

NAFTA's Broken Promises: The Border Betrayed

U.S.-Mexico Border Environment and
Health Decline in NAFTA's First Two Years

January 1996



Public Citizen's Global Trade Watch

in cooperation with

Red Mexicana de Acción frente al Libre Comercio (RMALC)

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Ralph Nader, Founder

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Introduction

As the massive effort to gain U.S. Congressional approval of the North American Free Trade Agreement (NAFTA) came to a head in November of 1993, the Clinton Administration released its comprehensive "NAFTA Report on Environmental Issues". In this 152 page document, the Clinton Administration recognized that "there are serious environmental problems in North America, particularly along the U.S. Mexican border, that must be addressed in the context of expanded trade." The Administration's Report identified the issue at the core of a heated controversy on NAFTA and the environment: *"The question that Congress now faces, and this Report attempts to answer, is whether passage of the NAFTA will exacerbate our environmental problems or give us effective mechanisms to ameliorate them."*¹

Two years later, in the fall of 1995, Washington DC-based Public Citizen, in coordination with the Mexico-City-based Red Mexicana de Accion Frente al Libre Comercio (RMALC) examined this very question. But rather than using a variety of economic models and predictions as the Clinton Administration did in its 1993 report, Public Citizen and RMALC gathered nearly two years of real life evidence of environmental and health conditions along the U.S.-Mexico border.

Methodology

In undertaking this task, Public Citizen conducted interviews with more than one hundred different sources on how NAFTA was affecting the public health and the environment of the U.S.-Mexico border area. Interviews were conducted with scores of academics, activists, medical doctors, representatives from NAFTA's parallel environmental institutions, CEC, BECC and NADBank, journalists and with government officials ranging from U.S. State attorneys general to Mexican embassy officials, from EPA section heads to a local fire chief. Hundreds of articles, from legal, business and medical journals, trade publications, newsletters, magazines, and newspapers were scrutinized for relevant information. Electronic information sources, including internet distribution lists, world wide web sites, news groups and "gopher sites," were also examined for information on NAFTA and the environment. Public documents of all kinds were scrutinized. Drafts of sections of this report were reviewed by the relevant authorities, experts and activists most involved and affected. In short, Public Citizen, with the generous assistance of countless individuals and organizations, gathered as much evidence about the effect of two years of NAFTA on environment and public health along the U.S. Mexico border as possible.

Background

During the debate over the North American Free Trade Agreement in 1993, U.S. political and corporate proponents made numerous promises in an attempt to pass the trade agreement through the U.S. Congress.

The promises were impressive in their number and scope. If Congress would pass NAFTA, there would be

an increase in jobs, wages would rise, the environment—particularly the area along the U.S.-Mexico border—would improve, relations between the peoples of North America would be enhanced, illegal drug trafficking between NAFTA nations would be reduced, enforcement of each nation's labor and environmental laws would be strengthened, illegal immigration would decrease, and the list went on.

The promises on the environment were particularly compelling. With NAFTA opponents, proponents and the news media eager to personalize and emotionalize the NAFTA debate, the health and living conditions along the U.S.-Mexico border became a highly emotional and visible aspect of the debate. The border area was a powerful symbol because a small free trade zone already existed there lined with U.S.-owned manufacturing plants known as "maquiladoras." As a result of large scale poverty, concentrated industrial development, pollution and overpopulation, the border area had turned into "a virtual cesspool and breeding ground for infectious disease," according to the American Medical Association.

The controversy of what NAFTA would mean for the environment was underscored by a division in the U.S. environmental movement. Citing their satisfaction with NAFTA and its side agreements, five major U.S. environmental organizations endorsed NAFTA: the National Wildlife Federation, the World Wildlife Fund, the Environmental Defense Fund, the Natural Resources Defense Council and the National Audubon Society. Most local and national environmental organizations, including the Sierra Club, Friends of the Earth, Greenpeace, the Humane Society of the United States, the American Society for the Prevention of Cruelty to Animals, Clean Water Action, Rainforest Action, Environmental Action and hundreds of others opposed NAFTA as a threat to the North American environment.

NAFTA proponents argued that NAFTA would solve the health and environmental problems occurring in the border free trade zone, and that without NAFTA these problems would get worse. If NAFTA were implemented, they argued, the concentration of industries in the border, and thus industrial pollution and human population would lessen, reducing the strain on the environment and the massively overburdened border infrastructure.

As well, they argued, NAFTA would increase the prosperity of Mexico, raise its standard of living and result in an increase in spending on environmental clean up. Finally, proponents argued that the new environmental institutions that were to be created parallel to NAFTA would provide the funding and oversight to organize large scale environmental clean up and improvements to the infrastructure, as well as ensuring strong environmental law enforcement.

"There's going to be a near-term resolution of some incredibly difficult environmental degradation problems," said Jay Hair, president of the National Wildlife Federation. "And there's going to be a long-term ben-

efit of NAFTA, by ripening the very investment process, that environmental impacts will be increasingly be considered."²

Because of the international attention brought to the acute problems of public health and the environment along the border area, NAFTA advocates predicted that at a minimum, both the U.S. and Mexican governments would place top priority on making the necessary investment to remedy high profile problems, if only in the name of good public relations for NAFTA.

For NAFTA opponents, the environmentally-devastated, impoverished border zone was an example of what free trade arrangements like NAFTA would mean for public health, the environment, and the living conditions of workers. They argued that the border area's problems would not be improved by NAFTA, but would intensify along the border and spread to the rest of Mexico. By promoting and making secure investment in Mexico, absent enforceable environmental and labor standards, NAFTA would exert a downward pull on environmental and health standards throughout North America, opponents argued. Increased trade under NAFTA, they argued, would not necessarily lead to increased prosperity for NAFTA nations and would be more likely to lead to a "race for the bottom" in wages and living standards.

In the fall of 1993, the environmental controversy became part of one of the fiercest, largest and most intense lobbying and public relations campaigns the U.S. Congress had ever seen. The American public, Congress and the media were overwhelmed by a never-ending barrage of studies, economic models, radio, television and print advertisements, demonstrations, factsheets, bumbersuckers, Congressional testimony, town hall meetings and debates. Congressional offices were inundated with constituent telephone calls, letter, telegrams and faxes.

Though each side had experts predicting what would happen if Congress passed NAFTA, no one could possibly be certain exactly what would happen. NAFTA was unprecedented. Never before had an economy of the size and development level of the United States entered into an agreement that rapidly cut controls on investment and increased investment protections with a country on its border with dramatically different standard of living and regulatory and political structures. The proposed NAFTA was, in effect, an experiment, the first of its kind.

Despite the backing of political leaders, including the President, the Speaker of the House, the Senate majority leader, the minority House and Senate leaders, governors of 41 states and five former U.S. presidents; most of corporate America, including the U.S. Chamber of Commerce, the National Association of Manufacturers and a coalition of businesses called USA*NAFTA; and the editorial boards of almost every major U.S. newspaper, Congress passed NAFTA by a narrow margin. NAFTA's ultimate passage followed a flurry of Presidential pork barrel deal-making to gain Congressional votes. The special deals involved everything from bridges to military planes, from local university funding to special government studies.

Now that NAFTA has been in effect for two years, it is possible to move beyond the rhetoric, models and predictions and to begin to study the real life effects of this "experiment" on the people and environment of North American.

After two years of NAFTA in effect, it is too early to measure whether all of NAFTA's proponents' positive promises have come to fruition. However, it is more than reasonable at this time to make two measurements.

□ First, is NAFTA passing a "do no further harm" test in its impact on U.S.-Mexico border environmental and health conditions?

□ Second, does two years of real life NAFTA data show that the agreement is on target to satisfy its proponents' promises in the future?

¹ The NAFTA Report on Environmental Issues, Clinton Administration, November, 1993, p. 4.

² "Interview: A Resounding 'Yes' from the NWF", Greenwire, September 21, 1993.

Executive Summary

Section I: Monitoring Border Environmental and Health Conditions Two Years After NAFTA

Chapter 1: The Maquiladora Border Industrial Zone

NAFTA, the Concentration of Border Industry, and Pollution

Promise

With NAFTA, "[M]aquiladora development will tend to be dispersed away from the border area to other parts of Mexico, thus reducing its impact on the border area.... If NAFTA is not implemented, incentives will continue under the maquiladoras to locate facilities in the border areas, thus exacerbating environmental pressures on the border, such as loss of habitat, adverse impacts to endangered and threatened species, and reductions in groundwater levels."

— Clinton Administration, November 1993.

"...Many of those facilities that are close to the border that are described are ones that would be eliminated under NAFTA. So for those who are trying to say that we will see more facilities such as those on the border, I say it is 180 degrees the other way. Those are the facilities that will be eliminated."

— Calman Cohen, Emergency Committee
for American Trade, a pro-NAFTA lobbying group
comprised of large U.S. corporations, 1993.

NAFTA Reality

"Everybody I'd talked to had predicted that with NAFTA, the maquiladora industry would disappear," said Miguel A. Conchas, the president of the Laredo Chamber of Commerce. "But now it turns out in the second year of NAFTA, with the peso devaluation, they're going strong."

Maquila workforce grows 20% after NAFTA

Instead of shrinking, two years after NAFTA there are now 20% more Mexican maquiladora employees than before NAFTA went into effect, from 546,588 in December 1993 to 689,420 in October 1995. Maquiladora growth has increased despite an economic crisis in Mexico that has left the unofficial unemployment rate at a staggering 25%, with government reports of over 1.6 million people losing jobs since January 1995.

NAFTA supporters also promised NAFTA would cause a decline in concentration of maquiladoras in the border area. Yet, as of the summer of 1995, more than 85% of the maquiladora workers were employed in one of the

six Mexico-U.S. border states: Chihuahua, Baja California Norte, Sonora, Coahuila, Norte Leon and Tamaulipas. In the fall of 1995, Ensenada, Tecate and especially Tijuana and Mexicali, all located in Baja California Norte, had a company arriving or expanding at a rate of more than one a week. "This is the fastest growth in the country," according to Carlos Fernandez Ruiz, Secretary of Economic Development for Baja California Norte speaking about the maquila explosion in his state.

The pro-NAFTA promises of a decrease in industrial concentration along the border are worth noting. First, they promised improvements in border health and the environment would require that NAFTA disperse maquila development. Second, these promises specifically reveal the Clinton Administration's conclusion that an increase in industrial concentration would have a devastating impact on public health and the environment along the border.

Far from showing signs of disappearing, the maquiladora industry is growing rapidly and transforming from assembly plants to full-line manufacturing facilities. "The maquiladora program will not be affected by NAFTA and will continue to operate under the flexibility provided by the agreement," according to Maria Telles-McGeagh, Director of the Border Research Institute of New Mexico State University in Las Cruces. "Forget the name maquiladora," said Fernandez Carlos Fernandez Ruiz, secretary of economic development for Baja California Norte. "It will become national industrial exportation."

Resources Available for Environmental Efforts

Promise

NAFTA would benefit the Mexican economy and that would translate into more money available to spend on environmental cleanup and regulation.

NAFTA Reality

Mexico's economic collapse—prompted by a more than a 50% devaluation of the peso since NAFTA's passage—has significantly undermined the ability of federal, state and local governments to fund environmental cleanup and regulation of industries. Thus, while there has been notable new private investment in Mexican maquiladoras, there has been no significant investment in the infrastructure in the communities where the maquiladoras operate. At the same time, the U.S. Congress has cut funding for some border programs.

Astronomical interest rates in Mexico have seriously undermined the ability of state and local governments to fund environmental cleanup projects or improve the public infrastructure. Mexican Foreign Secretary Jose Angel Gurria says Mexico has put on hold participation in border environmental projects because the economic crisis has led to a nearly 10 percent cut in the federal budget. Because Mexico imports most of the equipment necessary for hazardous waste disposal, sewage treatment and other environmental cleanup, the collapse in the value of the peso has made this equipment more than 50% more expensive.

Chapter 2

Border Hazardous Waste Two Years After NAFTA

The Amount of Hazardous Waste

Promise

"In the absence of NAFTA, the amount of hazardous waste from Mexico requiring management in the United States could increase, as a result of two factors. First, the continuation of the maquiladora program is likely to result in increasing industrial activity in the border area, with associated growth in generation of hazardous waste. In contrast, implementation of the NAFTA could significantly reduce the incentives to locate in this region."

— Clinton Administration, November 1993.

NAFTA Reality

The damage to the environment and public health caused by illegal dumping of hazardous waste along the U.S.-Mexico border has increased under two years of NAFTA. The increase in border industrial activity has led to an increase in the creation of hazardous waste, with data showing an increase in hazardous waste production since January 1994. Much waste still simply is washed down the drain. The newspaper *Diario de Juarez* reported in 1995 that in Ciudad Juarez, only 70 of the 352 industries generating hazardous wastes reported proper disposal. According to a 1995 report, one quarter of the hazardous waste from the maquiladora zone, approximately 44 tons daily, has an unknown end.

"Each year, seven million tons of toxic waste are, without control, illegally dumped in drains and marine waters. Only one percent are under surveillance in the country," Oscar Canton Cetina, Chair of the Mexican Ecology Commission said in mid-1995. A spokesman for the Mexican National Council of Environmental Industrial Businessmen noted in an August 1995 *Excelsior* interview: "the inspection of the maquiladora industry is virtually non-existent... which is a great environmental problem for Mexico."

If the exacerbation of pre-NAFTA conditions were not sufficiently damaging, a "low-level" nuclear waste dump

is under construction on the border in Sierra Blanca, Texas, across from the Mexican state of Chihuahua. Texas seems intent on turning this poor, isolated and largely Hispanic community into the nuclear dumping ground for the state. Texas utility officials are aiming for congressional approval so that the dump, scheduled to open in 1997, will also be allowed to receive nuclear waste from other states. Mexican officials and residents on both sides of the border oppose the dump: the site is one of the most earthquake-prone in the border, is 16 miles from the Rio Grande River, and is close to water drainage systems and above an aquifer used by five counties for drinking water. Every other existing "low-level" radioactive waste dump has leaked. Sierra Blanca is already a dumping ground for New York City sewage sludge, receiving 225 tons daily. Using New York state data on the sludge's composition, local activists have calculated that this means 3,357 pounds of arsenic, 3,021 pounds of cadmium, 260,503 pounds of copper, and 85,089 pounds of lead are being deposited on the site annually.

The case of the Alco Pacifico lead and arsenic mountain contaminating a Tijuana residential area, including a dairy, was one of the high-profile examples of border toxics brought to North America's attention by NAFTA media coverage. Remarkably, two years after NAFTA, remediation has not started at even this highlighted toxic site despite funds available for clean up from a 1994 settlement of a multimillion dollar suit against responsible parties.

Resources to Track and Clean Up Hazardous Waste

Promise

"Without NAFTA and its associated Border Environmental Cooperation Agreement, Mexico may have fewer funds to invest in waste management infrastructure."

— Clinton Administration, November 1993.

NAFTA Reality

Resources for hazardous waste management have not improved since NAFTA. The amount of unrecorded hazardous waste has increased, as have incentives for illegal dumping. The maquilas are producing more and, by producing more, they are generating more waste. Since the cost of disposal is the main reason for illegal dumping, the leading maquila business journal, *Twin Plant News*, reports that Mexico's depressed economy has created even greater incentives for illegal waste dumping by industry. As well, post NAFTA, with the Mexican depression and public spending slashed, government regulators have fewer resources to track and clean up illegally dumped hazardous waste. Because Mexico imports the majority of the equipment used to dispose of and transport hazardous waste, the major peso devaluation increased prices at a time when companies are tightening their belts.

HAZTRAKS, a binational, "high-tech" hazardous waste tracking program was highly touted during the NAFTA campaign as an "essential tool for monitoring compliance with hazardous waste shipments laws on both sides of the border" by EPA Head Carol Browner. The program has been able to gather information about the extent of hazardous dumping, for instance that only 20 of the 101 maquiladoras in Mexicali have ever filed a proper waste-return manifest. However, HAZTRAKS, which is based on computer tracking of hazardous waste, has been seriously undermined by a lack of computers in Mexico, and a very cumbersome enforcement process. It takes six months or more after a violation has occurred to identify illegal dumpers, and the HAZTRAKS program does not include authority or funding to clean up illegally dumped hazardous waste.

Since NAFTA, the volume of hazardous materials transported across the U.S.-Mexico border has increased and regulation of such toxic transports remains grossly inadequate. According to the Texas Attorney General, more than a fourth of the roughly 5,000 Mexican trucks that cross into Texas each day carry corrosives, chemicals, explosives, jet fuel, poisons, toxic waste and pesticides. Starting December 18, 1995, NAFTA was to permit U.S. and Mexican trucks to operate freely in all border states. (Before NAFTA, international truck traffic was limited to a small area along the border.) The environmental and health risks of the open border trucking provision of NAFTA is at the core of an on-going battle to delay implementation of this NAFTA provision. Many trucks carrying such hazardous materials are oversized, undermaintained and uninsured, according to Texas state data. Compliance with proper hazardous material documentation rules of the U.S. Department of Transportation was only two percent at Laredo, the busiest U.S.-Mexico border crossing in the fall of 1995.

Chapter 3

Border Birth Defect Clusters Powerful NAFTA Symbol

Promise

"I've seen the babies born with birth defects. The NAFTA package gives us the ability to assure that [those problems] will be addressed."¹⁶⁵

—Lloyd Bentsen,
then Treasury Secretary, November 1993

Reality

The incidence of neural tube birth defects has not improved since NAFTA took effect in 1994, and may actually be increasing. Cameron County, the location of the pre-NAFTA anencephaly cluster, reported 15 cases in 1994, up 36 percent from 1993, when 11 cases were reported. In early 1995, a new post-NAFTA anencephaly cluster was

identified in Eagle Pass, Texas and Piedras Negras, Mexico. In all of 1992, only two cases were reported in the Texas county in which Eagle Pass is located. In 1993, four cases were reported. In December 1994 through February 1995, three cases were reported, one per month. The cause of this deadly birth defect remains unknown, as does an explanation for the high rate of its occurrence in the U.S.-Mexico border zone.

During the NAFTA debate, much scrutiny was given to unusually high levels of birth defects along the U.S.-Mexico border. In Brownsville, Texas, and its Mexican sister city, Matamoros, a cluster of anencephaly, a rare birth defect in which a full-term baby is born with incomplete or missing brains and/or skulls, had been identified in the late 1980s. For NAFTA opponents, the horror of the border anencephaly cluster became an example of the possible effects of industrialization without regard for health and environmental considerations. NAFTA proponents pointed to the tragedy as the sort of health crisis that could only be solved through the better cooperation, new environmental funding and increased prosperity they believed NAFTA would bring.

Incidents of Anencephaly Are Not Improving, May Be Getting Worse

The incidence of neural tube birth defects has not improved since NAFTA, and may actually be increasing. In contrast to the national anencephaly rate, which has declined steadily, in 1994, there were 15 recorded neural tube defects in Cameron County (where Brownsville is located,) up from 11 in 1993 (a 36 percent increase) according to the Texas Department of Health.

A new 1995 epidemiology report, correlating 12 years of Matamoros industrial activity and Brownsville anencephaly rates, finds that the prevalence of anencephaly is strongly correlated to the level of activity at the nearby Matamoros maquila zone: "As maquila activity has waxed and waned, so has the anencephaly rate increased and decreased in Cameron, but not in Hidalgo or Nueces [the other two counties studied which are located farther from Matamoros]." However, the study's design could not test actual exposure of mothers of anencephalic babies to toxics. Thus, the study cannot find a direct link between maquila toxics and the anencephaly cluster.

New Anencephaly Birth Defect Cluster Since NAFTA

Late in 1994, the Texas Department of Health discovered a new cluster of neural tube birth defects, including anencephaly and the related spina bifida, in babies born in December 1994 and early 1995. In 1992, only two such cases were reported in Maverick County. In 1994, four cases were reported. Then a total of three cases, one per month, occurred between December 1994

and February 1995. Eagle Pass' Mexican sister city, Piedra Negras, reported three cases in a two-month period from February to March 1995.

