydrogen fluoride	3	2,155	.	.	450
Isopropyl alcohol	2	2,835	330	.	1,630
Lead	1	500	.	.	3,663
Lead compounds	2	5	.	.	59,548
Manganese	2	1,000	99,000	.	9,216
Methanol	2	21,672	.	.	1,770
Methyl ethyl ketone	7	101,051	.	.	80,367
Methylenebis(phenylisocyanate)	1	99	.	.	.
N982	4	455	4,600	.	179,151
NO2	13	152,372,000	.	.	.
Naphthalene	2	3,000	.	.	.

Table 5
Chemicals Released On or Near Tribal Lands Nationwide and by Region

Chemical	Facilities	Release Quantity (lbs)			
		Air	Land	Water	Offsite
Nickel	4	455	.	.	56,503
Nickel compounds	1	5	.	.	17,289
Nitric acid	4	5,630	.	.	10,000
Phenol	2	6,300	.	.	750
Phosphoric acid	4	340	.	.	.
SO2	9	151,852,000	.	.	.
Styrene	5	58,925	.	.	250
Sulfuric acid	13	7,533	89,000	.	71,501
Toluene	7	56,600	.	.	9,629
Trichloroethylene	1	120,000	.	.	20,000
VOC	13	3,628,000	.	.	.
Xylene (mixed isomers)	8	91,149	44	.	176,706
n-Butyl alcohol	1	20	.	.	.

Region - 10

1,1,1-Trichloroethane	5	235,661	33	.	195,232
1,2,4 Trimethylbenzene	3	15,535	260	261	550
1,3-Butadiene	3	33,599	.	.	.
2-Ethoxyethanol	1	21,100	.	.	2,246
Acetone	13	506,503	250	13,595	75,638
Ammonia	10	518,641	2,073	142,313	.
Anthracene	1	34	.	11	.
Antimony compounds	1	220	25	7,040	7,930
Arsenic	1	.	.	34	210
Arsenic compounds	1	.	.	.	250
Asbestos (friable)	1	1	.	.	.
Benzene	4	56,341	260	261	322
CFC-12	1	28,000	.	.	.
CO	21	126,060,000	.	.	.
Cadmium compounds	1	7,772	3,596	.	5
Catechol	2	.	.	12,924	.
Chlorine	10	55,629	.	12,905	.
Chlorine dioxide	2	56,196	.	.	.
Chloroform	2	178,657	5	9,694	.
Chromium	3	505	.	13	4,865
Chromium compounds	4	2,512	12,944	73	96,732
Copper	3	15	.	261	449,178
Copper compounds	1	.	.	.	250
Creosote	2	659	.	.	564
Cresol (mixed isomers)	1	89	.	11	.
Cumene	1	2,886	.	11	.
Cyclohexane	3	21,736	330	261	630
Diethanolamine	1	1,573	.	.	.
Ethylbenzene	4	29,890	250	261	5,890
Ethylene	3	29,460	.	.	.
Ethylene glycol	2	8,935	2,068	.	12,151

Table 5
Chemicals Released On or Near Tribal Lands Nationwide and by Region

Chemical	Facilities	Release Quantity (lbs)			
		Air	Land	Water	Offsite
Formaldehyde	1	767	.	.	327
Freon 113	1	12,700	.	.	295
Glycol Ethers	3	43,041	.	.	11,797
Hydrochloric acid	8	49,384	.	102	30,836
Hydrogen fluoride	4	141,114	.	.	10,600
Lead compounds	3	.	471	282	130
Manganese	2	15	.	43,005	255
Manganese compounds	2	452	.	1,982	.
Methanol	5	1,256,032	2,400	.	3,692
Methyl ethyl ketone	6	243,145	5	1,200	152,881
Methyl isobutyl ketone	1	11,700	.	.	12,100
Methylenebis(phenylisocyanate)	1	780	.	.	3,119
Molybdenum trioxide	2	10	250	255	81,490
N982	1	1,194	48,170	.	.
NO2	25	23,284,000	.	.	.
Naphthalene	3	13,909	250	261	10,523
Nickel	1	500	.	5	250
Nickel compounds	2	1,245	5	.	3,050
Nitric acid	1	.	.	.	191,200
Pentachlorophenol	2	7	.	2	644
Phenol	3	3,709	5	784	143
Phosphonic acid	2	33,846	10,000	.	36,200
Phosphorus (yellow or white)	1	.	319,828	.	.
Propylene (Propene)	3	211,050	.	.	.
SO2	19	79,420,000	.	.	.
Styrene	5	77,671	.	.	5
Sulfuric acid	4	148,776	.	27	63,039,993
Toluene	9	212,696	290	261	88,356
VOC	20	19,912,000	.	.	.
Xylene (mixed isomers)	8	265,216	310	261	42,407
Zinc (fume or dust)	1	250	1,100	12,000	.
n-Butyl alcohol	1	8,735	.	.	.

APPENDIX E

Public Access to the TRI Database

Public Access to The Toxics Release Inventory

EPA believes that increased citizens and community awareness of environmental issues and their involvement in the decision-making process is important to developing successful environmental programs. In addition, the Agency recognizes that effective pollution control and prevention depends on state and local government, industry, and the public, as well as the Federal government. EPA is fully committed to carrying out the Emergency Planning and Community Right-to-Know Act (EPCRA), which mandates that the Toxics Release Inventory (TRI) be made available to the public through telecommunications and other means. The Agency is providing many avenues of access and technical assistance to meet the needs of the varied TRI users to enable them to obtain and use the data collected by EPA.

As an integral part of EPA's efforts, the Agency has implemented an outreach program which identifies intermediary groups, such as librarians, journalists, trade associations, national public interest and environmental groups, and States, to assist in making the various constituencies aware of the availability and potential uses of the TRI. Developing the appropriate mix of products, activities, and routes of access for a variety of interested users is crucial to meeting EPA's goals for public access to TRI data.

A chart of TRI and TRI related products and activities, and their routes of access is shown below.

Product/Activity	Route of Access
Public Database for Toxics Release Inventory (online access) and training and materials	National Library of Medicine 301-496-6531
Magnetic Tapes of the TRI Database, including 1990 data	National Technical Information Service
State Diskette in dBASE or LOTUS format for all reporting years (1990 data available in June 1992); a MacIntosh version is available for 1989 and will be available for all subsequent years	NTIS or GPO
Compact Disk — Real Only Memory (CD-ROM) version 1987-1989; (1987-1990 available July 1992)	NTIS, GPO, Depository Libraries, EPA Regions and some States
The TRI National Report (covering 1987-1989 data)	EPCRA Information Hotline 800-535-0202
"Chemicals in Your Community; A Guide to the Emergency Planning and Community Right-to-Know Act"	EPCRA Information Hotline

Product/Activity	Route of Access
Public Database for Integrated Risk Information System (IRIS) — online access and training and materials for obtaining information on TRI chemicals	National Library of Medicine TOXNET System 301-496-6531
Roadmap Database to provide assistance to TRI users for identifying regulations and risk assessments on TRI chemicals	EPCRA Information Hotline
"Risk Screening Guide" — methodology for evaluating TRI data for environmental managers	EPCRA Information Hotline
TRI User Support Service Search Assistance NLM/TOXNET online search training	TRI US 202-260-1531
"Chemicals, the Press and the Public" — A Journalist's Guide to Reporting on Chemicals and the Community	Environmental Health Center National Safety Council 1050 17th St., N.W., Suite 770 Washington, DC 20036