

Enforcement and Compliance

Regulated Facilities in the U.S. Side of the Border Region Figure 18		Type of indicator State
		Goal and Objective: 6.2
Description of the INDICATOR		
<i>Definition</i>	Graphical representation of the number of regulated U.S. facilities within 100 km of the U.S.-Mexico Border by permit number and type	
<i>Importance of the indicator/purpose</i>	<p>The geographical representation serves as a base for determining the pollution sources that present the highest risks to human health and the environment.</p> <p>Environmental laws exist on both sides of the border to regulate issues such as chemical production, pollutant discharge to air and surface waters, and the generation, transportation, storage, and treatment of hazardous wastes. These environmental regulations are complex, but have a simple aim of protecting human health and the environment. On both sides of the border these laws and their implementing regulations are enforced by federal governments with many authorities delegated to States and in some cases municipalities.</p>	
<i>Concepts and definitions</i>	<u>Regulated facility</u> – Facility that is regulated by one or more permits	
<i>Units of measure</i>	Number of regulated facilities by state and by total number of permits/type	
<i>Coverage</i>	November 2005. Portions of the U.S. side of the border region	
<i>Calculation</i>	<p>Extract the facilities linked with a permit by Facility Registry System (FRS) identification number from EPA's Integrated Data for Enforcement Analysis (IDEA) System. Then determine which facilities fall within the 100 kilometers of the U.S.-Mexico border, based on latitude and longitude, city, state, county and/or ZIP code. Count the number of facilities in the border region in each state and calculate a percentage of the total number by state. Percentages are reported in the text.</p> <p>Regulated facilities identified in Arizona, California, New Mexico and Texas border regions are listed in Tables 20-1, 20-2, 20-3, and 20-4, respectively. Regulated facilities included in the total number reported in the text of the report, but for which location information were not provided in the tables (blank) are listed in Table 20-4. A total of facilities by state are listed in Table 20-5.</p> <p>Plot the location of facilities geographically on a map with different symbols for number of permits.</p>	
<i>Source(s) of information</i>	The data were originally submitted to the States and/or EPA in permit applications or generator notices and were extracted for the border area based on a search of EPA's Integrated Data for Enforcement Analysis (IDEA) System including EPA's Air Facility System (AFS); Permit Compliance System (PCS); and Resource Conservation and Recovery Act Information System (RCRAInfo). November 2005 Refresh.	
<i>References (Additional information)</i>	http://www.epa.gov/compliance/data/systems/index.html	
<i>Limitations of the indicator</i>	<p>Approximately 2,900 facilities (often inactive and/or "minors") from the search of the IDEA system were found without substantial information to determine exact location. Due to the poor quality of data these data were excluded from the analysis.</p> <p>Facility identification depends on reported latitude and longitude, city, state, county and/or ZIP code. Issues have been known to exist with the quality of data within these fields (such as: fields not always populated; containing contradicting data; containing spelling errors; or information presented in non consistent formats (St. Thomas versus Saint Thomas). Additional assignment of location information could have been conducted based on city, but was excluded from the analysis due to the high level of effort involved.</p>	

Number of Enforcement Actions in the U.S. Side of the Border Region Figure 19		Type of indicator Response
		Goal and Objective: 6.3
Description of the INDICATOR		
<i>Definition</i>	Number of enforcement actions in U.S.-Mexico border region by U.S. border state by year from 2001 to 2004	
<i>Importance of the indicator/purpose</i>	When a facility violates environmental law, the regulating agency may impose actions to enforce compliance and may also impose monetary penalties and/or criminal sanctions. Enforcement actions cannot be imposed unless a violation has occurred and has been detected by the regulatory agency. There is, however, not always a clear connection between a facility polluting the environment and compliance with the law as facilities may legally pollute under the conditions of a permit and violations may not always result in releases.	
<i>Units of measure</i>	Number of enforcement actions	
<i>Concepts and definitions</i>	<u>Formal enforcement actions</u> (U.S.) - may be administrative, civil judicial or criminal actions.	
<i>Coverage</i>	2001 to 2004	
<i>Calculation</i>	Take the number of enforcement actions reported for facilities within the U.S. side of the border region reported by state and plot for each year. Also report total number across all states for each year.	
<i>Sources of information</i>	The data were submitted to EPA by state and federal enforcement programs as part of their routine reporting. They were extracted for the border region based on a search of EPA's Integrated Data for Enforcement Analysis (IDEA) System including EPA's Air Facility System (AFS); Permit Compliance System (PCS); Resource Conservation and Recovery Act Information System (RCRAInfo). November 2005 Refresh. The search results reported by Abt Associates are summarized in Table 21-1.	
<i>References (Additional information)</i>	http://www.epa.gov/compliance/data/systems/index.html	
<i>Limitations of the indicator</i>	The number provided for enforcement actions does not include criminal enforcement actions.	