Cause of Border Anencephaly Remains Unknown

The cause of anencephaly generally, and the high rate of anencephaly in some U.S.-Mexico border areas remains unknown despite the attention of the NAFTA debate and the high incidence along the U.S.-Mexico border. A variety of factors are thought to play a role in a baby's development of anencephaly, major ones being related to socioeconomic status, nutrition, use of prescription and over-the-counter drugs during pregnancy and environmental factors. The Texas Department of Health has taken steps to educate border residents about the benefits of high doses of folic acid before and during pregnancy in significantly reducing chances of a second anencephalic birth. Why folic acid has this effect is unknown; mothers with anencephalic babies do not have low folic acid blood levels. Local residents and public health officials believe the link between the neural tube birth defect clusters and toxic emissions from nearby maquiladoras deserves more study. To date, besides the 1995 study correlating ups and downs in Matamoros maquiladora activity to ups and downs in area anencephaly incidence, several connections between toxics and anencephaly have been made.

- Men working in certain occupations with high chemical exposure, particularly painting, have a greater risk of fathering an anencephalic child, according to Texas state mortality data analyzed in a *American Journal of Epidemiology* study.

- A 1979 Finnish study reported in *Lancet* ties exposure of mothers to certain types of solvents and increased anencephaly rates.

- Few anencephalic babies are autopsied. One that was in Brownsville, Texas, in 1991, had the pesticides DDE, DDT and Lindane, all of which are banned in the United States, in its tissue. Also, Phenylglyoxilic acid, a breakdown product of the chemicals styrene and ethylene, which are used in the manufacture of plastics, was found in the baby's body at levels three times the allowable U.S. occupational exposure for adults.

Anencephaly Lawsuit Settlement

A lawsuit filed in March 1993 by 27 parents of anencephalic babies demanded compensation from 88 maquiladora companies and the Brownsville, Texas, Public Utility Board for the increase in anencephaly cases in the area, which the plaintiffs argued, resulted, in part, from release of hazardous chemicals at the defendants' sites. In June 1994, five companies settled with all of the plaintiffs, paying a total of \$700,000. From 1993 to 1995, more com-

panies were added to the suit as defendants, and claims against five companies were dismissed. When the entire amended suit was settled in August 1995, a total of \$17 million dollars was paid to the families involved, according to their lawyer. (See Appendix A for a full defendant list) As part of the settlement, the companies reiterated that they had committed no wrongdoing and the amounts paid to the plaintiffs were to be kept confidential.

Lower Birth Weights for Babies Born to Women in Some Maquiladora Industries

Women working in garment and electronics maquila plants in Tijuana, Mexico, have babies with lower birth weights than those born to women who worked in service-related industries. According to a study published shortly after NAFTA approval, in the December 1993 issue of *American Journal of Industrial Medicine*, babies of women in the garment industry averaged 653 grams less and babies of women in the electronics industry averaged 337 grams less than babies born to women working in service industries. The impact of maquiladora working conditions on reproductive health, including birth weights, is significant because there are over 350,000 women working in the maquiladoras who are of reproductive age.

Chapter 4 Fouled Water Increasing Border Health Problem

Incidence of Waterborne Infectious Diseases

Promise

"The incidence of hepatitis, shigellosis and amebiasis along the border is two to three times the national average. Fifteen percent of families in colonias report at least one family member suffers from diarrhea every week... This legislation [NAFTA] seeks nothing more than to protect poor children from becoming sick."

—Rep. Ron Coleman (D-TX), 1993.

NAFTA Reality

Since NAFTA, the spread of infectious diseases, such as hepatitis-A, cholera, typhoid and amoebic and diarrheal diseases, attributed to the lack of safe drinking water and sewage treatment in the border area, has not diminished, and in some cases has increased. For instance, two years after NAFTA the hepatitis rate in the border region remains at two to five times the U.S. national average. Waterborne disease has grown dramatically in some areas, such as Maverick County (Eagle Pass, Texas) where the hepatitis-A rate nearly doubled relative to the state average. (5.3 times state average in 1993; 10.3 times state average in 1994.)

Demand on Border Water Infrastructure

Promise: In the absence of NAFTA, incentives for companies to locate facilities in the border region will continue, resulting in additional strains on already scarce water sources."

— Clinton Administration, November 1993.

NAFTA Reality

Since NAFTA passage, the maquiladora work force has increased 20 %. With pro-NAFTA promises about environmental improvements based on dispersal of industry away from the border, it is not surprising that maquila growth has led to increased industrial and residential sewage problems. There have been no appreciable changes in the public water or sewage treatment infrastructure. (See, below, city-by-city summary of water problems and infrastructure for details.) As well, two years after NAFTA, the border region's water shortage crisis is growing with the severe drought that has plagued Northern Mexico and Southern Texas for the past three years.

Financial Resources and Political Will to Construct Infrastructure

Promise

"The Border Environmental Cooperation Agreement associated with NAFTA will provide new financing for infrastructure projects to treat wastewater and provide clean drinking water supplies... Implementation of the NAFTA will lead to the establishment of the Commission for Environmental Cooperation, which will provide added impetus to U.S.-Mexican cooperation on managing water resources in the area.

— Clinton Administration, November 1993.

NAFTA Reality

Extensive new water and sewage treatment facilities that were touted by NAFTA proponents have not been completed. Several water and sewer projects underway before NAFTA have been halted as a result of the Mexican economic depression. The surge in funding for such projects promised by NAFTA supporters never materialized. (See city-by-city summary for details below.)

The Colonias, labelled an American Calcutta, are rural slums on both sides of the U.S.-Mexican border where poor residents live without access to safe water or sewer systems. The Texas Water Development Board estimates that as of February 1995, there were 340,000 residents living in 1,436 colonias in 23 Texas counties alone. Residents of the colonias are exposed to a variety of serious health risks. Past studies have shown that by the time colonia residents are eight years old, about 35 percent have been infected with hepatitis-A and by the time they are 35 years old, 85-90% have it. Surveys in 1995 of well water in U.S. colonias revealed sulfate concentrations nearly twice the level considered safe for drinking wa-

ter, and high levels of arsenic, bacteria and fecal coliform. Waterborne diseases remain a leading cause of death in many of the colonia communities. Because these areas are too poor to repay loans or pay user fees, assistance from the border institutions established parallel to NAFTA, BECC and NADBank, is unlikely.

Chapter 5

Border Air Pollution Under NAFTA

NAFTA and Border Industrial and Vehicle Emissions

Promise

Without NAFTA, it is expected that the maquiladora program will continue to provide incentives for the construction of facilities in the border region, and that Mexican border populations will continue to increase, with resulting increases in air pollution emissions. Wages would be less likely to improve in a relative sense, so that widespread retirement of highly polluting automobiles and residential fuels would be less likely to occur. It is not clear, however, whether efforts by the Mexican government to control emissions will continue to increase without NAFTA.

— Clinton Administration, November 1993.

NAFTA Reality

As both the maquila industry and border-area populations have grown in two years of NAFTA, so has airborne pollution from industry, cooking and heating fuel and increased commercial and private transportation in the border area. The maquila workforce is up 20% since NAFTA passage. The collapse of the Mexican economy after NAFTA has reduced real wages and Ciemex-WEFA economic forecasting group reports it will be into the next century before Mexican workers' buying power will be restored to its 1993 level. At the same time, every day, 3,500 trucks jam the U.S.-Mexico border just at Laredo, Texas, running their engines and diesel-operated refrigerator units for extended periods of time as they sit and wait to cross the border. Border air pollution problems after NAFTA have serious health consequences, for instance a 30% difference in deaths from heart and respiratory diseases and lung cancer between El Paso, Texas and less polluted cities. The Border Environment Cooperation Council, created to develop border environmental projects, will focus on water and sewage projects, not air quality.

Carbon II Coal-Burning, High-Pollution Electric Plant

Promise

Reducing pollution from the plant (Carbon II) will support my position that the NAFTA agreement is our best

hope for cleaning up the border environment.—Former Texas Governor Ann Richards, 1993. (Carbon II was being built and not operational during the NAFTA debate.)

NAFTA Reality

Two years later, Carbon II is operational. Half of the plant has operated since mid-1994, burning "dirty" coal with no emission controls. Full capacity operation is now being test run, with the expectation that full capacity commercial operation will begin in early 1996. Emissions are responsible, in part, for pollution as far west as Carlsbad Cavern, New Mexico and the Grand Canyon in Arizona. Environmental concerns caused the World Bank and a major U.S. investor to withdraw from the 1,400 megawatt power plant project near an existing plant of the same design at Rio Escondido, Coahuila, across from Eagle Pass, Texas. The state of Texas and the U.S. EPA has pressed the Mexican government to redesign the plant. A \$500,000 U.S. grant to study new "scrubber" technology that would reduce emissions by

60 percent at one-third to one-fifth the cost of current technology was rejected by Mexico in June 1995. Carbon II will spew up to 230,000 tons of sulphur dioxide annually, twice the rate allowed for U.S. plants built in 1970. Carbon II will reduce visibility 130 miles to the northwest in Texas' Big Bend National Park by up to 60 percent. Canadian firms are considering a \$400 million power plant in Sabinas, Coahuila, about 50 miles south of Eagle Pass, to burn the same grade coal as Carbon II.

After documenting some of the environmental problems two years after NAFTA in the first section of this report, the report now turns to the effectiveness of the new NAFTA-related environmental institutions. Have the NAFTA environmental side agreement and/or the Border Environmental Cooperation Committee or its related NADBANK been able to ameliorate the significant environmental and health problems that existed in the border region prior to NAFTA? Are these institutions counteracting the increase in pollution and health problems that has occurred since NAFTA? Are they on target to be able to do so in the future?

Section I: Monitoring Border Environmental and Health Conditions Two Years After NAFTA

Chapter 6 Environmental Institutions Parallel to NAFTA

Promise

The Environmental Agreement establishes a framework for the United States, Mexican and Canadian cooperation on environmental matters."

— *Clinton Administration, November 1993.*

The NAFTA text and NAAEC would "encourage public participation in resolving trade and environment disputes..."

— *Pro-NAFTA National Wildlife Federation president Jay Hair, 1993.*

NAFTA Reality

The Clinton Administration concluded the North American Agreement on Environmental Cooperation (NAAEC) in the summer of 1993. The agreement led to the creation of the tri-national North American Commission for Environmental Cooperation (CEC) based on Montreal, Canada. This new agency got a slow start, only getting a director in the fall of 1994 and being fully staffed in 1995. The CEC's stated goals are ensuring high levels of environmental protection, fostering public discussion of environmental concerns, formally advising

trade representatives from the three countries, securing effective enforcement and providing for transparency and access to enforcement processes. The CEC is composed of three bodies: the Council of Ministers, a Secretariat and a Joint Public Advisory Committee (JPAC). It has faced a number of difficulties in getting started, and then in operating:

I. Structural Problems

Limited Authority

The staff of the CEC are "highly constrained by the limited authority they have under the agreement and the reluctance of the governments to let them even exercise that limited authority to its fullest interpretation," according to Mary Kelly of the Texas Center for Policy Studies, who heads the U.S. National Public Advisory Committee (NAC), which advises the U.S. government on CEC matters. "The governments are very hesitant to let the [CEC] Secretariat be too independent," she said.

1. Limits on Scope

There are limits on the issues into which the Commission can inquire. For instance, only nonenforcement of existing environmental law can be challenged under the CEC, however, the entire category of existing laws focusing on commercial harvest or exploitation of natural resources is excluded from this limited list.

2. No Power to Investigate Independently

The CEC has no authority to inspect environmental sites and lacks subpoena power. Its investigations must rely on documents that are already in the public domain or submitted voluntarily.

3. Difficult to initiate process

The CEC staff must have a two-third's majority Council vote to initiate an investigative report or to prepare a factual record on an outside submission asserting noncompliance of an environmental law. This is quite different than NAFTA's commercial dispute rules, under which a review is initiated simply by merit of a country filing.

4. Cumbersome Hurdles for Economic Sanctions

For cases challenging nonenforcement of environmental law that could result in sanctions, the CEC has a burden of proof much more demanding than NAFTA's commercial provisions. This type of CEC case, which can result in fines or sanctions, can only be initiated by a government, not by nongovernmental organizations. Fines under this provision are capped at \$20 million, even if actual damage is found to be higher, and are paid by governments, not the polluting industry. If fines are not paid, the CEC can then authorize limited sanctions on the industry.

5. Conflict of Interest

No formal guidelines exist, or are being drafted, to prevent possible conflicts of interest. There are no requirements, for example, that top CEC staff put certain assets into blind trust or corporate advisors in JPAC recuse themselves if their companies have a business interest in matters before the CEC. JPAC provides only the most bare-bones guidelines.

II. Budget Difficulties

1. Less Money than Expected

The CEC's annual budget is \$9 million, significantly less than the \$30 million to \$70 million originally recommended by National Wildlife Federation and Environmental Defense Fund study and the

2. Future Funding Uncertain

A U.S. House of Representatives proposal threatened to divert the \$3 million U.S. contribution to CEC to offset revenue losses from a proposed expansion of NAFTA tariff cuts to 23 Central American and Caribbean nations. Though the plan was shelved, the CEC budget remains in the sights of hostile members of Congress.

Enforcement of U.S., Mexican and Canadian Environmental Laws

Promise

"The Environmental Agreement... commits the parties to effective enforcement of their environmental laws."

— Clinton Administration, November 1993.

The NAFTA text and NAAEC would "impose trade sanctions on countries seeking to boost trade by lowering or ignoring their environmental standards... address wildlife issues from an ecosystem approach, that is, spanning national borders to preserve international wildlife habitats."

— National Wildlife Federation
President, Jay Hair, 1993

NAFTA Reality

The CEC has received three petitions. It accepted only one, a case that requested only a study of a Mexican environmental problem and the CEC prepared a report on the issue. The CEC rejected two cases involving possible fines or sanctions for nonenforcement of domestic environmental laws based on U.S. congressional defunding of U.S. environmental law enforcement. In rejecting these cases, the CEC drastically narrowed its already limited scope of review, ruling that "failure to enforce" can only occur by merit of administrative failure, and not because of legislative defunding of enforcement of intact environmental laws.

The Mexican government may have refocused the CEC on Mexico by recently waiving the requirement for environmental impact statements (EIS) for many new Mexican investments in numerous industries, including some of the most polluting industries. Instead of an EIS, investors can now submit a "preventative statement" that would be automatically approved by default if not answered in 30 days. The adequacy of EISs has caused some of the fiercest environmental battles in Mexico today, including plans of: California-based Metalclad Corporation to build a toxic waste dump in San Luis Potosi despite local opposition and; the Salt Exporting Company (jointly owned by Mitsubishi and the Mexican government) to build a sea-salt extraction facility in the federally-protected Vizcaino Reserve in Baja California, where gray whales from all of North America's Pacific waters mate. This new post-NAFTA swipe at environmental law enforcement has incensed environmentalists in all three NAFTA countries.

CEC Takes Case 1: Report on Bird Kill

In May 1995, the CEC accepted its first petition (filed by Mexican and U.S. environmental groups) to investigate deaths of 20,000 to 40,000 birds in Silva Reservoir in the central Mexican state of Guanajuato in the winter of 1994-1995. The petition was filed under the less adversarial NAAEC Article 13, which urges the CEC to focus international attention on the problem and to recommend solutions. A CEC scientific panel concluded that "the overriding cause" of the bird deaths was botulism.

One of the Silva petitioners, the Grupo de los 100 (Group of 100), criticized the report for downplaying the role of industrial toxins, particularly chromium which is prevalent at the site. Other observers and peti-

tioners expressed overall satisfaction with the report's findings, but raised concerns about whether its recommended solutions would prevent a recurrence of the problem and, indeed, whether the recommendations would be carried out. Although the Mexican government did not want the scientific report to be made public, the U.S. and Canada voted to release it.

CEC Rejects Cases 2 and 3: Endangered Species Act, Logging Rules

The CEC has rejected its next two petitions, NAAEC Article 14 cases on the defunding of U.S. enforcement of the Endangered Species Act (ESA) of 1973 and of logging rules on federal lands.

The **Endangered Species Act** petition focused on an amendment Sen. Kay Bailey Hutchison (R-Texas) attached to a defense funding bill that rescinds 1995 budget funds earmarked to implement the Endangered Species Act, and prohibits the U.S. Fish and Wildlife Service from using other funds to make ESA habitat and species determinations. The bill was signed into law in April 1995. The CEC petition, filed by U.S. conservation groups, argues that the Hutchison Amendment, without repealing or modifying the Endangered Species Act law, effectively halted enforcement of important ESA provisions. The petitioners argued that this amounted to an Article 14 failure of the United States to enforce its existing environmental law.

The CEC's September 1995 decision rejecting the petition stated that "the alleged failure to enforce environmental law results from competing legislative mandates, and not from other action or inaction taken by agencies or officials." In its opinion, the CEC Secretariat interpreted Article 14 as being limited to "administrative breakdowns (failures) resulting from acts or omissions of an agency or official charged with implementing environmental laws" and not to encompass legislative actions such as in the Hutchison Amendment. The lawyer from the University of Denver's Earthlaw Center, who filed the petition, argued that the CEC "effectively granted the legislative branch of government an exemption to the effective enforcement promise in NAAEC," which would encourage business lobbyists to focus more on environmental budget cuts.

The **Logging Rider** petition was filed on behalf of 26 environmental groups from all three NAFTA countries by the Sierra Club Legal Defence and Education Fund. That case argued that a logging rider attached to a disaster assistance appropriations bill in the U.S. Congress (which became law in July 1995) suspends "enforcement of U.S. environmental laws" for two important programs governing logging on public lands. Like the ESA petition, the Secretariat rejected the logging rider petition under the logic that legislatively-enacted budget cuts that halt enforcement of a nation's existing environment laws are not covered by the NAFTA side agreement.

x • **NAFTA's Broken Promises: The Border Betrayed**

Chapter 7

BECC/NADBANK and Funding of Border Projects

Financial Resources Needed for Border Clean Up, Infrastructure Additions

Promise

"There's going to be a near-term resolution of some incredibly difficult environmental degradation problems."

—*National Wildlife Federation
President, Jay Hair, 1993.*

"This agreement augments the NAFTA by helping to ensure that the environmental consequences for the border area of increased trade with Mexico will be affirmatively managed to secure a better environment for the millions of American who live there, as well as their Mexican neighbors."

— *Clinton Administration, November 1993.*

NAFTA Reality

The Border Environment Cooperation Commission (BECC) and the North American Development Bank (NADBank) were created in a binational U.S.-Mexico agreement parallel to NAFTA to coordinate, and provide the funding for, border cleanup. The BECC was to assist in developing border environmental proposals and to certify projects for NADBank funding. As of mid-December 1995, the BECC had certified three border cleanup projects and is expected to consider seven others over the next few months. The NADBank was designed to provide financing for projects through long-term loans and guarantees. NADBank has yet to fund a single project. It is expected to adopt funding plans for the three BECC-certified projects in 1996.

U.S. government budget cuts and the Mexican economic depression have limited the amount of funding available for these institutions, which some analysts thought had been underfunded from the beginning. The BECC had come under heavy fire for wavering on its commitment to environmental and public participation principles. In a boisterous public meeting in November 1995, BECC adopted operating rules with changes for which local residents, activists and Members of Congress had pressured. NADBank can only make loans and loan guarantees of BECC-approved projects. Thus, the poorest communities most in need of water and other infrastructure projects cannot obtain NADBank funding, as BECC rules require a lender to prove its ability to pay back loans, in part through user fees.

The amount of funding necessary to adequately clean up the border area environment and provide infrastructure to avoid future problems was a major point of contention during the 1993 NAFTA debate. The Sierra Club

estimated that \$20.7 billion would be needed to deal with border environmental problems. The Clinton Administration's funding plan for border area cleanup was \$8 billion, 60% less than the Sierra Club's estimate. The Administration plan was to be funded by state and local governments, external multilateral banks like the World Bank, U.S. and Mexican federal funds, private investment, and from the NADBank.

Although this funding plan was at the core of NAFTA proponents' argument that NAFTA would clean up the border area, none of these funding sources are guaranteed. Since NAFTA has been in effect, each funding source has faced problems that raise serious questions as to whether \$8 billion will ever be provided for cleanup. As well, the \$8 billion cleanup plan had assumed a reduction in the concentration of industry and human population in the border area and the opposite has occurred.

Government Budget Cuts Reduce Funds For Border Cleanup Projects

The Clinton Administration's funding plan had the U.S. and Mexican governments each contributing \$3.4 billion: \$2 billion from state and local governments and \$1.4 from federal funding. Two years into NAFTA, it is unlikely that the full \$3.4 billion will materialize from either country. The Mexican economic collapse after the December 1994 peso devaluation severely undermines the Mexican federal, state and local governments ability to contribute to border cleanup. Beyond contributions to BECC and NADBank, "we're not going to be hitting up the Mexican government for anything else," stated NADBank credit analyst Sara Fort. U.S. federal budget cuts also reduced border cleanup funding. For instance, the Agriculture Department's program for colonia drinking water projects was cut by \$6.3 million in FY96, down 25 percent, from \$25 million in FY95. Also, some members of Congress hope to reduce, or end, U.S. contributions to NADBank and BECC.

NADBank Funding Problems

Problems with "Callable Capital": In order to maintain a AAA bond rating, reliance on Mexican callable capital will be limited until Mexico improves their credit rating, likely reducing NADBank's lending capacity from the expected \$3 billion to \$1.725 billion. "Callable capital" refers to financial instruments from the U.S. and Mexican treasuries that can be traded for cash and are used to back up loans. "Investors are skeptical about Mexico's callable capital," said NADBank's spokesperson Lisa Roberts.

Poor Communities Unable to Afford NADBank Loans: Since NADBank only administers loans and loan guaran-

tees, not grants, applicants must demonstrate a capacity to repay NADBank loans in order to receive financing. According to NADBank credit analyst Sara Fort, "The ability to pay back loans is the most important financial consideration for NADBank." User fees would be a primary instrument in paying for many NADBank projects. The inability to afford user fees seriously undermines the ability of poor communities, who for the same reasons have no access to private financing, to have access to NADBank funds for cleanup projects.

Funding Not Available for Non-Water Projects: The NADBank is limited to funding only BECC-certified projects. The BECC certification process focuses predominantly on water projects, so essential environmental and health improvements in air quality, and natural resources and species conservation and management projects are unlikely to be funded by the NADBank.

World Bank Loans Reduced: A June 1994 Mexico-World Bank agreement to provide the border region with between \$1.5 and \$2 billion for environmental infrastructure projects was changed following the December 1994 peso devaluation. The largest of the loans, \$368 million to fund the Northern Border Environmental Project, was cut by \$160 million. The loans have been reduced in part because goods and services are cheaper in Mexico since the devaluation, meaning Mexico and the Bank can accomplish the same with less money, but also because Mexico wishes to avoid increasing its foreign debt. Mexico also is planning on scaling back a program to reloan World Bank money to Mexican localities. With interest rates fluctuating between 50 percent and 75 percent, localities simply cannot afford the loans.

Public Access Problems With the BECC

Border area activists and organizations have been frustrated by BECC rules that allow BECC's board of directors to hold discussions and make decisions behind closed doors, restrict public access to many documents, limit public participation in "open sessions," and omit from meeting minutes the comments of directors on specific projects unless they formally request that such comments be recorded. In a letter to Secretary of State Warren Christopher, Rep. Estaban Torres (D-CA) said, "These procedural rules violate the spirit of openness upon which the BECC and NADBank were founded. The credibility of BECC... has also been put in jeopardy."

Under public and congressional pressure, the BECC board of directors reached a unanimous decision to give special priority to projects that incorporate a large number of sustainable development criteria. Many border-area activists found the BECC's adoption of sustainable development criteria to be a sign of the BECC's willingness to include public participation.

City-by-City Summary of Water Quality Two Years After NAFTA

Juarez, Chihuahua/El Paso, Texas

Two years after NAFTA, there still is no treatment facility in Juarez. Six open canals still carry "black waters" containing run-off from the city's 350 factories and raw sewage, which is dumped into the Rio Grande at a rate of 55 million gallons daily. After NAFTA, the Rio Grande remains so polluted by human fecal matter in this area that skin contact threatens exposure to cholera and hepatitis and dysentery-causing organisms. This untreated water is still used for irrigation, threatening Mexican farmers and consumers on both sides of the border. Construction of a \$72.2 million sewage treatment plant for Juarez, planned before NAFTA, halted in its earliest stages early 1995 when the Mexican economy collapsed. A proposal for NADBank funds for a Juarez wastewater plant was postponed because Juarez can not demonstrate to the BECC that it can pay back a loan.

Nuevo Laredo/Laredo, Texas

Two years into NAFTA, at Nuevo Laredo, a city of 220,000, about 70 percent of toilets flush directly into the Rio Grande. No sewage treatment facility exists for the city. At this juncture of the river, over 24 million gallons of raw sewage is dumped daily. The threat of this sewage dumping became deadly clear in August 1994, when a 13-year-old Laredo boy died from a brain infection caused by an amoeba common to untreated water after swimming in the river. After delays, construction finally began on a 31 million gallon/day Nuevo Laredo wastewater treatment plant planned before NAFTA by the International Boundary and Water Commission (IBWC). The project was being financed jointly by the United States and Mexico, but has been halted as of March 1995 because the Nuevo Laredo municipal authorities cannot pay the final 10 percent.

Nogales, Sonora/Nogales, Arizona

Two years after NAFTA, the twin cities of Nogales still are plagued by the heavily contaminated Nogales Wash, a channel roiling with toxics and raw human sewage flowing through the downtown areas of Nogales, Sonora, and Nogales, Arizona. There still is no effective water treatment for the industrial and residential waste of Nogales, Sonora, population 400,000. In 1995, fecal coliform levels were often above Arizona standards, often by as much as 20 times. The International Boundary and Water Commission decided to begin a groundwater monitoring project in the area which has faced several delays.

California/Baja California

The New River still has the ignominious distinction of being the dirtiest U.S. river, with a daily flow at the border of 20 to 25 million gallons of partially treated domestic and industrial wastewater and about 3 million

gallons of untreated industrial wastewater. "The New River is a time bomb waiting to explode on both sides of the border," said Dr. Lee Cottrell, former health officer for Imperial County, California. Previous monitoring reports showing high levels of DDT, PCB, chloroform, trichloroethane, toluene and xylene and fecal coliform levels several thousand percent higher than the level considered potentially fatal to humans. Warnings are posted to avoid bodily contact with the water. In 1994 and 1995, the U.S. EPA provided new funds for the "New River Project," an attempt to update facilities and determine additional needs, which predated NAFTA. In late 1995, the IBWC decided to start planning a new treatment plant in Mexicali. Mostly U.S. funds are planned for the project. With other Mexican government funding unavailable, the required Mexican government contribution is being sought through the NADBank. The project is hiring an engineering firm to design a plan for treatment needs. This will take about a year to complete. EPA marked \$5 million in 1995 for emergency quick fixes to fund more monitoring sites and 11 quick-fix projects, with \$47.5 million allotted by Congress to the IBWC, in part for Mexicali wastewater treatment.

Tijuana, Baja California/San Diego, California

The Tijuana sewage system was built for 17 million gallons per day of sewage. Average 1995 sewage production was 35 to 40 million gallons per day. Two years after NAFTA, Mexican and U.S. coastal residents in the Tijuana and San Diego areas are exposed to untreated water with California's southernmost beaches continually closed. 1995 California EPA data show daily release of 25 million gallons of undisinfected wastewater and partially treated sewage, and 2 to 3 million gallons of raw sewage, into the Pacific six miles south of the border. Tijuana waste-water and storm-water systems are combined, so industrial waste, laden with lead and pesticide residues, flows in the sewage system.

An International Wastewater Treatment Plant, agreed to in 1990 by Presidents Bush and Salinas, is being constructed just inside the U.S. border to treat water for bacteria from residential sewage, but not for industrial toxics or pesticides. Construction is scheduled for completion in June 1988. The plant's design has come under challenge and it is unclear if the water that the plant will release will meet EPA guidelines, will be reusable in the arid region or will be discharged partially treated into the Pacific. Plant cost is about \$379 million and contributions from both U.S. and Mexican governments are expected to fall short of the full cost of the plant. The U.S. Congress was asked for \$274 million for the project, but granted \$239 million, leaving a shortfall of \$35 million. In 1991, the U.S. Congress gave Mexico a \$16 million loan to fund the Mexican contribution to the project. With the lower peso exchange rate, Mexico's capacity to put \$16 million toward the project now is in doubt.

City-by-City Summary of Air Quality Two Years After NAFTA

Juarez, Chihuahua/ El Paso, Texas

Two years after NAFTA passage, the most serious air pollution problems along the U.S.-Mexico border exist at Juarez-El Paso. In 1995, El Paso regularly exceeded EPA standards for carbon monoxide, ozone, and particulate matter (PM10), three of six criteria pollutants for determining a Clean Air Act "non-attainment" area. Maquila emissions, coal-fired brick factories, burning rubbish and dust from unpaved roads comprise the extremely high level of dangerous particulate matter in the air. An ozone haze hangs over Juarez and El Paso much of the year caused by emissions reacting with sunlight. Since NAFTA went into effect, the ozone levels in El Paso have steadily increased from 58% of the days each year having unhealthy ozone levels in 1992, to 67% in 1994, and 75% for the first 11 months of 1995. The U.S. EPA agreed with Mexico to jointly monitor air quality in the region, but part of the agreement is not to release the data they record. Four continuous air monitoring stations exist in Juarez and in El Paso.

The Lower Rio Grande Valley

With a historically small population and proximity to a southeastern Gulf of Mexico breeze, the Lower Rio Grande Valley has not had to be concerned with air quality until recently. In 1994, two air monitoring sites were installed in Brownsville to sample for deadly carbon monoxide and for sulfur dioxide (cause of acid rain) and Volatile Organic Compounds, which are cancer-causing agents. The state governments of Texas and Tamaulipas (home to Lower Rio Grande Cities of Matamoros, Reynosa and further upstream Laredo) are working cooperatively on air quality monitoring, thanks in part to earlier World Bank funding. Mexican officials were to submit a proposal for further monitoring funding to the World Bank, but have been delayed.

Nogales, Sonora/ Nogales, Arizona

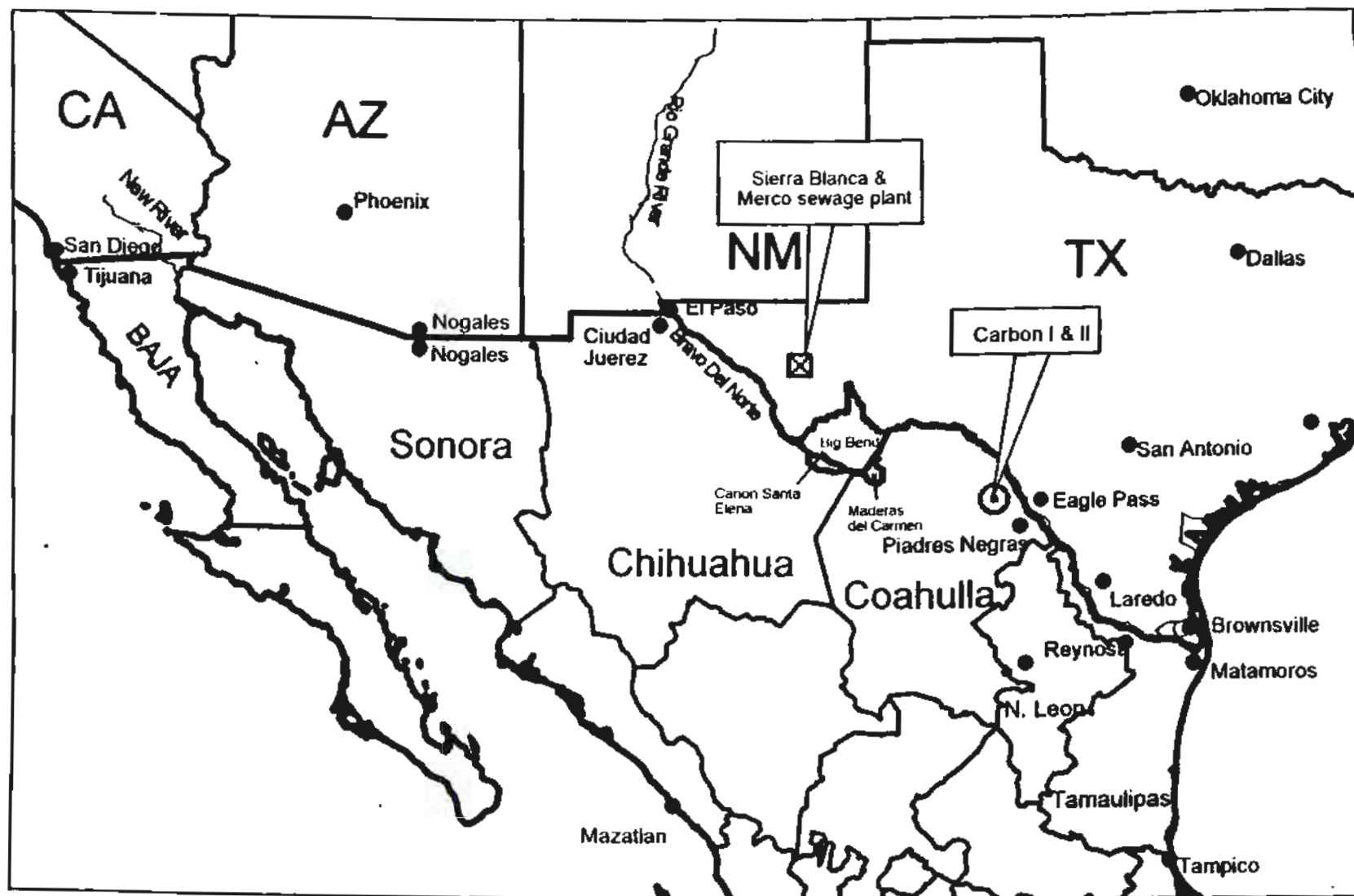
Two years after NAFTA, air pollution is a serious public health problem in this, the most-populated part of the Arizona-Sonora border. Residents complain of burning eyes and that a smokey haze, caused by the high concentration of maquilas, hangs over the cities. Nearby Santa Cruz, Arizona, (also in Nogales County) had 1995 particulate matter counts almost as high as El Paso. Arizona started a one-year study of the air on both sides of the border in the Nogales region in April 1994, the results of which are not yet released. EPA funded the \$250,000 monitoring project, which was deemed necessary because of the high incidence of multiple myeloma, a type of cancer, and of Lupus in the Nogales region. In April 1995, when the special testing program was completed, just one monitoring station on each side of the border continued measuring particulate matter, PM10, but no other pollutants, such as ozone, sulfur dioxide or carbon monoxide.

Tijuana, Baja/San Diego, California

Tijuana, and San Diego, challenge Juarez/El Paso for the most polluted border air, with San Diego cited as a 1995 non-attainment zone for carbon monoxide and ozone under the Clean Air Act. Most pollution comes from automobiles in both countries and the Tijuana maquiladoras. Two years after NAFTA passage, very little air quality data are even available for the area or nearby Mexicali/Calexico, much less amelioration efforts. There has been some cooperation between U.S. and Mexican officials with air monitoring stations. However, in April 1995, there were only two fully functioning stations in Tijuana, one in Calexico, and a proposed facility in Mexicali. Although California EPA says a network of four to six full stations are needed, it is uncertain when any additions could be made because of U.S. budget concerns and the Mexican economic depression. Local officials suggest that area air projects should focus on reducing waiting time for border crossing which is now a large factor in area air problems.

Section I

Monitoring Border Environmental and Health Conditions Two Years After NAFTA



● Towns and Cities



Rivers



National Parks



Booming Maquiladora Border Free Trade Zone

Promise

"In the absence of NAFTA, the continuation of the maquiladora program is likely to result in increasing population and industrial growth rates along the U.S.-Mexico border."¹ NAFTA will remove the current artificial incentives which have intensified investment along the border through the maquiladora program. Without NAFTA, it is more likely that intense border investment will continue, with the attendant adverse environmental consequences for the border region.

—Clinton Administration,
November 1993²

Reality

Contrary to the promise, since NAFTA, the problems have increased. NAFTA has caused a jump in industrial activity in the Mexican border zone and a 20 percent increase in maquiladora workers without appreciable improvements in industrial waste or human health infrastructure. Many communities still lack both access to water and sewage systems. Some border infrastructure and cleanup projects that predated NAFTA now have been halted with the Mexican economy reeling and NAFTA's spotlight dimmed.

Shortly before the NAFTA vote, the U.S. Government Accounting Office (GAO) conducted a site inspection of six new U.S.-owned maquiladora plants located along the U.S.-Mexican border. As documented in the August 2, 1992 study, *U.S.-Mexico Trade: Assessment of Mexico's Environmental Controls for New Companies*, not one of the U.S. companies had filed an environmental impact appraisal as then required by Mexican law. According to the report, a federal environmental official in the Mexican government stated that the lack of compliance is widespread and not confined to U.S. majority-owned maquiladoras.⁷

Another GAO report published November 1993 investigated the work environment at eight U.S.-owned maquiladora auto parts plants. The specific violations are detailed in a 1995 Investor Responsibility Research Center report. "GAO's consultants in the study observed 'varying degrees of hazards in four areas: ergonomic, safety, physical and chemical.' The consultants said that 'some of these hazards were serious, although none presented an imminent danger to the workers' lives or health.' U.S. Occupational Safety and Health Administration officials said the types of hazards observed are present in some U.S. auto parts as well, said GAO.

"Most of the maquiladora plants lacked seven of the 10 hazard-specific training programs GAO's consultants felt necessary. Only one of the eight plants had a complete hazard communication program... The consultants said the most serious hazard observed at all eight plants 'involved workers' exposure to hot, moving or sharp machine parts because of lack of protective guarding.' Six plants had inadequate (or inadequately marked) exits, or doors blocked by materials and carts..."

"Generally, said the study, 'the plants did not have the specific programs to identify and monitor the levels of contaminants to which the workers may be exposed.'"⁸

Background on the Maquiladora Zone

A U.S.-Mexico border free trade zone running from the border 20 kilometers into Mexico was established in 1965 under the Border Industrialization Project, and through a series of adjustments to U.S. and Mexican tariff and tax rules.³ In 1972, the 20 kilometer zone restrictions were relaxed so that maquiladoras could operate throughout Mexico, except for several large industrial areas.⁴ Under the program, corporations could locate factories in the zone and send products manufactured there into the United States with tariffs charged only on the value added to the product in the zone.⁵ Thus, U.S. companies could send auto or electronics parts to Mexico to be assembled by low-wage workers, and then send the finished product back into the United States paying duties only on the labor value added to the parts.

Hundreds of industrial facilities, including those producing or using lethal toxics, filled a region which did not have even the most basic industrial waste or human sewage capacities.⁶ The limited environmental and health laws on the books were not well enforced, allowing relocating companies to avoid environmental and worker safety compliance costs by simply dumping their industrial waste into rivers and on the ground.

Such lax enforcement provided a special lure for the most polluting and dangerous industries. Included was the electronics assembly industry, which uses highly toxic solvents and has a large presence throughout the border region, especially in Tijuana and Matamoros. Similarly, California's furniture industry, painting and other chemical-related industries have relocated to the maquila zone to avoid the United States' and especially California's environmental laws. Heavy metal smelting plants, such as those processing lead, shipped operations into the maquila zone from throughout the United States.

With NAFTA, "[M]aquiladora development will tend to be dispersed away from the border area to other parts of Mexico, thus reducing its impact on the border area...If NAFTA is not implemented, incentives will continue under the maquiladoras to locate facilities in the border areas, thus exacerbating environmental pressures on the border, such as loss of habitat, adverse impacts to endangered and threatened species, and reductions in groundwater levels."