Inspection Results for Facilities in the Mexican Side of the Border Region Figure 20		Type of indicator Response
		Goal and Objective: 6.3
Description of the INDICATOR		
<i>Definition</i>	The cumulative result of inspections for facilities in the Mexican Side of the Border Region from 2001 to 2004. Classified as in compliance, non-serious violation or serious violations.	
<i>Importance of the indicator/purpose</i>	Increasing compliance along the border region is a priority of the program.	
<i>Concepts and definitions</i>		
<i>Units of measure</i>	Number of different types of compliance (in compliance, non-serious violations and serious violations)	
<i>Coverage</i>	2001 -2004. Mexican side of the border region by state	
<i>Calculation</i>	Take the number of three different types of compliance actions listed (in compliance, non-serious violations and serious violations) and plot by Mexican state and year.	
<i>Source(s) of information</i>	The data were reported by PROFEPA as listed in Table 22-1. PROFEPA, Secretaria de Medio Ambiente, Recursos Naturales y Pesca. Subprocuraduria de Auditoria Ambiental.	
<i>References (Additional information)</i>	--	
<i>Limitations of the indicator</i>	--	

Pollution Reduction from Federal Enforcement Actions in the U.S. Side of the Border Region		Type of indicator
Figure 21		Response
		Goal and Objective: 6.3
Description of the INDICATOR		
<i>Definition</i>	Amount of pollution reduction from federal enforcement actions in the U.S. side of the border region by year for 2003 to 2005	
<i>Importance of the indicator/purpose</i>	In order to protect human health and the environment and to enforce environmental laws, regulatory agencies may enforce actions that result in pollution reduction activities by regulated facilities.	
<i>Units of measure</i>	Millions of pounds per year	
<i>Concepts and definitions</i>	<u>Pollution Reduction</u> - function of the number and type of enforcement actions.	
<i>Coverage</i>	2003 -2005. U.S. side of the border region. Federal level.	
<i>Calculation</i>	Compare enforcement actions in the border states that show amounts of Pollution Reductions to the facilities determined to be in the border region. Summarize the reported pounds of pollution reduced in the border region for each state and plot by year. Also, total the amount across all states and report the total on the graph by year.	
<i>Sources of information</i>	The data were reported to EPA's Office of Enforcement and Compliance Assurance's Integrated Compliance Information System (ICIS) by EPA's Regional Offices as part of their annual reporting	
<i>References (additional information)</i>		
<i>Limitations of the indicator</i>	Pollution reduction amounts are from Federal actions only.	

Number of State and Federal Inspections of Facilities in the Border Region Figure 22		Type of indicator Response
		Goal and Objective: 6.3
Description of the INDICATOR		
<i>Definition</i>	Number of state and federal inspections of facilities in the U.S.-Mexico border region by state and year from 2001 to 2004.	
<i>Importance of the indicator/purpose</i>	Regulatory agencies may conduct inspections to verify a facility's compliance status, while companies may also conduct their own audits to ensure environmental compliance and to improve pollution prevention. Border 2012 aims to continue increasing the number of facilities implementing voluntary compliance or self-audits.	
<i>Units of measure</i>	Number per year	
<i>Concepts and definitions</i>		
<i>Coverage</i>	Yearly from 2001 to 2004 for U.S. data Cumulative from 2002 to 2004 for Mexican data	
<i>Calculation</i>	Take the reported number of inspections by state and plot in tabular form by state and by year.	
<i>Sources of information</i>	The data were submitted to EPA by state and federal enforcement programs as part of their routine reporting. They were extracted for the border region based on a search of EPA's Integrated Data for Enforcement Analysis (IDEA) System including EPA's Air Facility System (AFS); Permit Compliance System (PCS); Resource Conservation and Recovery Act Information System (RCRAInfo). November 2005 Refresh. The search results reported by Abt Associates are summarized in Table 21-1. The Mexican data were reported by PROFEPA in May 2005.	
<i>References (additional information)</i>	http://www.epa.gov/compliance/data/systems/index.html	
<i>Limitations of the indicator</i>	Due to the different regulatory policies and legal systems between the U.S. and Mexican governments, the information on enforcement actions, compliance, pollution reduction, inspections, and penalties as presented cannot be directly compared.	

Penalties in Number and Dollar Value in the U.S. Side of the Border Region		Type of indicator
Figure 23		Response
		Goal and Objective: 6.3
Description of the INDICATOR		
<i>Definition</i>	Number of penalties and total U.S. dollar amounts by year for all U.S. side of the border region, 2001-2004.	
<i>Importance of the indicator/purpose</i>		
<i>Units of measure</i>	Number of penalties and total dollar amount of penalties.	
<i>Concepts and definitions</i>	Penalties - Monetary assessments paid by a regulated entity in response to a violation or noncompliance. Not all enforcement actions require a penalty and may require other remedies. Penalties act as deterrence to violating the law, and an incentive for staying in compliance with the environmental statutes and regulations. Penalties are designed to recover the economic benefit of noncompliance as well as to account for the seriousness of the violation.	
<i>Coverage</i>	2001 to 2004. U.S. side of the border region.	
<i>Calculation</i>	Take the reported pounds of pollution reduced for each state and plot by year. Also total the amount across all states and report the total on the graph by year.	
<i>Sources of information</i>	The data were submitted to EPA by state and federal enforcement programs as part of their routine reporting. They were extracted for the border region based on a search of EPA's Integrated Data for Enforcement Analysis (IDEA) System including EPA's Air Facility System (AFS); Permit Compliance System (PCS); Resource Conservation and Recovery Act Information System (RCRAInfo). November 2005 Refresh. The search results reported by Abt Associates are summarized in Table 21-1.	
<i>References (additional information)</i>	The data were submitted to EPA by state and federal enforcement programs as part of their routine reporting. They were extracted for the border region based on a search of EPA's Integrated Data for Enforcement Analysis (IDEA) System including EPA's Air Facility System (AFS); Permit Compliance System (PCS); Resource Conservation and Recovery Act Information System (RCRAInfo). November 2005 Refresh. The search results reported by Abt Associates are summarized in Table 21-1.	
<i>Limitations of the indicator</i>		