*—Clinton Administration,
NAFTA Report on Environmental Issues,
November 1993⁹*

Besides the threat posed to the border environment and public health by industrial pollution, rapid and unregulated industrialization along the border caused a population explosion in a region without basic public health infrastructure such as housing, residential sewage and water and electrical service. The presence of the maquila plants caused the border area population to nearly double; about six million Mexican families from the interior relocated to the border during the 1980's in search of maquila factory jobs.¹⁰ From Nuevo Laredo to the Gulf of Mexico, the population doubled from 1.5 million in 1985 to 3 million in 1993.¹¹

Maquiladora facilities in Mexico experienced enormous growth in the 1980s following Mexican currency devaluations. During the period 1983-88, the number of maquiladora jobs grew by an average of 19.7 percent annually.¹² The number of Mexican workers employed

by the maquiladora industry rocketed from 127,000 in 1982 to 430,000 by the end of 1988.¹³

This population explosion overwhelmed an already inadequate public infrastructure in communities along the border from Matamoros to Tijuana. Neighborhoods known as "colonias" sprang up in all of the maquila factory areas where basic necessities such as running water, drainage and sewage systems, roads, bridges, electricity, schools and hospitals were not provided, much less housing (see sidebar on page).

NAFTA Promise: NAFTA Will Reverse Concentration of Industry and Population Along the U.S./Mexican Border

One of the core pro-NAFTA arguments was that NAFTA would improve the environment and public health along the U.S.-Mexico border. Under NAFTA, industrial development was supposed to be dispersed throughout Mexico, reducing the enormous environmental and health pressures on the border region, thus alleviating the problem of industrial waste accumulation and the lack of public infrastructure to support a greatly expanding population.

The notion that NAFTA would disperse border industry became the mantra of corporations supporting NAFTA. For instance, Calman Cohen, of the Emergency Committee for American Trade, a pro-NAFTA lobbying group comprised of large U.S. corporations, pledged to Congress that NAFTA would reverse the concentration of maquila facilities. In 1993 testimony before the House Foreign Affairs Committee he claimed:

*"In a sense, what is occurring on the border area is an aberration, rather than emblematic of what will occur under NAFTA... Many of those facilities that are close to the border that are described are ones that would be eliminated under NAFTA. Those were not set up for, in many cases or almost in all cases, for sale of products in Mexico, but for the use of low-wage workers to put together parts and components... So for those who are trying to say that we will see more facilities such as those on the border, I say it is 180 degrees the other way. Those are the facilities that will be eliminated."*²⁰

This promise of border deindustrialization was echoed by the Clinton Administration in its November, 1993 report, *The NAFTA: Report on Environmental Issues*. In this document, the Administration promised that the economic changes that would come from NAFTA would "disperse industrial development away from the already stressed border area of Mexico... Without NAFTA, it is more likely that intense border investment will continue, with the attendant adverse environmental consequences for the border region."²¹

In the report, the Administration made a number of specific assurances of improvements in public health, air and water, and area wildlife, as well as a reduction in

Clinton Administration Promises: NAFTA Will Reduce Border Maquilas, Improve Public Health and the Environment

Before the NAFTA vote, the Clinton Administration predicted dire public health outcomes if border area development continued as it had pre-NAFTA. Per the Administration, with NAFTA, "the mix of border and interior industry growth should tend to keep up with the need for new jobs for border populations and keep migration down from the interior, due to employment opportunities closer to other urban centers."¹⁴

Public Health: Without NAFTA, "[i]t can be presumed that additional development will continue to take place on the Mexican side of the border...Without NAFTA, the key infectious diseases would continue to be major problems at the same incidence levels, particularly Hepatitis A, tuberculosis and the diarrheal diseases. Deteriorating sanitation/water supplies could result in cholera outbreaks in border communities which, thus far, have not occurred...accidents and chronic diseases would increase slowly with the population increase and the absence of resources for effective prevention campaigns."¹⁵
Hazardous waste: Without NAFTA, "the continuation of the maquiladora program is likely to result in increasing industrial activity in the border area, with associated growth in generation of hazardous waste."¹⁶

Non-hazardous Waste: "[I]mplementation of The NAFTA may reduce the growth of waste along the U.S.-Mexico border by decreasing incentives for industries and populations to locate along the border...In the absence of NAFTA, the continuation of the maquiladora program is likely to result in increasing population and industrial growth rates along the U.S.-Mexico border."¹⁷

Air Quality: "Without NAFTA, the continuation of the maquiladora program is likely to result in more rapid growth in air emissions in the border region, since incentives will be maintained for companies to build facilities near the U.S.-Mexican border. Such facilities are likely to be associated with further population increases, which will, in turn, contribute additional sources of air pollution in the form of motor vehicle emissions and pollution from residential heating fuels."¹⁸

Water Quality and Supply: "Without NAFTA, the United States and Mexico may have difficulty sustaining their current level of cooperation in projects designed to maintain water quality...Moreover, in the absence of NAFTA, incentives for companies to locate facilities in the border region will continue, resulting in additional strains on already scarce water sources."¹⁹

These promises are worth noting, first, because they show that promised improvements in border health and the environment require that NAFTA disperse maquila development and second, *these promises specifically reveal the Clinton Administration's conclusion that an increase in industrial concentration would have a devastating impact on public health and the environment along the border.*

hazardous and non-hazardous waste, which would occur as a result of NAFTA reducing industrial concentration along the border.²²

These promises are worth noting, first, because they show that promised improvements in border health and the environment require that NAFTA disperse maquila development and second, *these promises specifically reveal the Clinton Administration's conclusion that an increase in industrial concentration would have a devastating impact on public health and the environment along the border.*

NAFTA Reality: Border Industrialization, Maquilas and Associated Environmental and Health Problems Increase, Not Decline After NAFTA

"Everybody I'd talked to had predicted that with NAFTA, the maquiladora industry would disappear," said Miguel A. Conchas, the president of the Laredo Chamber of Commerce. "But it turns out in the second year of NAFTA, with the peso devaluation, they're going strong."²³

Nearly two years into NAFTA, the pact has not slowed the industrialization of the border. Instead, the region is experiencing more growth, without appreciable improvement in social or environmental infrastructure.

The number of Mexican maquiladora workers rose more than 20 percent in the first 21 months of NAFTA, from 546,588 in December 1993 to 689,420 at the end of September 1995.²⁴ As of the summer of 1995, more than 85 percent of these workers were employed in a one of the six Mexican states which border the United States: Baja California Norte, Sonora, Chihuahua, Coahuila, Norte León, and Tamaulipas.²⁵

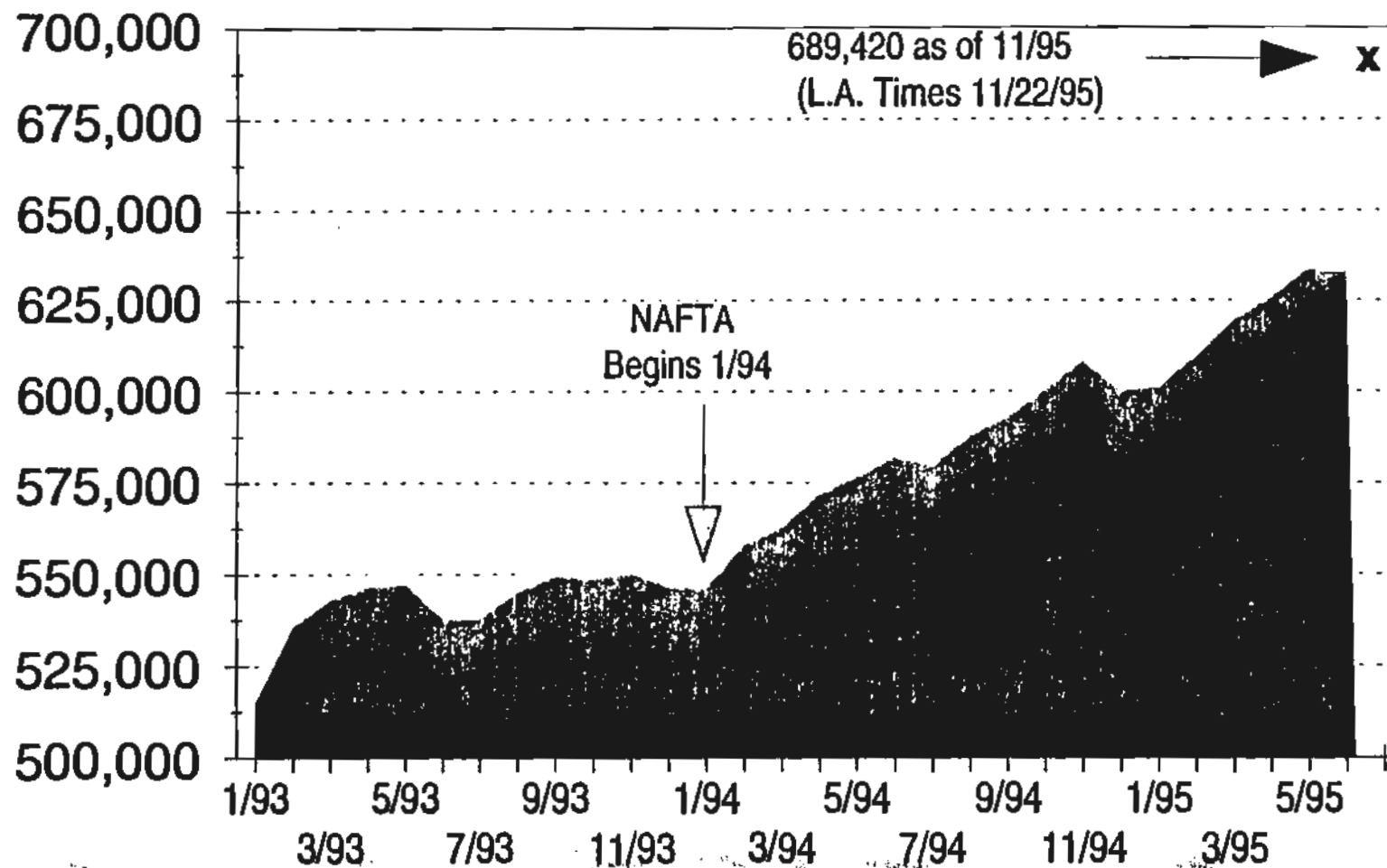
*"The industry really went through a hiatus of three or four years of relative flat growth... Now we've had 10 months of not only a lot of inquiries, but tremendous commitments."*²⁶

—Donald Michie,
NAFTA Ventures, Inc., June 1995.

The increase in maquiladora employment began before the peso devaluation. According to Lucinda Vargas, an economist with the U.S. Federal Reserve, maquiladora employment grew 5.6 percent during January-August 1994 compared with the same period in 1993. Employment growth in the border area was clearly growing faster than in the interior.²⁷ In all of 1994, SECOFI, Mexico's Commerce Ministry, approved 258 permits to U.S., Mexican and other companies to operate maquilas throughout Mexico.²⁸ In just the first five months of

Maquiladora Employment in Mexico

January 1993 - June 1995



1995, SECOFI had approved 174 such permits.²⁹ In the period from January to November, 1995, nearly 400 new maquiladora facilities opened.³⁰ The industry really went through a hiatus of three or four years of relative flat growth," said Donald Michie, who heads the El Paso, Texas maquiladora consulting firm NAFTA Ventures, Inc. "Now we've had 10 months of not only a lot of inquiries, but tremendous commitments," he said in the late spring of 1995.³¹

It is estimated that in the Mexican state of Baja California Norte, in the cities of Ensenada, Tecate and especially Tijuana and Mexicali, a company either arrives or expands at the rate of more than one a week.³² "This is the fastest growth in the country," said Carlos Fernandez Ruiz, secretary of economic development for Baja California Norte.³³

Companies like Sanyo, Sony, Hasbro, Daewoo and others are adding capacity to increase production of televisions, toys, medical equipment and electronic components.³⁴

Not surprisingly, maquiladora exports to the United States in the first five months of 1995 were up 20 percent from the same period in 1994.³⁵ Maquilas now create more than 33 percent of Mexico's manufacturing output. The maquila industry is now second (behind petroleum) as the nation's largest generator of foreign currency.³⁶

NAFTA Incentives for Maquila Growth

NAFTA's provisions were more focussed on investment rules than on traditional trade issues such as lowering tariffs and quotas. While NAFTA's average 10 percent tariff cut did not benefit firms operating under the maquila zone's special reduced tariffs, NAFTA's new investment protections certainly did. NAFTA's passage spurred increased foreign investment in the maquila growth among U.S. manufacturers looking for cheap labor and weaker enforcement of labor and environmental standards by providing U.S. manufacturers with new investment protections. Indeed, NAFTA provisions guarantee indemnification in the event property is being nationalized.³⁷ "NAFTA provides for certainty for investors," said Raul Urteaga-Trani, commercial counselor to the Mexican Embassy's NAFTA office. "There is a guarantee that your investments are secured." Under NAFTA, Mexico provides national treatment to investors from the United States and Canada, treatment equal to that enjoyed by domestic investors under the corresponding Mexican law.³⁸ Further, NAFTA's dispute resolution system provides prospective U.S. investors with a means to avoid the difficult Mexican court system, and still have a venue for adjudication of commercial disputes.³⁹ As well, NAFTA's investment rules greatly constrain any local control over regulation of foreign investments.⁴⁰

Moreover, as NAFTA critics had predicted, to best exploit NAFTA's new investment protections, U.S. in-

vestors needed to stay near the Mexican border. Most importantly, poor transportation infrastructure within Mexico deters setting up manufacturing facilities in the interior when the largest market of the products is export to the United States. By

NAFTA Promotes Trans-shipment, Border Investment by Non-NAFTA Countries

New factories from other countries are also coming to the border post NAFTA, adding to the concentration. Non U. S. or Canadian manufacturers who do not qualify for NAFTA's investment guarantees are still able to gain special access to the U.S. market through NAFTA. By producing in Mexico, foreign companies establish an export platform into the United States with lower tariffs and quotas. Transportation problems in Mexico's interior draw these investors to the maquila border zone. Japanese and Korean companies like Sanyo, Daewoo and Sony have developed facilities in the Tijuana area since NAFTA.⁴¹

Shortly after the NAFTA passed, the *Journal of Commerce* reported on the surge in investment in the maquiladora region by Asian textile and apparel manufacturers who regularly filled their U.S. import quotas. By sending goods through the maquiladora zone, these firms could tranship additional goods into the United States above their quotas. For example, early in 1995, the Mexican ambassador to Indonesia met with Indonesian textile exporters to encourage them to use his country as a stepping stone into the U.S. market: "You could export batik cloth, for instance, and we will tailor it and export it to the United States as Mexican products," Jorge Palacios told a Jakarta meeting of Indonesian companies in early 1995.⁴²

locating near the border, factories have almost immediate access to U.S. highways and railways for importing parts to their Mexican factories and exporting assembled goods to the U.S. consumer market. In addition, many North American maquila factory managers want to live on the U.S. side of the border and commute.⁴³

Peso Devaluation After NAFTA Further Slashes Maquila Worker Wages

After one year of moderate post-NAFTA maquila industrialization growth, the major December 1994 peso devaluation made setting up a maquila factory even more lucrative. Maquila wages are paid in pesos, while earnings are made in dollars. Thus, the devaluation created an immediate boost in profits for foreign maquila investors.

Measured in dollars, the overall hourly labor cost, including benefits, in the Mexican maquiladora industry dropped from \$2.61 in 1994 to \$1.80 in 1995.⁴⁴ Some maquila factories grabbed headlines for their "generosity" by giving workers a 4 to 10 percent pay raise, while the real value of the workers' wages had fallen 50 percent. Thus, Zenith, which employs 18,000 workers in five Mexican plants, expects to save "tens of millions of

dollars" in lower manufacturing costs in 1995 due to the peso devaluation.⁴⁵

Meanwhile, the so-called "peso crisis" has now become the new peso reality. A June, 1995 Ciemex-WEFA forecast projected that the buying power of Mexican workers will not return to 1994 levels in this century.⁴⁷ Thus, looking into the future, it is the post-devaluation exchange rate that must be used to predict the rate of maquila development and its related environmental impacts. After sliding from 3.1 pesos to the dollar when NAFTA was passed, to 3.5 pesos to the dollar in December 1994, the peso plummeted even further to 6.2 pesos to the dollar by January 1995. The rate settled at about 6 pesos for several months, fell again, settling at around 7 to 1 and then early November 1995, sunk to an all-time low of 8 to 1 before settling at 7.4 in mid December.⁴⁸ Some economists now say that this exchange rate, or one more devalued, more accurately reflects the comparative value of the two currencies, and that the peso was maintained at a falsely inflated level for reasons of the Mexican government's domestic and international political image.

A June, 1995 Ciemex-WEFA forecast projected that the buying power of Mexican workers will not return to 1994 levels in this century.⁴⁶

Post-NAFTA Border Industrialization: Transforming to Full-Line Manufacturing

The combination of NAFTA, the peso devaluation and general industry trends is changing the nature of the maquiladora industry from assembly plants pre-NAFTA to full fledged manufacturing facilities post-NAFTA. "The maquiladora program will not be affected by NAFTA and will continue to operate under the flexibility provided by the agreement," according to Maria Telles-McGeagh, Director of the Border Research Institute of New Mexico State University in Las Cruces. "It will be transformed into another kind of animal, and it will do so because of the options open to it."⁴⁹ "The business has changed. It's no longer just assembly. It's truly evolving into manufacturing and distribution," noted Sean Doyle, a San Diego consultant to companies considering operations in Tijuana and Mexicali.⁵⁰ "Forget the name maquiladora," said Carlos Fernandez Ruiz, secretary of economic development for the state of Baja California Norte. "It will become national industrial exportation."⁵¹ Raul Urteaga-Trani, commercial counselor to the Mexican embassy's NAFTA office agrees. "More and more, maquiladoras are becoming

complete industrial facilities," he said.⁵²

"Forget the name maquiladora...It will become national industrial exportation."⁵³

—Carlos Fernandez Ruiz,
Secretary of Economic Development for Baja
California Norte.

According to Mike Patten, Editor of the maquiladora industry trade journal, *Twin Plant News*, another change in the maquiladora industry is the "trend toward large multinationals. Generally speaking, the smaller 15-30 person shop is being replaced by the larger multinationals," he said.⁵⁴ According to Patten these new larger plants "are the best in the world."⁵⁵

"More and more, maquiladoras are becoming complete industrial facilities."⁵⁶

—Raul Ortega-Trani, commercial counselor to the
Mexican Embassy.

While the scheduled elimination of the tax benefits of the actual maquiladora program at the end of the decade is well known to the companies that are currently opening and expanding maquiladora operations, the "safety" provided by NAFTA's investment rules and the new reality of a devalued peso are the real attractions of the maquiladora zone to large multinational firms. Simply, investment in Mexico along the border under NAFTA ensures cheap production with secure investment and easy access to the U.S. consumer market.

Emerson's Electric Company's motor division operates several maquiladoras in Mexico. "We would still continue to build even if there was not a maquiladora program because you can build the motors cheaper down there," says company spokesperson Tom Wade, who is based in Laredo Texas.⁶⁵

U.S.-Mexico Border Environment and Health Worsen

NAFTA has spurred uncontrolled industrial growth in the border region, bringing a 20% increase in population without appreciable improvements in industrial waste and human health infrastructure. Many communities still lack both access to water and sewage systems. In some cases border infrastructure and cleanup projects that predated NAFTA now have been halted with NAFTA's spotlight dimmed and the Mexican economy reeling.

According to Mexican Foreign Secretary Jose Angel Gurria, Mexico has put on hold participation in border

environmental projects because the economic crisis has led to a nearly 10 percent cut in the Mexican federal budget.⁶⁶ For instance a planned project to install gas-burning furnaces in maquila brick-making factories has been halted. This means those factories will continue their current practice of burning old tires as fuel—a major source of border pollutants.⁶⁷

NAFTA promoters' promises that NAFTA would create resources for environmental enforcement and cleanup have not been met. Nearly two years into NAFTA, the limited promises for environmental improvements made to sell NAFTA largely have been broken.

Many of the long list of new efforts in enforcement and cleanup pledged as a condition of NAFTA passage were either abandoned before they were initiated, or are now halted in their early stages.⁶⁸ A major sewage treatment project in Laredo has been halted because the Mexican government has discontinued its financial contribution to the joint project.⁶⁹ (See chapter 4 for more in canceled water treatment projects.) Meanwhile, in the United States, the Republican-controlled Congress has been cutting the funding of environmental projects that directly impact the health and safety of the U.S. border environmental communities.

Pete Emerson, an economist with the Environmental Defense Fund (which supported NAFTA) tried to find out how much would be spent on environmental protection during meetings with government officials in Mexico City in the spring of 1995. "I couldn't get an answer," he told a reporter for Cox news.⁷⁰

When Dick Camp of the Border Ecology Project asked Mexican officials how much money would be available for the Mexican government to spend on environmental protection after the peso collapse, he said he was told "there's zilch."⁷¹

According to Jose Luis Samaniego, a top official at the Mexican federal environmental protection ministry, inflation is expected to cut in half the value of Mexico's environmental protection budget, since most of the equipment used for environmental cleanup needs to be imported.⁷²

As well, contributions to state and local budgets by the Mexican federal government have been drastically reduced. According to a recent report by a Mexican opposition political party released earlier this year, at least four states risk going bankrupt.⁷³ For instance, the Mexican federal government has cut its contribution to Ciudad Juarez's city budget by 80 percent as part of its economic crisis plan.⁷⁴

Hazardous Industry Waste

According to a 1995 report, maquila plants generate approximately 164 tons of hazardous waste each day.⁵⁷ Most of this waste should have been returned to the United States for proper disposal under a 1983 environmental treaty between the two countries, known as the La Paz Agreement. As a signator of the La Paz Agreement, the United States shares in the responsibility to ensure that maquiladora waste is returned the United States for treatment.⁵⁸ Of the daily 164 tons of hazardous waste generated by maquila plants, approximately ninety tons were returned to the United States.⁵⁹ Thirty tons are disposed of in Mexico under national programs and forty four tons are unaccounted for.⁶⁰ On an annual basis, this would cumulate to about 50,000 tons of hazardous waste each year, 14,000 tons of which is unaccounted for. Furthermore, in 1993, SECOFI reported that 98 percent of maquila factories lack treatment systems for their wastewater.⁶¹ Much of this waste is not properly disposed of, or accounted for, but most likely winds up in local municipal landfills and dumped down the drain contaminating area water and soil.

Of the hazardous waste exported from Mexico to the United States in 1994, the first year of NAFTA, 95 percent came from one of the six Mexican border states or Baja California Sur.⁶² Almost 70 percent of the waste transported legally to the United States was disposed of in Arkansas, Arizona, California or Texas.⁶³

Residents in both Mexico and the United States are being put at risk from illegally dumped hazardous wastes. Illegally dumped hazardous waste contaminates rivers and groundwater, dispersing the toxins through a broad geographical area. As well, the water these toxics contaminate is used to irrigate crops consumed in both countries.

Since the cost of proper hazardous waste disposal is the main reason for illegal dumping, the leading maquila business journal, *Twin Plant News*, reports that the depressed economic conditions accompanying the December 1994 peso devaluation has created even greater incentive for illegal waste dumping.⁶⁴ The Mexican government has officially stated that Mexico's economic problems will make it even more difficult for Mexico to contribute to clean-up along the border.

Hazardous Waste Along the Border

Promise

While the potentially adverse effects of NAFTA on hazardous waste do not appear to be significant, the impacts in the absence of NAFTA could well be substantial... In the absence of NAFTA, the maquiladora program will continue to provide incentives for companies to locate facilities along the U.S.-Mexican border. These facilities will generate increasing levels of hazardous wastes, which will need to be transported back to the United States for management.... Mexico may be unable to obtain adequate funding to build an effective regulatory infrastructure and waste management capacity in Mexico. As a result, Mexico will continue to depend on U.S. facilities to properly manage its hazardous wastes. Finally, without additional cooperative programmatic and enforcement efforts, there is a greater likelihood that hazardous wastes imported into the United States will evade protective U.S. hazardous waste laws, and thus increase risks from potential mismanagement of these wastes.⁷⁵

—Clinton Administration
November, 1993

Reality

Since January 1994, there has been a constant increase in hazardous waste production in the border area. From 1988 to the end of 1994, the amount of hazardous waste received from Mexico in Region 6, Texas, increased more than five fold.⁷⁶

The Consejo Nacional de Industrias Ecologicas-CONIECO (National Council of Environmental Industrial Businessmen) confirmed the problem: "the inspection of the maquiladora industry is virtually non-existent...which is a great environmental problem for Mexico."⁷⁷

The peso devaluation has exacerbated the illegal dumping of hazardous waste. "The amount of unrecorded waste has increased. The maquilas are producing more, and by producing more, they are generating more waste and the government regulators now have less resources to track them with," according to David Eaton, a professor of border and environmental law in the Mexican Technological Institute of Monterrey and a legal researcher for the National Law Center for Inter-American Free Trade.⁷⁸

The tracking and disposal of hazardous waste has been one of the largest environmental issues facing Mexico since the opening of the maquiladora program in the mid-1960's. A startling amount of hazardous waste generated in the maquila zone has never been disposed of properly.

Maquila waste is supposed to be returned to its country of origin for proper disposal, according to the 1983 La Paz agreement.⁷⁹ Unfortunately, very little is actually returned, posing hazards for people and the environment on both sides of the border. Recent statistics show that about 54 percent of toxic wastes are returned properly to the United States.⁸⁰ More than one-quarter of hazardous waste from the maquila zone, roughly 44 tons per day, has an unknown end.⁸¹

NAFTA Promise—Toxic Cleanup and Better Accounting for Waste

During the NAFTA debate, proponents stated that NAFTA would usher in a new era of cooperation between U.S. and Mexican environmental enforcement agencies. New "high tech" hazardous waste accounting systems were touted by the EPA, and its then-counterpart in Mexico, SEDUE. HAZTRAKS, as the waste tracking system is known, would be the tool to catch the environmental criminals who put the lives and health of thousands of people on both sides of the border in jeopardy. Without the new level of U.S.-Mexico cooperation NAFTA would bring, NAFTA proponents argued, already serious hazardous waste problems at the border would get worse.

In promoting NAFTA passage, EPA Administrator Carol Browner spoke of great expectations for the HAZTRAKS system: "...[W]e have developed a binational database for tracking hazardous waste shipments from the maquiladora industry on both sides of the border. This database promises to be an essential tool for monitoring compliance with hazardous waste shipments laws on both sides of the border...We have been working to increase binational interaction and cooperation in investigating environmental violations. This cooperative interaction has already led to an increasing number of enforcement actions against illegal hazardous waste shippers."⁸²

NAFTA Reality—Hazardous Waste Dangers on the Rise

Hazardous waste production and transportation has been increasing since the late 1980s at a steep rate.⁸³ From 1988 to the end of 1994, the amount of hazard-

ous waste received from Mexico in EPA Region 6, which contains Texas, has increased roughly five fold.⁸⁴ The growth in maquiladora industry production following NAFTA was further intensified by the devaluation of the peso, increasing hazardous waste production in the border area. According to EPA Region 6 official Joe Shultes, there has been a 30% increase since last year in hazardous waste coming across the border.⁸⁵

Toxic Puddles Where Children Play

An accident involving an eight-year-old Juarez girl in June 1993 underscored the severe problem of toxic contamination in some maquilas. Clara Lucia Esparza was playing tag outside the gates of the Juarez Candados Presto factory, a subsidiary of Presto Lock, of Garfield, New Jersey, when her foot slipped into a hole filled with toxic waste. "As I walked, it felt like my foot was full of spines," recalled the child.⁹¹ Clara's foot was burned by a caustic solution of chemicals which local residents said came from the plant. Officials at the plant declined to comment.

Local residents complained about the pollution, and the Mexican government closed the electroplating plant for two weeks. Months later, it was business as usual at the Candados Presto factory and neighbors began to protest outside the plant, demanding the plant be cleaned up.⁹² The Mexican government permanently closed the Presto Lock facility in December, 1993.⁹³

In a situation that is all too typical of the environmental clean up promises made during the NAFTA debate, two years into NAFTA, 472 drums labeled cyanide and sulfuric acid were found at the Candados Presto site in Juarez.⁹⁴ The Mexican government had allowed the plant to clean up under federal supervision before it was shut down, but apparently not all the toxic chemicals were removed.⁹⁵ Presto Lock is no longer active in Juarez, and no longer appears in New Jersey telephone listings. On May 18, 1995, the Mexican environmental protection agency, PROFEPA, gave Candados Presto 10 days to remove all toxic chemicals from its former maquiladora.⁹⁶ The complaint charges unidentified parties with failure to dispose of hazardous materials and the unauthorized removal of equipment and machinery from the plant. It also charges the owner of the land leased to Candados Presto, a real estate company called En Mobiliaria del Bravo, S.A., with failure to clean the site after the plant closed.⁹⁷

In an August 1995 *Excelsior* interview, Mexican Ecology Commission President Oscar Canton Zetina reported: "each year seven million tons of toxic wastes are, without control, illegally dumped in drains and marine waters. Only one percent are under surveillance in the country."⁸⁶ The Consejo Nacional de Industriales Ecologistas-CONIECO (National Council of Environmental Industrial Businessmen) confirmed the problem. "The inspection of the maquiladora industry is virtually non-existent... which is a great environmental problem for Mexico," reported an August 1995 story on the CONIECO analysis

of the situation in the newspaper *Excelsior*.⁸⁷

The peso devaluation has exacerbated the illegal dumping of hazardous waste. "The amount of unrecorded waste has increased. The maquilas are producing more, and by producing more, they are generating more waste and the government regulators now have less resources to track them with," according to David Eaton, a professor at the Technological Institute of Monterrey.⁸⁸

Eaton also believes that the peso devaluation "has created additional incentives to dump wastes illegally. Mexico imports the vast majority of the equipment used to dispose of and transport hazardous waste. Subsequently, prices have risen considerably at a time when companies must tighten their belts. Proper disposal of hazardous waste has become a luxury many companies cannot afford," he wrote.⁸⁹

*Entries in the HAZTRAKS database indicate that of the 101 maquiladoras in the Baja California border city of Mexicali, only 20 have ever filed a manifest showing compliance with proper waste return.*¹⁰⁰

Observers report that much of the waste still simply is washed down the drain by plant employees. For example, in May 1995, the newspaper *Diario de Juarez* reported that in Ciudad Juarez, of the 352 industries which generate hazardous wastes, only 70 plants reported proper disposal in Mexico or of the waste being returned to its country of origin.⁹⁰ That means that only 20% of the Ciudad Juarez maquilas generating hazardous waste are disposing of it properly.

Proper hazardous waste management in Mexico should be a prime concern for all North Americans. When wastes are dumped illegally, they contaminate rivers and groundwater. This means contaminated drinking water for Mexicans. Moreover, the same water is used to irrigate crops—which, under NAFTA, are increasingly consumed in all three NAFTA countries.

As well, only a small percentage of companies properly pre-treat waste to remove metals and toxics from waste. The contamination of industrial wastewater with such metals and toxics poses serious additional problems to the effectiveness of any prospective border wastewater treatment facilities. These metals and toxics destroy the bacteria required to operate the activated sludge process through which residential wastewater is

cleaned.⁹⁸ Some believe that the increase in toxic waste is the cause for problems with the sewage and drainage systems in Ciudad Juarez, Mexico. "Waste drainage facilities are collapsing,... they believe toxic waste is being dumped, and it is eroding the pipes" according to Richard Boren, the El Paso coordinator for the International Environmental Alliance of the Bravo.⁹⁹

Meanwhile, with the amount of hazardous waste production increasing with each year of NAFTA, the much-touted HAZTRAKS program, has not been effective in reducing the illegal disposal of hazardous waste. While a fine concept, in practice, the HAZTRAKS process is so cumbersome that, even if it does nab a hazardous waste dumper, it is six or more months after the deed is done.¹⁰¹ And, even when a 'Responsible Party' is identified, the program does not provide authority or funds to remediate the situation, or deal with the resulting health problems.¹⁰²

Despite its shortcomings in remediating the growing post-NAFTA hazardous waste problem in the border zone, HAZTRAKS has turned up some useful and disturbing information in Mexicali with regard to the amount of waste generated there and the amount returned to the United States for proper disposal. Entries in the HAZTRAKS database indicate that of the 101 maquiladoras in Mexicali, only 20 have ever filed a manifest showing compliance with proper waste return.¹⁰³

Although touted as a binational monitoring system, the HAZTRAKS database is only fully operational in the United States. HAZTRAKS is a computerized system and a serious problem is inadequate computer support in Mexico. Although SEDUE, the Mexican environmental agency in existence when NAFTA was debated, had com-

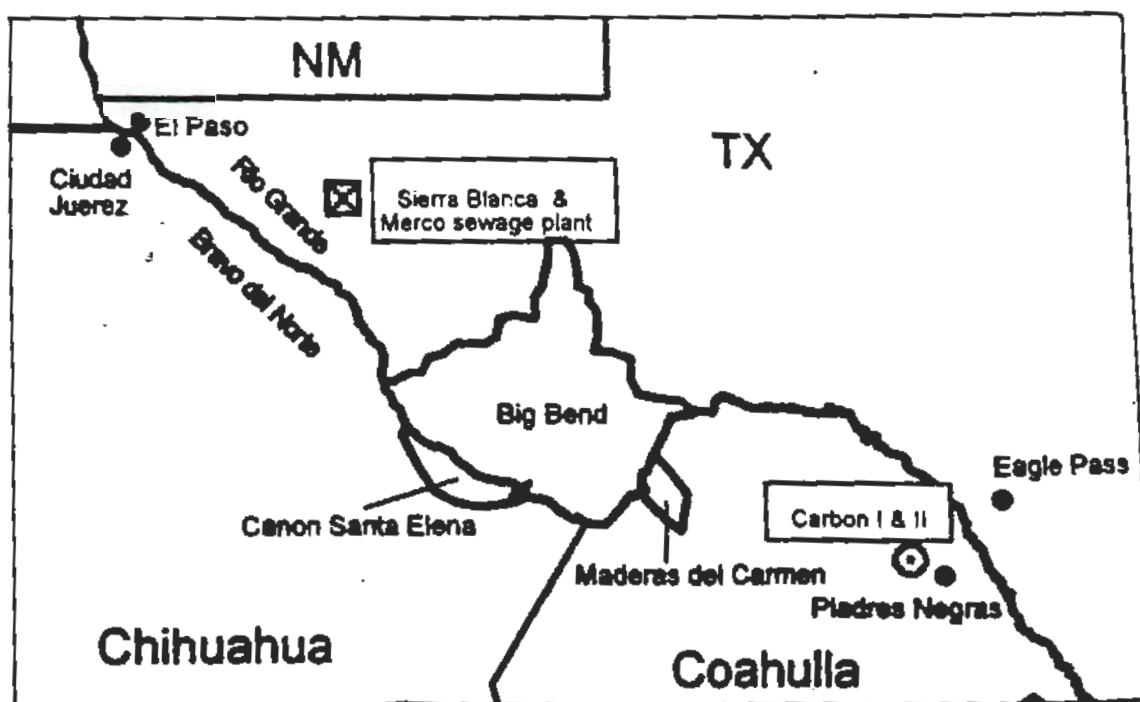
puters, that agency was eliminated in a reorganization. After NAFTA passage, SEDUE's computers went to PROFEPA (Procuraduria Federal de Proteccion al Ambiente), the agency which assumed SEDUE's environmental jurisdiction. In this reorganization, three Mexican border states were left without computers. One of these was the state of Chihuahua, which is the largest single generator of hazardous waste.¹⁰⁴ The U.S. EPA had not received any 1995 HAZTRAKS data from Mexico until recently.¹⁰⁵ Finally, in late November 1995, all three states were provided computers, not by their government, but by the EPA. These states are in the process of updating their past data. The EPA has now received 1995 data that is fairly complete, except for that from Chihuahua.¹⁰⁶ Thus, the HAZTRAKS database is missing months of data from one of the most crucial states, and has not been fully operational for nearly all of NAFTA's second year.

Nuclear Waste

An indication of the post-NAFTA disregard for the health and safety of border residents and the environment is a proposed "low-level"¹⁰⁷ nuclear waste dump at Sierra Blanca, in Hudspeth County, in west Texas. The proposed dump is also a vivid example of the post-NAFTA reality of failed environmental and health improvement promises.

In the spring of 1995, approval was given for New York City to dump its sewage sludge here. Local residents opposed to the sludge dumping have used data from the New York Department of Environmental Quality to show that the sludge contains lead, arsenic, and cadmium.

BIG BEND AND SURROUNDING REGION



Sludge Dumping

Already at the proposed Sierra Blanca radioactive waste site is a dumping ground for waste for sewage sludge, also known as biosolids. Sierra Blanca is already receiving sewage sludge from New York City at a rate of 225 tons per day under a 6 year contract with the Merco Joint Venture Company, a corporation chartered in New York state.¹⁰⁸ Based on the average composition of the sludge using figures provided by the New York Department of Environmental Quality, Save Sierra Blanca's Addington calculated that in the course of one year, Merco deposits 3,357 pounds of arsenic, 3,021 pounds of cadmium, 260,503 pounds of copper, and 85,089 pounds of lead on its tract of land.¹⁰⁹

According to the *New York Times*, Merco used all means necessary—putting 40 local public officials on its payroll and spending \$598,000 on public relations, to get Texas state approval of its project. The approval process, which usually takes months, took only 32 days for the Merco project, placing the largest sewage sludge project in the world only 16 miles from the Rio Grande.¹¹⁰

Add this to a string of other proposed hazardous waste dumps along the border (many of which are slated to handle maquiladora waste), and you have an impoverished, minority community bearing the brunt of the waste for the profits of distant corporations. Over 70 percent of the residents of Hudspeth County, Texas, where Sierra Blanca is located, are Hispanic and over 40 percent of the residents live below the poverty line.¹¹¹

On September 19, 1995, the U.S. House of Representatives denied a "compact" between Texas, Maine and Vermont, which requested approval for Texas to accept radioactive waste from Maine and Vermont.¹¹² However, Congressional staff expect the dumps' proponents to bring the bill, H.R. 558, up again, and Texas utilities have been lobbying federal legislators who voted against the compact. Texas is going ahead with plans to establish a dump to be used for Texas-generated radioactive waste, for which it does not need approval by the U.S. Congress.¹¹³

Despite protests from local citizens and nearby Mexican officials, this poor, isolated and largely Hispanic community also remains a primary target to be turned into the nuclear dumping ground for Texas, and, quite possibly, other states across the country. Scheduled to open in 1997, the Sierra Blanca nuclear waste site will permanently store nuclear power plant waste from Texas, and, if the U.S. Congress approves, from Maine and Vermont, with the possibility of adding many other states.

The site is in "the most tectonically active area within the state of Texas," according to a licensing document filed with the Texas Low-Level Radioactive Disposal Authority.¹¹⁴ There have been three earthquakes in the area in the past two years, including an earthquake in April 1995 that measured 5.6 on the Richter scale near Alpine, Texas, only 100 miles south of the site.¹¹⁵ Sierra Blanca is also located only 16 miles from the Rio Grande river, and close to surface and subsurface water-drainage system.¹¹⁶ The site is also above the West Texas Bolson (aqui-

fer), which now supplies drinking water for five counties, and which El Paso itself is predicted to need as a source of drinking water within the next decade.¹¹⁷

The proposed waste site is also opposed by Mexican government officials and Mexican citizens living across the border from the site. "My government is concerned that toxic and low-level nuclear disposal facilities be built so close to the border. Texas is such a huge state and they try to send all three of their dumps to the border," said Roberto Gamboa Mascarenas, the Mexican Consul General in El Paso, Texas.¹²⁶ The Ciudad Juarez city council also issued a statement of opposition to the proposal: "The underground water could face contamination and consequently, the Bravo's (Rio Grande's) riverbed; furthermore, the river's waters would face contamination from radioactive leaks which pose danger for the residents not only of that community but on both sides of the border."¹²⁷

Hazardous Material Transportation

Since NAFTA, the number of hazardous material shipments across the U.S.-Mexico border has increased.¹¹⁸ Regulation of such toxic transports remains grossly inadequate.¹¹⁹ Starting December 18, 1995, NAFTA's transportation rules permit U.S. and Mexican trucks to operate freely in all border states. (Before NAFTA, international truck traffic was limited to a small corridor on either side of the border.) Because of heightened concern by safety and environmental groups and some border state attorney general, it is unclear if this open border rule's implementation will be delayed. According to the office of the Texas Attorney General, any trucks carrying such hazardous materials are oversized, undermaintained and uninsured. Overall, compliance with proper hazardous material documentation requirements of the U.S. Department of Transportation was only two percent at Laredo, the busiest U.S.-Mexico border crossing.¹²⁰ More than a fourth of the approximately 5,000 Mexican trucks that cross into Texas each day carry corrosives, chemicals, explosives, jet fuel, poisons, toxic waste and pesticides.¹²¹ The U.S.-Mexico Hazardous Waste Tracking System reports that in two of Texas' most heavily traveled areas, EPA regions 6 and 9, the amount of hazardous waste received from Mexico has been increasing.¹²² In 1993, 9,826 tons of hazardous waste was received from Mexico in EPA regions 6 and 9 combined; in 1994, 10,321 tons of hazardous waste were received from Mexico.¹²³ Recently Texas state Attorney General Dan Morales traveled to Washington, D.C. to request authority for Texas Department of Public Safety officers to enter U.S. Customs facilities to help inspect trucks. Furthermore, he requested funds to set up a prototype one-stop inspection facility where trucks can be inspected for drivers' licenses, registration, weight, narcotics, hazardous waste and valid insurance.¹²⁴ Morales has not yet received an answer to his requests.¹²⁵

Every other existing U.S. "low level" radioactive waste dump has leaked.¹²⁸ In Texas, the waste will be buried in shallow trenches. According to Bill Addington, Director of Save Sierra Blanca, the proposed dump is also a flagrant example of disregard for the La Paz Agree-

ment,¹²⁹ the U.S.-Mexico border treaty which requires governments to consult on and evaluate "... projects that may have significant impacts on the environment of the border area."¹³⁰

"My Government is concerned that toxic and low-level nuclear disposal facilities be built so close to the border. Texas is such a huge state and they try to send all three of their dumps to the border."

—Roberto Gamboa Mascareñas,
the Mexican Consul General,
El Paso Texas.¹³¹

Explosive Chemicals in Nogales Sewage

Shortly after NAFTA went into effect in February 1994, the very real threat of dumping hazardous substances down the factory drain was discovered in the twin cities of Nogales, Sonora and Nogales, Arizona.¹³² Explosive levels of petroleum were found in the sewage system as waste reached a plant on the U.S. side of the border where chlorine is added to the sewage, on February 17, 1994.¹³³ Five thousand people in Nogales, Arizona schools, businesses and some neighborhoods had to be evacuated.¹³⁴ Tracing the source proved impossible because of the number of potentially responsible parties in Nogales, Sonora.

"It's scary when these alarms go off because you never know what it is. Who knows what kind of chemicals they [maquiladoras] are using?"

—Jose De La Ossa,
Nogales Arizona Fire Chief¹³⁷

After the 1994 evacuation, the International Boundary and Water Commission installed a warning device at the border where the sewage comes in from Nogales, Sonora to Nogales, Arizona. Fire Chief Jose De La Ossa of the city of Nogales, Arizona said that the warning device goes off almost every day.¹³⁵ He also said that none of the alarms have been very serious. Rather, the device is fairly sensitive and there is always some type of

chemical or gasoline coming through the system, so it is continually triggered. The source of the original leak has never been tracked down. Two years after NAFTA's promised improvements, more hazardous waste is being created and dumped. "It's scary when these alarms go off because you never know what it is. Who knows what kind of chemicals they [maquiladoras] are using?," said Nogales, Arizona Fire Chief, Jose De La Ossa.¹³⁶

Placing warning systems like Nogales' in more locations may help avoid another tragic explosion such as that which occurred in the Guadalajara sewer system in 1992. In April 1992, an explosion in the Guadalajara sewer system killed at least 191 people, injured 1,500 and devastated about 20 city blocks.¹³⁸ The main cause of the explosion was identified as buildup of gasoline in the city sewage system caused by a leaking gas pipe of the Mexican national monopoly oil company, Pemex.¹³⁹ Absent strong measures to reduce the sources of such contamination, the border population remains exposed to explosive risk.

Tijuana Lead Contamination Mountain Unremediated Two Years After NAFTA

The notorious case of the Alco Pacifico lead and arsenic mountain contaminating a Tijuana residential area, including a dairy, was one of the high-profile examples of the human health risk of border toxics brought to North America's attention by NAFTA media coverage. Remarkably, *not even* this highlighted toxic waste site has been remediated in the two years since NAFTA went into effect.

Alco Pacifico, a smelter located just east of Tijuana among the farms that supply milk for Tijuana, was hired by RSR Inc.'s City of Industry, CA operation called Quemetco.¹⁴⁰ Alco Pacifico was hired to transport lead from batteries to its Tijuana area smelting operation to "process" the batteries and return the salvaged lead to RSR.¹⁴¹

In 1991, Alco Pacifico closed down the smelter as business went sour and the Mexican government increased pressure because of residents' complaints of pollution.¹⁴² In the El Florido, Tijuana neighborhood, where the plant had been located, authorities found a 31 million pound toxic nightmare covering 14 acres.¹⁴³ Toxic lead slag and other toxic substances, such as arsenic and cadmium, were found in an uncontained powdery mini-mountain of waste accumulated from years of battery cracking at the site.¹⁴⁴

The Mexican government says there is little danger to people or dairy animals in the immediate vicinity.¹⁴⁵ However, others disagree, saying the waste site has had health effects in the El Florido, Tijuana community. "The smelter was located behind a large dairy. Cows are dying for unexplained reasons. Imagine what effect this is having on the kids who drink the milk," said Mary Tong, Director of the Support Committee for Maquiladora Workers.¹⁴⁶

In preparation for a study by the National Religious Partnership for the Environment, an independent en-

environmental firm tested the Alco Pacifico soil and found 5600 parts per million of lead and 51.8 parts per million of arsenic.¹⁴⁷ The legal concentration in the United States is 300 ppm for lead and 30 ppm for arsenic.¹⁴⁸

Some of the health effects attributed to lead are central nervous system problems causing fatigue, impaired concentration and behavior changes, and seizures, reduced sperm count in men, anemia, high blood pressure and hearing loss.¹⁴⁹ The danger is greatest for infants, young children, and pregnant women, since over-exposure to lead can irreversibly stunt mental and physical development.¹⁵⁰

A settlement was reached with the companies that had supplied Alco Pacifico with the batteries, Quemetco of City of Industry, California and RSR of Dallas, Texas (the company's national headquarters) for \$2.5 million.¹⁵¹ Of the \$2.5 million, \$300,000 was given to the U.S.-Mexico Border Progress Foundation, a San Diego-based binational non-profit organization which promotes education on environmental and public health issues.¹⁵² Two million dollars were placed in a trust account by the L.A. County District Attorney's office to be used by the Mexican government to start clean-up of the toxic site.¹⁵³

Two years after NAFTA, the clean-up, for which there is funding and which was supposed to begin January 1994, has not even been started.¹⁵⁴

In 1993, a Mexican official had lauded the case and its multi-million dollar settlement as indicative of the kind of effective cooperation possible under the then-proposed NAFTA.¹⁵⁵ Yet, according to David Eng, the L.A. County District Attorney who won the settlement, "The Mexican government has made little effort to clean up the site, and now has asked me to direct the operation."¹⁵⁶

As an interim solution, the Mexican government has covered the lead mountain with a plastic tarp.¹⁵⁷ Environmental activists argue that this is not even a sufficient

temporary solution, since the tarp blows away regularly and when it rains, lead is absorbed into the soil. "The soil is completely contaminated. When it rains the soil absorbs the lead. There are still people living close to the site," says Maunilio Sanchez Pachura, from the Citizens' Committee of Restoration of Del Padre, a Tijuana group that has worked in the border area for the last thirteen years.¹⁵⁸

The U.S.-Mexico Border Progress Foundation, which was given the \$300,000, put together a survey and educational brochures on lead poisoning. According to Elsa Saxod who heads the project, "The surveys are primarily to find out what the residents know about lead. It's a way to find out what people know without insulting their intelligence."¹⁵⁹

When asked about her community's reaction to the survey, Marta Rocha, who heads a group of activist home makers, reported: "We couldn't believe it. We just wanted the money to go to clean the site and instead they put this useless leaflet together. We already know about the health effects. Besides, brochures and surveys cost \$900,000?!"¹⁶⁰

Meanwhile, also in December, 1993, the Los Angeles County District Attorney's office had prosecuted Alco Pacifico for transporting toxic lead slag across the border and abandoning the waste in Tijuana, thus breaking California laws regulating transfer of toxic waste.¹⁶¹ Alco Pacifico's president, a U.S. citizen named Morris Kirk, agreed to plead no contest to felony charges in breaking California's toxic waste hauling law.¹⁶² Kirk was sentenced to sixteen months in prison, beginning January 25, 1994 and was also to pay \$5.7 million.¹⁶³ As of November, 1993, nearly two years later, the fine remained unpaid and according to the Los Angeles District Attorney's office, it will be difficult to obtain since the company went bankrupt.¹⁶⁴

Chapter 3

Border Health Crisis: Neural Tube Birth Defects

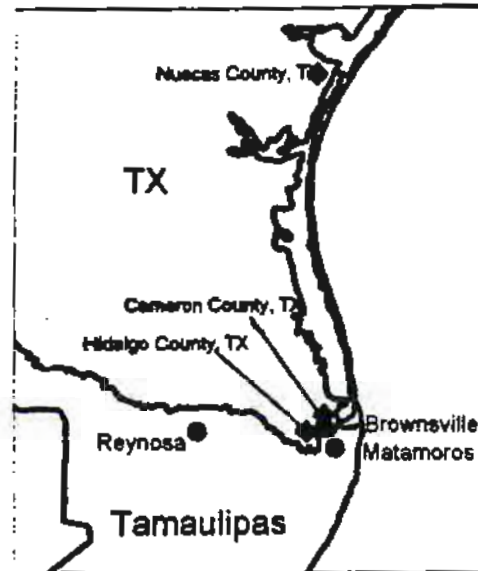
Promise

"I've seen the babies born with birth defects. The NAFTA package gives us the ability to assure that [those problems] will be addressed."¹⁶⁵

—Lloyd Bentsen,
then Treasury Secretary, November 1993

Reality

The incidence of neural tube birth defects has not improved since NAFTA took effect in 1994, and may actually be increasing. Cameron County, the location of the pre-NAFTA anencephaly cluster, reported 15 cases in 1994, up 36 percent from 1993, when 11 cases were reported. In early 1995, a new post-NAFTA anencephaly cluster was identified in Eagle Pass, Texas and Piedras Negras, Mexico. In all of 1992, only two cases were reported in the Texas county in which Eagle Pass is located. In 1993, four cases were reported. In December 1994 through February 1995, three cases were reported, one per month. The cause of this deadly birth defect remains unknown, as does an explanation for the high rate of its occurrence in the U.S.-Mexico border zone.



During the 1993 NAFTA debate, the North American public came to know the pain of families who, after nine months of anticipation, could only plan funerals for their babies born with the fatal anencephaly birth defect. The anencephaly tragedy became closely connected to NAFTA when ABC's Prime Time Live aired a segment called "The Poison Next Door" in 1993 during the NAFTA debate.

Anencephaly is one of a category of neural tube birth defects that includes spina bifida. Anencephaly is a de-

Background on the U.S.-Mexico Border Anencephaly Cluster

In just one 36-hour period in the spring of 1991, three women gave birth to anencephalic babies at the Valley Regional Medical Center in Brownsville, Texas.¹⁶⁶ The cluster of this rare birth defect, in which a full term baby is born with incomplete or missing brains and/or skulls, puzzled doctors at the hospital. Puzzlement and sadness gave way to alarm and horror after the doctors discovered many more cases over a short period of time in Brownsville, a city located in Cameron County, Texas.¹⁶⁷

By May 1992, doctors had found 30 anencephaly cases in Texas in as many months.¹⁶⁸ These findings were occurring at a rate higher than the normal occurrence rate of this rare defect in the United States, which is 3.1 per 10,000.¹⁶⁹ At least 42 cases were identified across the border in Matamoros, Tamaulipas in the same period, with a dozen cases at one hospital alone.¹⁷⁰ Data from Tamaulipas, which borders Texas in the Lower Rio Grande Valley and contains both the Reynosa and Matamoros maquila areas, showed 386 recorded cases of anencephaly between 1987 and 1992.¹⁷¹ Many cases of birth defects along the border in both Mexico and Texas are thought to go unreported because lay midwives, who are not registered with local health authorities, deliver almost 40% of local babies.¹⁷²

From 1986 through 1991, Cameron County recorded 68 cases of severe neural tube defects, (including anencephaly and other neural tube birth defects, such as spina bifida), for a rate of 18.9 per 10,000 births.¹⁷³ This is more than two times the current U.S. average for neural tube birth defects of 6.2 per 10,000.¹⁷⁴ Moreover, the rate of neural tube birth defects has been declining in many parts of the world. In the United States, rates have declined considerably in the past 20 years from about 20 per 10,000 births, in the late 1960s, to about 8 per 10,000 births in the late 1980s.¹⁷⁵

fect that prevents a full term baby from forming a complete brain and/or skull. A cluster of such birth defects occurring at a rate significantly above U.S. norms was discovered in Brownsville, Texas in 1991. Brownsville, Texas is located directly across the border from Matamoros, Mexico, the location of a large maquiladora industrial zone. Matamoros was soon also discovered to have a high incidence of the tragic birth defect.'

New Anencephaly Birth Defect Cluster Since NAFTA

Late in 1994, the Texas Department of Health's Neural Tube Disorders Surveillance and Intervention Project received notification from its Laredo field team of what appeared to be a higher-than-expected number of anencephaly and spina bifida cases in Eagle Pass, Texas.¹⁷⁶

In fact, the rate of these rare defects had been climbing in Maverick County Texas, where Eagle Pass is located. In all of 1992, the Neural Tube Disorder team reported only two cases in the county.¹⁷⁷ In 1994, there were four cases reported.¹⁷⁸ Then, in the three-month period of December 1994 to February 1995, the field team recorded a total of three cases, one each month.¹⁷⁹ At the same time, Eagle Pass' Mexican sister city, Piedras Negras, reported three cases in a two month period from February to March 1995.¹⁸⁰

The Texas Department of Health's Neural Tube Defect Surveillance Project reported that in 1994, there were 66 neural tube disorder-affected pregnancies in a 14-county study area, including Cameron, Hidalgo, Webb, and El Paso counties.¹⁸¹ Of the 66 cases, 31 were anencephaly, 32 were spina bifida and 3 encephalocele.¹⁸² The overall Neural Tube Disorder rate of 14.2 per 10,000 live births in 1993 increased to 14.6 in 1994.¹⁸³ Cameron County alone experienced a 35 percent increase in its Neural Tube Disorder rate, from 14.4 per 10,000 to 19.5 per 10,000.¹⁸⁴ The study area anencephaly rate was 6.4 per 10,000 live births in 1993 and 6.9 per 10,000 live births in 1994.¹⁸⁵ The spina-bifida rate was 6.7 per 10,000 live births in 1993 and 7.1 per 10,000 live births in 1994.¹⁸⁶

The unusually high levels of birth defects along the U.S.-Mexico border over the past decade have been, and currently are being, studied by doctors and public health specialists. According to Drs. Wilkenson, Rocco and Daniels in their recent study, "Epidemiological Study of Neural Tube and Other Birth Defects in the Lower Rio Grande Valley," birth defect studies play an important public health surveillance function because prior epidemiological research has documented fetal susceptibility to a variety of workplace and environmental exposures to toxic substances.¹⁸⁷

There is evidence from both U.S. border state and Mexican public health records that the rate of neural tube birth defects, such as anencephaly, had been increasing on both sides of the border prior to NAFTA, particularly in the late 1980's and early 1990's. For instance, rates of anencephaly in the Mexican border city of Matamoros, Tamaulipas increased from 3 per 10,000

births in 1987 to 15 per 10,000 births in 1992.¹⁸⁸ In Cameron County, the location of Matamoros' sister city of Brownsville, Texas, the number of anencephaly cases increased from 8.1 per 10,000 live births in 1986 to 20.6 per 10,000 live births in 1991.¹⁸⁹

For NAFTA opponents, the horror of the border anencephaly cluster was an example of the possible human health effects of industrialization without regard for health and environmental considerations. NAFTA proponents pointed to the anencephaly tragedy as the sort of human health crisis that could only be solved through the better cooperation, new environmental funding and increased prosperity that they believed NAFTA and its environmental institutions would bring.

Despite the media and public attention brought to the problem, the incidence of neural tube birth defects has not improved since NAFTA took effect in 1994, and may actually be increasing. According to the Texas Department of Health, in 1994, NAFTA's first year, there were 15 recorded neural tube defects in Cameron County, up from 11 in 1993 (a 36 percent increase).¹⁹² The increase of birth defects in 1994 found in Cameron County was significantly larger than the increase for the entire 14 county area included in the Texas neural tube defect study.¹⁹³

Why Brownsville-Matamoros?

A 1995 epidemiological study found an interesting correlation between the level of area industrial activity and the neural tube birth defect rate. The study, by doctors at the University of Texas, the University of Indiana, the Gansu Public Health and Anti-Epidemic Institute in the Peoples Republic of China and the Brownsville Community Health Center, reported a strong correlation between the anencephaly rate in Cameron County increasing and decreasing as the level of industrial activity in the nearby Matamoros maquiladora zone increased and decreased.¹⁹⁰ Meanwhile, the anencephaly rate in two countries with similar population demographics, but located farther away from the Matamoros maquiladora zone, Hidalgo and Nueces Counties, did not show such a correlation.¹⁹¹

As well, nearly two years after NAFTA passage, and despite U.S. and Mexican local, national and international media attention, the cause of anencephaly generally, and of the border clusters specifically, remains unknown, and *a new U.S.-Mexico border cluster of the disease was identified with affected births occurring in late 1994 and early 1995.*

"We are concerned with the unusual number of anencephaly and spina bifida cases. This is why we are calling it a cluster, and this is why we are investigating. This was not expected at all." Dr. Russell Larsen of the Texas Department of Health said of the new EaglePass/Piedras Negras cluster.¹⁹⁴

Causes of the Deadly Anencephaly

The cause of anencephaly generally, and the high rate of anencephaly in some U.S.-Mexico border areas, re-

remains unknown. A variety of factors have been thought to play a role in the cause of anencephaly, major ones being socioeconomic factors, nutrition (particularly maternal consumption of folic acid), use of prescription and over-the-counter drugs during pregnancy, and environmental factors (particularly parental occupational factors).¹⁹⁵

A 1992 study, instigated after the Brownsville-Matamoros cluster was identified, by the Texas Department of Health and the Center for Disease Control (TDH-CDC) identified four possible causes of anencephaly: in consumption of aflatoxin-contaminated corn during pregnancy, pre-natal folic acid vitamin deficiency, maternal intake of any medication (except prenatal vitamins) and exposure to toxic substances.¹⁹⁹ The TDH-CDC study ruled out an early hypothesis that the cause was a highly toxic aflatoxin fungal contamination of corn used to make tortillas.²⁰⁰ The fungus causes a severe food poisoning, and had been hypothesized to also cause birth defects.

Matamoros Maquila Zone Found to Be Highly Contaminated by Solvents

In 1990 and 1991, the National Toxics Campaign had samples taken from several U.S.-Mexico border maquila zones to be tested by an EPA-certified lab.

A variety of solvents were found in extremely high concentrations in the soil and water samples taken in Matamoros adjacent to maquiladoras which utilize these chemicals in their production processes. Samplings of effluent from 23 maquilas near the Rio Grande/Rio Bravo close to Brownsville, Texas found levels of solvents at several sites that were many thousands of times above the allowable EPA standards.¹⁹⁶ For example, in a canal running out of the property of Stepan de Mexico (a subsidiary of Chicago-based Stepan chemical), the solvent xylene was detected at 52,700 times the EPA standard.¹⁹⁷ Methylene Chloride dumped in a ditch at the Rimir General Motors Plant in Matamoros exceeded U.S. federal standards for "receiving waters" (the amount of contaminant that can be in a fluid being dumped into a river or other body of water) by as much as 215,000 times.¹⁹⁸

The study found that mothers who reported taking any medication, except prenatal vitamins, during pregnancy had a significantly increased risk, seven fold, of conceiving babies with neural tube defects.²⁰¹ Such a link between the use of medications during pregnancy and birth defects has been documented in the past. This factor, however, is not unique to the U.S.-Mexico border regions in which a high rate of anencephaly has been documented.

The TDH-CDC study then proceeded to focus mostly on the folic acid theory. The study concluded that folic acid is critical to the early stages of pregnancy²⁰⁵ and found that high doses of folic acid one month before pregnancy and through the first trimester can significantly reduce the chance of women who have previously had babies affected by anencephaly of having another

baby with a neural tube defect.²⁰⁶ The Center for Disease Control has published guidelines recommending the use of folic acid by women who have had an anencephalic pregnancy.

However, the TDH-CDC research team also found that folic acid deficiency was not necessarily found in mothers of anencephalic children. "Case" mothers had higher folic acid blood levels than "control" mothers.²⁰⁷ However, high doses of folic acid seemed to reduce the rate of repeated anencephaly incidence.

Low Birth Weights of Maquiladora Workers' Babies

Women working in garment manufacturing and electronics assembly in maquilas in Tijuana, Mexico have babies with lower birth weights than those born to women who worked in service-related industries.²⁰² According to a study published in the December 1993 issue of *American Journal of Industrial Medicine*, babies of women in the garment industry averaged 653 grams less and babies of women in the electronics industry averaged 337 grams less than babies born to women who worked in the service industry.²⁰³ The impact of maquiladora working conditions on reproductive health, including birth weights of maquila workers' babies, is significant because there are over 350,000 women working in the maquiladoras who are of reproductive age.²⁰⁴

Currently, there is a great deal of discussion in the scientific community about the potential benefit of folic acid in the prevention of a first neural tube defect affected pregnancy.²⁰⁸ However, the biological reason for why increasing maternal folic acid intake is connected to the rate of neural tube birth defects remains unknown. One hypothesis is an interaction between environmental exposures and poor folate intake.²⁰⁹ However, to date, no data exist on such interactions.

The fourth possible cause, environmental factors, especially toxic contamination from exposure to solvents and pesticides, was not sufficiently addressed by the Texas Department of Health-Centers for Disease Control study, according to Dr. Carmen Rocco a pediatrician with the Brownsville Community Health Center. "They conducted the study in a manner that would produce the expected outcome, without regard for important cross-border data," she said.²¹⁰ The THD-CDC study recognizes environmental exposures as worthy of consideration as possible factors in anencephaly. However, according to Dr. Rocco's review of the THD-CDC study, if toxicological testing of affected mothers and babies' blood had been done, much information on toxic exposure could have been revealed that would have helped clarify the role of toxic contamination on the high incidence of neural tube birth defects.²¹¹

The TDH-CDC study was loudly criticized by various health experts for its singular focus on the folic acid

hypothesis. "What have they done? They haven't done anything. They haven't collected a single blood sample or tissue sample of any of the babies born in Brownsville," said Tony Zavaleta, a Dean at the University of Texas at Brownsville.²¹² Paula Gomez, director of the Brownsville Community Health Center, echoed similar concerns, "The CDC is refusing to call it an epidemic. We're calling it an epidemic... I believe it's environmental... I think it has the potential of being an international political problem."²¹³

"I am convinced some event or events occurred during that time, something in the environment that cannot be explained."

*—Dr. Carmen Rocco,
a Brownsville pediatrician²²⁰*

Critics of the TDH-CDC study point to a 1979 Finnish study, which tied anencephalic birth defects to a mother's exposure to chemical solvents which are widely used in production processes such as electronics manufacturing.²¹⁴ Such solvents, for example chemicals used to clean or mix in paint, and in plastics and electronic manufacturing, are also widely used as "inert" ingredients in many pesticides.²¹⁵ Pesticides, plastics, and electronics manufacturing are all large areas of maquiladora production.

A 1990 paper, using Texas birth and death records from 1981-1986, published in the *American Journal of Epidemiology*, found that men who worked in certain industries were 2.5 times more likely to father an anencephalic child.²¹⁶ For example, the study showed that fathers employed in occupations associated with solvent exposure were more likely to have offspring with anencephaly, with painters having the highest risk.²¹⁷

Other studies have also found a link between exposure to toxics and anencephaly. While most anencephalic babies are not autopsied, the tissues of one anencephalic baby in Brownsville, Texas in 1991 contained residues of DDE, DDT and Lindane, all pesticides which are banned in the United States.²¹⁸ Also, phenylglyoxilic acid, a breakdown product of the chemicals styrene and ethylene, which are used in the manufacture of plastics, was found in the baby's body at levels three times the allowable U.S. occupational exposure for adults.²¹⁹

However, none of this evidence conclusively points to maquiladora toxics as the cause of the border area anencephaly clusters. Findings of a recent study by Dr. Greg Wilkinson of the University of Texas Medical Branch at Galveston, Dr. Carmen Rocco of the Brownsville Community Health Center, Dr. Dennis Daniels of the University of Indiana, and Lei Meng of the Gansu Public Health

and Anti-Epidemic Institute of the Peoples Republic of China found a strong correlation between the rate of anencephaly in Cameron County, Texas and the prevalence of incidence of industrial activity in the nearby Matamoros maquila center.²²¹

The Mallory Babies: Setting a Dangerous Precedent

The case of the "Mallory babies" in Matamoros, Mexico involved 80 women who worked at the American-owned Mallory Capacitor Company factory between 1968 and 1977. Many women from the plant, which made capacitors used in televisions, had babies with similar birth defects. In a lawsuit originally filed by 42 families on September 23, 1991, families of some of the 120 Mallory children charged that the defects were caused by daily exposure of the pregnant women to a powerful solvent.²²⁵ The women were not warned of the dangers of the solvent, even though they were required to handle the substance without adequate protection.²²⁶

During the 1960's and 1970's, women at the factory were exposed to PCB's and by the early 1980's, "Mallory Syndrome" was the term used by residents in the community to describe their children with deformed limbs, unusually-sized noses, small mouths and learning disabilities.²²⁷ The children's mental impairments resembled those of children born with Down's syndrome. Families were unaware of the cause of their children's health problems until they noticed a trend among many children in the area born with similar afflictions within a few years of one another. The common factor among these children was that their mothers worked at the plant. Mallory Capacitor Company went out of business in 1977 and was acquired by the Emhart Group²²⁸ and then a succession of other companies.²²⁹ Four additional suits were filed, ultimately totalling 270 claims.²³⁰ The Mallory case resulted in a February 1995 settlement offer of \$15 million from two defendants in the case, Duracell and Kraft Foods. In making the offer to 80 Mexican families involved in five separate suits, the companies, which were successor owners of Mallory, have admitted no wrongdoing.²³¹

This 1995 report, which correlated 12 years of Matamoros industrial activity and Brownsville anencephaly rates, finds that the prevalence of anencephaly in Cameron County, Texas is strongly correlated to the number of nearby maquila plants and employees: "As maquila activity has waxed and waned, so has the anencephaly rate increased and decreased in Cameron, but not in Hidalgo or Nueces [the other two counties studied]."²²² The three counties were chosen for the study because they have similar demographics. Differences in the rates of anencephaly in these counties might indicate how the prevalence of anencephaly and other neural tube birth defects vary according to geographic proximity to the Matamoros industrial complex.

The researchers had hypothesized that anencephaly prevalence would be highest in Cameron County, lower in Hidalgo County and lowest in Nueces County if envi-

ronmental factors associated with the maquiladora industry in Matamoros were related to the prevalence of birth defects on the U.S. side of the border.²²³ (Cameron County is closest to the Matamoros maquila complex.) If agricultural factors were related to the prevalence of birth defects, the researchers hypothesized, the prevalence of birth defects would be highest in Hidalgo County, the location of the most agriculture among the three counties, followed by Cameron and then Nueces Counties.²²⁴

In fact, Cameron County, which is located in proximity to the Matamoros maquila zone, had the highest prevalence of anencephaly, providing a strong correlation between these two variables.²³² The study reported a somewhat weaker correlation between the number of workers employed each year by the Matamoros maquila plants and the annual prevalence of anencephaly in Cameron, but not the most geographically-distant Hidalgo County.²³³ Interestingly, the association was only found with anencephaly, with the correlation between other neural tube defect rates and Matamoros industrial activity weak enough to be coincidence.²³⁴

Links Between Anencephaly and Toxics

□ Men working in certain occupations with high chemical exposure, particularly painting, have a greater risk of fathering an anencephalic child, per Texas state mortality data analyzed in a *American Journal of Epidemiology* study.²³⁵

□ A 1979 Finnish study reported in the *Lancet* links exposure of mothers to certain types of solvents and increased anencephaly rates.²³⁶

□ An autopsy of an anencephalic baby born in Brownsville, Texas, across from the Matamoros maquila zone, showed residues of toxics and pesticides in body tissues.²³⁷

□ A new 1995 study of the Matamoros/Brownsville anencephaly cluster finds a 12-year correlation between expansion and contractions in nearby Matamoros maquila industrial activity and increase and decrease in anencephaly rate in Cameron County, Texas where Brownsville is located, but not in more geographically-disparate counties.²³⁸

The study's design did not test for evidence of actual exposure of mothers, fetuses or anencephalic babies to maquila emissions. "We do not have evidence, however, of a direct link between maternal or prenatal exposure to maquila emissions and the occurrence of anencephaly,"²³⁹ The study concludes that without the proper environmental data, including surveillance of contaminants in area air, water, and soil, little can be concluded about the rate of actual exposure of people to the industrial and agricultural chemicals in the area. Thus, the lack of data to make this connection "suggests that caution should be exercised in attempting to attribute causation to environmental emissions from maquila factories."²⁴⁰ Another factor the study lists as needing more

research is differences in abortion behavior on both sides of the border and what effect it may have on observed prevalence of neural tube defects.²⁴¹

"I am convinced some event or events occurred during that time, something in the environment that cannot be explained," said Dr. Carmen Rocco, the Brownsville pediatrician, of the explosion of anencephaly cases in Brownsville.²⁴²

Thus, despite the strong correlation in the rate of maquila growth and anencephaly incidence and a correlation between anencephaly prevalence and geographic proximity to the Matamoros maquila industrial zone, without data on actual exposure, it is not possible to conclude the impact maquila toxics do or do not have on local resident's reproductive health.²⁴³

Current Anencephaly Lawsuits

In 1993, numerous plaintiff families who had given birth to anencephalic babies filed suit against a list of defendant companies in the maquiladora zone involving the adverse health effects of uncontrolled dumping of toxics on pregnant woman and infants.

In a lawsuit filed in March 1993, twenty-seven parents of anencephalic babies demanded compensation from eighty-eight maquiladora companies and the Public Utility Board of Brownsville, Texas for the increase in anencephaly cases in the area.²⁴⁴ The plaintiffs argued that the anencephaly had resulted, at least in part, from release of hazardous chemicals at the defendants' sites.

On June 21st, 1994, five companies settled with all of the plaintiffs including: Wickes Manufacturing of Southfield, Michigan; Rancho de Mexico of Columbus, Ohio; Gobar Systems of Dayton, Ohio; Breed Automotive of New Jersey; and Leonard Electric Products of Brownsville, Texas.²⁴⁵ Settlement payments totaling roughly \$700,000 were paid by the first five defendants to the twenty-seven families named in the suit.²⁴⁶ From 1993 to 1995, amendments added other companies to the suit.

The defendants denied any responsibility for the health problems. "Although General Motors has sympathy for the families affected and concern for its employees, their families and their neighbors, it has denied the allegations as being untrue...GM will vigorously defend itself and its good corporate citizenship in the Texas lawsuit."²⁶⁰ The entire amended suit ultimately was settled in August, 1995, for a total of \$17 million dollars, according to Randy Whittington, the plaintiffs' lawyer.²⁶¹ Claims against five companies were dismissed, including Austin Power, CMI, Mitsubishi, Valmont and Quimica Fluor,²⁶² and settlements were reached with all of the remaining defendant groups, including General Motors.²⁶³ As part of the settlement terms, the defendants vehemently denied any responsibility and the amounts paid by specific defendants remain confidential.²⁶⁴ (See Appendix A for a list of defendants)

Environmental Illness in Nogales? Highest Published Rate of Lupus in Medical Literature.²⁴⁷

Residents in the border city of Nogales, Arizona suffer from a rate of Lupus that is significantly higher than the national average.²⁴⁸ Lupus is a chronic inflammatory disease in which the immune system attacks various parts of the body, primarily the skin, joints, blood vessels and blood. Lupus symptoms include kidney problems, chest pain, fever, achy joints, prolonged fatigue, skin rashes and anemia.²⁴⁹ Death from lupus is not common. However, living with lupus is miserable.

A high rate of lupus incidents in the Nogales area in the 1980s prompted city and local university health officials to conduct studies on a potential link between pollution and the high rate of lupus.²⁵⁰ There remains a difference of opinion in the scientific community about the suggested linkage between the incidence of lupus and certain types of pollution.

A study published in December 1994 by the Santa Cruz County Community Health Department concluded that the area defined by Nogales and Rio Rico had a high prevalence of SLE [Lupus].²⁵¹ The survey also found that the rate was significantly higher than expected: 94.0 per 100,000.²⁵² Lupus rates vary greatly, ranging from about 15/100,000 to about 50/100,000 in the United States.²⁵³ The highest known incidence of lupus in a population published in medical literature was 50.8 per 100,000 in California.²⁵⁴ The study also

found that the high rate of lupus in Nogales was much higher than in Patagonia, another Arizona town with similar racial demographics, but in a different geographic area that was used as a control.²⁵⁵

The Santa Cruz County Community Health Survey also concluded that the "health effects may be the result of complex environmental exposure to biologic or chemical agents."²⁵⁶ Environmental exposures were defined as exposures found "in the external environment, within households, and include personal lifestyles."²⁵⁷

Ana Acuña is a co-founder of Living is for Everyone (LIFE), a grassroots environmental/health advocacy organization in Nogales, Arizona that works to raise awareness about the high rate of lupus in the community. Acuña, whose family has been in the Nogales area for three generations, said that when the maquilas first came into the area, "Everyone in the community really welcomed the plants... no one saw any smoke stacks, so we thought it was clean industry. It was about this same time, twenty years ago, when we began to see an upswing in the illness."²⁵⁸ Acuña, who has Lupus, says she has "learned to manage my disease well, but you just feel like hell a lot of the time, about 90 percent of the time you have inflammation, joint pain, puffed eyes, depression, diarrhea and you're on an emotional roller coaster."²⁵⁹ She believes, as do many of the members of the community on both sides of the border, that the high lupus rate is being caused by worsening environmental conditions.

Fouled Water: Sewage Treatment and Border Water and Health Problems

Promise

"The incidence of hepatitis, shigellosis and amebiasis along the border is two to three times the national average; 15 percent of families in colonias report at least one family member suffers from diarrhea every week...This legislation [NAFTA] seeks nothing more than to protect poor children from becoming sick."²⁶⁵

—Representative Ron Coleman,
(D-TX), July, 1993

Reality

Since NAFTA went into effect in 1994, the average rate of hepatitis in the border region has stayed at 2-5 times the U.S. national average,²⁶⁶ and in some areas has increased dramatically. In Maverick County (Eagle Pass, Texas), the rate of Hepatitis-A has nearly doubled from 5.3 times the state average in 1993 to 10.3 times the state average in 1994. Webb County (Laredo), El Paso County and Cameron County (Brownsville) had 2.7, 1.8 and 1.8 times the Texas state rate for Hepatitis A in 1994, respectively. The rate of Hepatitis A for the state of Texas remained virtually unchanged during the period from 1993 to 1994.²⁶⁷

Promise

"Without NAFTA, the United States and Mexico may have difficulty sustaining their current level of cooperation in projects designed to maintain water quality. In addition, it may be difficult to obtain sufficient financing to design and construct needed wastewater treatment facilities in the border area. Moreover, in the absence of NAFTA, incentives for companies to locate facilities in the border region will continue, resulting in additional strains on already scarce water sources."²⁶⁸

—Clinton Administration,
November, 1993

Reality

The maquiladora work force grew by 20 percent in NAFTA's first two years. Extensive new water and sewage treatment facilities that were touted by NAFTA proponents have not been completed. Several water and sewer projects underway before NAFTA have been halted as a result of the Mexican economic depression. The surge in funding for such projects promised by NAFTA supporters never materialized.

In addition to the serious health and environmental problems created along the U.S.-Mexico border by toxics, the lack of basic public health infrastructure on both sides of the border threatens the area's growing population. Since NAFTA, the spread of infectious diseases, including hepatitis-A, cholera, typhoid and of amoebic and diarrheal diseases, attributed to the lack of proper drinking water and sewage treatment infrastructure in the area, has not been reduced, and, in some instances, is increasing.

U.S.-Mexico Border Water and Sewage Problems pre-NAFTA

In 1993, over 3 million residents lived along both sides of the U.S.-Mexico border. The rate of poverty of U.S. border residents is much higher than the U.S. average. For example, in 1990, the poverty rate for families living in the Lower Rio Grande Valley (the southernmost tip of Texas) was 36.5 compared to the Texas average of 14.1.²⁶⁹ A significant number of border residents live in unincorporated communities called colonias. Most of these communities don't have water or sewer infrastructure, resulting in high rates of water-borne disease.²⁷⁰

As noted by El Paso Representative Ron Coleman (D-Texas) during the NAFTA debate: "The incidence of hepatitis, shigellosis and amebiasis along the border is two to three times the national average. Fifteen percent of families in colonias report at least one family member suffers from diarrhea every week...This legislation [NAFTA] seeks nothing more than to protect poor children from becoming sick."²⁷¹

Mexican border communities also suffer from higher rates of these diseases than the Mexican national average. The state of Tamaulipas, across from the southern most tip of Texas, had 2.7 times the incidence of Hepatitis, and 1.5 times the rate of intestinal infections than Mexico on average.²⁷²

For instance, since NAFTA passage in 1993, the average rate of hepatitis in the border region has stayed at 2-5 times the U.S. national average,²⁷³ and in some areas has increased dramatically. In Maverick County (Eagle Pass, Texas), the rate of Hepatitis-A has nearly doubled from 5.3 times the state average in 1993 to 10.3 times the state average in 1994. Webb County (Laredo), El Paso County and Cameron County (Brownsville) had 2.7, 1.8 and 1.8 times the state rate for Hepatitis-A in 1994, respectively. The Texas rate of Hepatitis-A remained virtually unchanged during the 1993 to 1994 period.²⁷⁴

Maquiladoras and Hepatitis

An Arizona study conducted in 1991 compared the incidence of Hepatitis-A in border counties with a large maquiladora sector, versus border counties which were less industrialized and populated. Twenty-seven cases per 10,000 were reported in the town of Nogales and 18.7 per 10,000 in Santa Cruz County (Nogales County).²⁷⁵ The less developed Yuma County and Cochise County had only 4.2 per 10,000 and 3.7 per 10,000 respectively.²⁷⁶

According to Dr. Laurence Nickey, from the El Paso County Health Department, this rate does not include those patients who seek medical help in Mexico. "For all we know, the rate may be double what the statistics reflect", said Dr. Nickey.²⁷⁷

Border Water Contamination Increases After NAFTA, Many Promised Treatment Plants Falter

During the NAFTA debate, NAFTA proponents tried to minimize the deep-rooted, long-range problems in the border area's sewage and wastewater treatment capacity. Despite evidence of major infrastructure failures, funding and political issues on both sides of the border, NAFTA proponents and the Mexican government promised that additional funds to update existing facilities, and to construct a few new sites to accommodate increased industrialization would remedy the problems. They argued that not only would NAFTA not make the situation worse, but that NAFTA passage would lead to actual improvements in water and sewage infrastructure in the border region.

For instance, in its *NAFTA Report on Environmental Issues*, the Clinton Administration wrote concerning border water issues: "Implementation of the NAFTA should have several beneficial effects on water supplies in the border region... the Border Environmental Cooperation Agreement associated with NAFTA will provide new financing for infrastructure projects to treat wastewater and provide clean drinking water supplies... Finally implementation of the NAFTA will lead to the establishment of the Commission for Environmental Cooperation, which will provide added impetus to U.S.-Mexican cooperation on managing water resources in the area."²⁷⁸

Some of the proposals themselves were appealing, but many were highly unrealistic. Post-NAFTA, many promised water and sanitation improvements have been delayed, or simply abandoned as infeasible. Meanwhile, as the maquiladora workforce grew by 20 percent in NAFTA's first two years without significant investment in water infrastructure, border waters were further polluted by increased industrial and residential waste.

Juarez, Chihuahua/El Paso, Texas

In Juarez, open canals still carry "black waters" containing sewage and run-off from the city's 350 factories

and numerous colonias. According to Dr. Laurence Nickey, of the El Paso City-County Health and Environmental District, raw sewage was dumped into the Rio Grande River at Juarez in 1993 at a rate of 55 million gallons each day.²⁷⁹ The construction of a sewage treatment facility, which had been planned prior to NAFTA, has since halted due to Mexico's economic crisis.

At issue is not just the death of this waterway's plants and wild animals, but a dire human health threat. Much of the Rio Grande River downstream from Juarez/El Paso is fouled by nitrates, phosphates and extremely high pH levels.²⁸⁰ High phosphates over-nurify plants, causing the river to be robbed of oxygen, and create an environment conducive to the growth of micro-organisms that cause human illness. High pH levels can interact with ammonia and other pollutants to cause fish kills.²⁸¹ High levels of nitrates in drinking water also can threaten the health of infants. Nitrates in high concentrations react with the blood's hemoglobin and interfere with its ability to carry oxygen. This results in "blue baby syndrome," which is sometimes fatal.²⁸² Also found in contaminated water are bacteria that cause typhoid, cholera, infectious hepatitis-A and dysentery.²⁸³

The Rio Grande remains so contaminated by human fecal matter in the El Paso-Juarez area that even skin contact is dangerous because of the possible exposure to cholera and hepatitis and the micro-organisms that cause dysentery carried in the waste.²⁸⁴ Raw sewage flows into the river, mostly from the Mexican cities along the river which either have no waste treatment system, or systems which are old and over burdened.²⁸⁵

The Rio Grande is also one of the most tested rivers in the world. A binational program called Project del Rio tests the river three times each spring. The Santa Fe, New Mexico-based program's 1994 test found colonies of fecal coliform at more than 230 times the level safe for skin contact in water forty miles downstream from Juarez/El Paso.²⁸⁶ Fecal coliform is often used as an indicator of the presence of the organisms that carry hepatitis-A, typhoid, and cholera.

"Some of the parts of the river are so dirty," said Craig Heacock, Project del Rio's U.S. coordinator, "that it's not a good idea to have the students test it. In those cases the U.S.-Mexico project sometimes pays the coyotes [people who ferry illegal immigrants across the border] to get a water sample for them, Heacock reported.²⁸⁷

Despite the urgency for projects to clean the Rio Grande, the construction of a \$72.2 million sewage treatment plant for Juarez, planned before NAFTA, was halted in its earliest stages of development in early 1995 because of the Mexican economic collapse.²⁸⁸ After the December 1994 peso crash, Juarez saw its city budget reduced by 70 to 80 percent and construction on the plant stopped short. "We stopped all projects," said city employee and pollution specialist Javier Sapien. "There's money for salaries and light bills, that's it."²⁸⁹

The possibility of NADBank financing a Ciudad Juarez wastewater treatment plant is slim. The Border Environment Cooperation Commission (BECC) which must approve projects for NADBank funding did not certify the project because the city could not come up with the required 20% of equity financing and the public could not afford user fees.²⁹⁰ Meanwhile, two years after NAFTA, the untreated water from the river is still being used for irrigation in Ciudad Juarez and the surrounding areas.²⁹¹

"The people of Juarez are our next-door neighbors," said Dr. Nickey. "They are our relatives and our friends. They are our business and professional associates. If the U.S. government can spend billions of dollars in foreign aid on Third World countries on the other side of the world, why can't it help our next-door neighbor build a sewage treatment facility that would not only benefit them, but would protect the health and lives of Americans? I have yet to get an answer to that question."²⁹²

Las Colonias de los Estados Unidos—An "American Calcutta"

One prominent NAFTA promise was that increased development and trade caused by NAFTA would mean greater prosperity for residents in all three NAFTA countries. Yet, before NAFTA and after, the formula of more commerce automatically translating into shared prosperity for the majority has proved false.

Increased development along the U.S.-Mexican border has not been accompanied by economic prosperity for many residents on either side of the border. Four of the five poorest cities in the United States with populations greater than 100,000 lie along the Texas-Mexico Border—Brownsville, McAllen, Laredo, and El Paso.²⁹³ Two years after NAFTA, an estimated half a million people live in what is known as the "colonias" on the U.S. side of the border, a population equal in size to New Orleans.²⁹⁴

The colonias, or *Las Colonias* (which means "neighborhood" in Spanish) are rural slums along the U.S.-Mexican border. Many colonias are located on the U.S. side of the border and the residents are U.S. citizens, but the sanitation and health conditions under which the residents live are more comparable to Bangkok than to Baltimore. The colonias, typically subdivisions without any access to safe water or sewer systems, appeal to new immigrants to the United States because the downpayments for "ownership" papers are low. For at least two decades, such colonias without municipal water and sewer hookups have been housing U.S. residents. The colonias lack the most basic infrastructure, and thus threaten residents with dismal health and housing conditions. Two years after NAFTA, the Texas Water Development Board (TWDB), in a February 1995 report which surveyed 23 Texas counties, identified 1,436 colonias with an estimated total population of 340,000. This was a net increase of 67,000 since their 1992 sur-

vey, though much of this increase may have been due to better information gathering.²⁹⁵

Land Sales, Scams, and "Grandfathered" U.S. Colonias

The U.S. colonias are also a scene of fraud and consumer abuse, as documented in a October 8, 1995 *60 Minutes* television news segment about the cruel land scams of the U.S. colonias. Immigrants eager to buy U.S. land scrape together enough money for a down payment on a plot of land in a colonia with the hope of building a home. However, exorbitant interest rates often keep them from ever actually owning their home-
stead.

According to Sister Rosemary Welsh, a nurse who works with colonia families outside of Laredo, "They could pay conceivably for 20 years and wouldn't even begin to pay off the principal because of the high interest rates."²⁹⁶ Moreover, if residents are late on a payment they can be evicted, which allows the colonia subdivision developer to sell the plot over and over again, she said.²⁹⁷ The colonias land "developers" are often rich and powerful people. In at least one case, an environmental administrator charged with protecting the environment and public health along the border who was appointed by the Clinton Administration to the board of one of NAFTA's parallel environmental institutions is making money through land sales in the colonias (See *60 Minutes* Box in Chapter 7).²⁹⁸

A February 1995 Texas Water Development Board report entitled "Water and Wastewater Needs of Texas Colonias: 1995 Update," concluded that establishment of new colonias is not a widespread problem. However, serious concerns remain regarding growth of existing colonias, and public health conditions in the existing colonias.²⁹⁹ Texas counties must adopt Model Subdivision Rules to obtain certain state funds. Thus, there are now rules in roughly half of Texas' border counties to prevent the development of new colonias. However, state officials are concerned about continued growth in the use of "grandfathered" colonias. These are subdivisions which do not have water and wastewater services, but which were legally platted before the adoption of the new rules and thus are not subject to them.³⁰⁰ According to Bill Allen, with the Texas Water Development Board, a recently passed measure by the Texas legislature (HB 1001) may reduce the use of colonia "grandfather" loop-holes by restricting the sales of land by developers.³⁰¹

Water and Wastewater Health Hazards in the Colonias: An Alphabet Soup of Disease

With no running water or sewage systems in place, residents of the colonias are exposed to a variety of serious health risks.³⁰² Laurance N. Nickey, M.D., Director of the El Paso City County Health and Environmental District, is currently updating a 1986 study conducted

in the colonia of Santa Lorenza, Texas. That study found that "by the time children are eight years old, approximately 35 percent have been infected with hepatitis-A and by the time they are 35 years old, 85-90% have it."³⁰³ According to Nickey, "the region has 2-5 times the national hepatitis-A rate."³⁰⁴ "This is not a regional problem. It's not a Texas problem. This is a crisis of potentially international scope... cholera, tuberculosis, bronchitis, typhoid, typhus," Texas Attorney General Dan Morales told *60 Minutes* in October 1995.³⁰⁵

*"By the time [U.S.] colonia children are eight years old, approximately 35 percent have been infected with hepatitis-A and by the time they are 35 years old, 85-90% have it."*³⁰⁶

A May 1995 article in the *Journal of the American Medical Association*, "Along the Southern Border, Pollution, Poverty, Ignorance and Greed Threaten Nation's Health," documented the U.S. colonias' current health problems. The article found some colonia residents, with no access to municipal water sources, draw their water from shallow wells and build their own make-shift out-houses. There are thousands of illegal or nonconforming septic systems in El Paso County alone.³⁰⁷ The well-water drawn from the Rio Grande flood plain is already badly contaminated, with shoddy, home-made sewage systems exacerbating the problem, the study found.³⁰⁸

Surveys in 1995 of water from U.S. colonias wells reveal sulfate concentrations nearly twice the level considered safe for drinking water, and also high levels of arsenic contamination.³⁰⁹ High levels of bacteria and fecal coliform were also found.³¹⁰ Waterborne diseases are leading causes of death in many of the colonia communities.³¹¹

The other U.S.-Mexico border states have similar colonia conditions. According to New Mexico Attorney General Tom Udall, "You have people living in Third World conditions, which to me is really appalling in this day and age in America."³¹² Udall issuing subdividers he says used illegal lot splitting to create five colonias. Some developers use a loophole which provides that if a lot is split four or fewer ways, it is not considered "subdividing", and thus is exempt from rules on roads, drainage, water and wastewater.³¹³ New Mexico's colonias are concentrated in Doña Ana County, where fewer than 20 percent of the residents are connected to wastewater systems.³¹⁴

The Attorneys General— Tracking Down Slum Lords

The New Mexico Attorney General's office is suing a

developer in Doña Ana County who has set up five colonias by using illegal lot splitting near the town of El Milagro.³¹⁵ In Texas, the Attorney General's office, which recently set up a "Colonia Strike Force," has initiated various investigations and is involved in 32 colonia-related lawsuits.³¹⁶ In June 1994, EPA awarded \$150,000 to the Texas Attorney General's "Colonia Strike Force." On September 13, 1994 this amount was increased by \$50,000, and, in 1995, the EPA awarded an additional \$50,000 to the "Colonia Strike Force."³¹⁷ The Texas Attorney General's office, together with EPA Region 6, administer the program through offices in Austin and McAllen, Texas. Their task is to investigate and prosecute violations of state law involving illegal subdivisions.³¹⁸

In 1995, EPA awarded \$60,000 for a similar investigation and prosecution project to the New Mexico Attorney General's office.³¹⁹ The New Mexico Attorney General's office will provide \$15,000 in-kind for the project as well.³²⁰ The money is supposed to finance a one year project to "support the effort to stem the development of colonias and alert potential purchasers to the environmental and health dangers of colonia development through innovative use of state enforcement authorities."³²¹

Shortchanging the Colonia Cleanup

Although colonias qualify for several federal water assistance programs, resources available pale in comparison to the amount of funding needed to establish even the infrastructure to protect the health of the U.S. colonias residents and the area environment. Moreover, much of the available funding goes to building infrastructure which should have been funded by developers.³²² For example, according to Sister Maribeth Larkin of the El Paso Interreligious Sponsoring Organization, when long-awaited water lines are finally run to selected colonia communities, public funds only cover the costs of running the water lines underneath, the streets and not the actual cost of hooking up the houses, a cost which many households cannot afford.³²³

In 1989, Texas voters approved \$250 million for Texas' Economically Distressed Areas Program by the sale of bonds. Funds were to be jointly administered by the Texas Water Development Board and the Texas Department of Housing and Community Affairs. Now, five years after the funding was approved, only \$37 million has actually been spent.³²⁴ The Texas Department of Housing and Community Affairs also had \$27 million for Texas from the Cranston-Gonzales National Affordable Housing Act, passed by the U.S. Congress.³²⁵ The program was not reauthorized in 1995.³²⁶ The state of Texas came forth with \$7.5 million of its own money.³²⁷ Moreover, because these areas are too poor to repay loans or pay user fees assistance from BECC and NADBank is unlikely.

Real Life Along the Border After NAFTA

According to Maria Muñoz, a resident of the colonias in San

Elizario, Texas, living there is "horrible." "Coming from California I never imagined it could really be this bad. We don't have any water. We have to go get water in containers at a local church. We go about twice a week," she said.

She describes how she ended up in this mess. "My husband saw that they were selling land. He came and bought land and we moved here with him in July 1994. My husband works in an industrial factory that manufactures some type of part. They pay him minimum wage, about \$150 a week for 6 days work which is really difficult for a family of 5. I have a son age 3, and two daughters 5 and 9."

"I saw reports about families in the same situation I am now in, but I never believed it was true. I didn't think people possibly lived this way."

According to Muñoz, she has not seen any dramatic improvements like those promised in the colonia community where she lives. "They say they are doing things and maybe they are, but you can't tell. We are still without water and without a sewage system. Our family was able to get a septic tank with the assistance of El Paso. (El Paso Interreligious Sponsoring Organization) who gave us economic help through a cooperative they have.

Even though Maria Muñoz says she finds her current situation very frustrating she does not foresee any way to leave. "How could we? Where would we go? We are a low income family. Even if we wanted to leave we couldn't."³²⁸

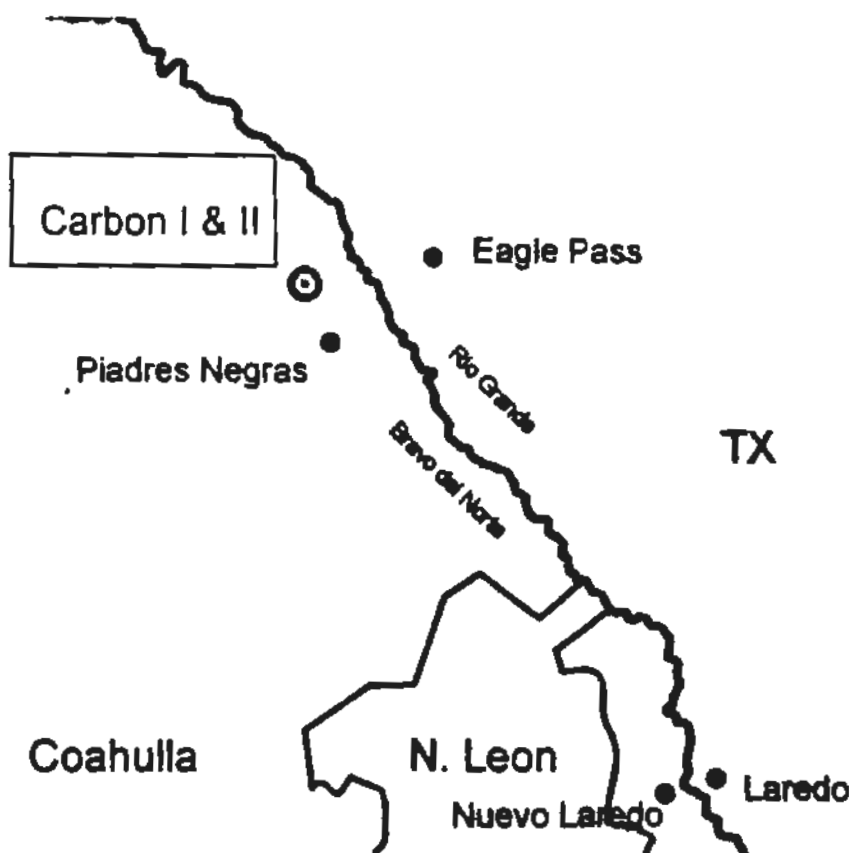
Nuevo Laredo, Sonora/Laredo, Texas

Two years into NAFTA, at Nuevo Laredo, 70 percent of the approximately half million residents flush their toilets directly into the Rio Grande, as no sewage treatment facility exists for the city.³²⁹ At this juncture of the river, millions of gallons of raw sewage are dumped each day.³³⁰

Fatal Infection Caused by Swim in Rio Grande

Despite all the attention on border environmental and health disasters during the 1993 NAFTA debate, and despite promises that NAFTA passage would improve the existing problems, after NAFTA, new tragedies are unfolding with grim regularity. For instance, the deadly threat to human health from sewage entering the Rio Grande became clear in August 1994, when a 13-year-old boy from the Laredo-area colonia of Rio Bravo died from an amoebic brain infection after swimming in the river. The rare infection, called meningoencephalitis, is caused by a micro-organism found in most untreated water. The amoeba, *Naegleria fowleri*, can cause meningoencephalitis when it infects the lining of the nose or nasal passages, and travels to the brain by way of the olfactory nerves. The disease is rare, but fatal, with death occurring within five days. The amoeba was found in high concentrations in the water in which the boy was swimming.³³¹

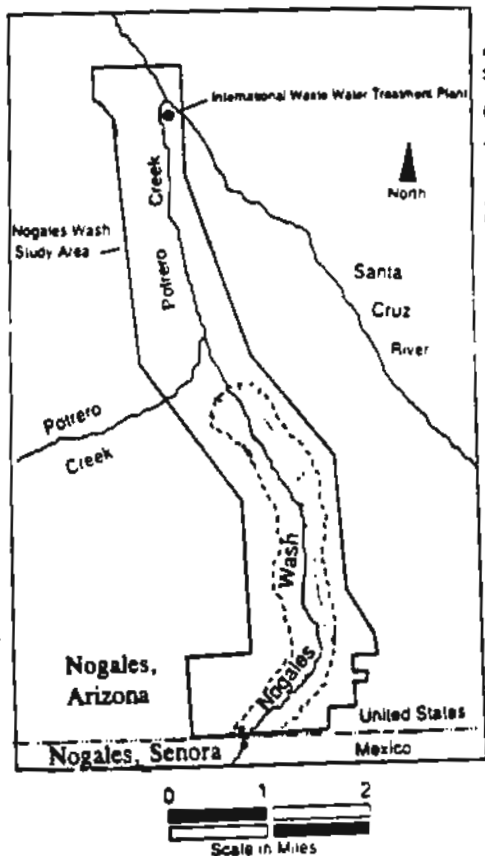
EAGLE PASS/ LAREDO REGION



After a number of delays, construction had begun on a massive 34-million-gallon/day Nuevo Laredo Joint International wastewater treatment plant which had been planned as a project of the U.S.-Mexico International Boundary and Water Commission prior to NAFTA.³³² The project was being financed jointly by the United States and Mexico. Mexico has spent \$10.7 million, matched with a \$10.9 million grant from the U.S. EPA. Mexico owes \$10.2 million. The state of Texas would then pay a final \$2 million.³³³

The project was halted in March 1995 because the Nuevo Laredo municipal authorities cannot pay the remaining \$10 million even though the project is almost completed. "Even a plant that is 90% finished is likely to be unfunded because \$10 million is just about impossible to find with the current crisis in Mexico," said Geoff Land, program director with the Border Ecology Project in Bisbee, Arizona.³³⁴ In the meantime, crews of workers have been laid off or shifted to other details.³³⁵

The Nogales Wash



Source: Adapted from "Border Trouble: Rivers in Peril," National Toxic Campaign Fund, May 1991, p. 25.

Nogales, Sonora/Nogales, Arizona

The city of Nogales, Arizona has been plagued by the heavily contaminated Nogales Wash, which was another featured environmental horror story of the NAFTA debate. The Nogales Wash starts in Mexico and flows north through the downtown area of Nogales, Sonora and

Nogales, Arizona. The water, roiling with toxics and raw human sewage, flows uncovered until it reaches the metropolitan area of Nogales, Sonora.

From 1989 to 1993, the U'dall Center for Studies in Public Policy at the University of Arizona and El Colegio de la Frontera Norte (COLEF) in Tijuana and Nogales, Mexico conducted an interdisciplinary study of transnational waste management policy. Included in this study were detailed analyses of water in the Nogales Wash, and also in drinking water wells located near the Nogales Wash. Findings showed high levels of fecal coliform, among other contaminants.³³⁶

As well, many of Nogales, Sonora's colonias still are not connected to the cities' sewers. Sewers that do exist are aging and poorly maintained.³³⁷ Leaks and breaks are common, as well as seasonal flash floods which carry the sewage into groundwater that supplies local wells.³³⁸

Fecal coliform levels are often above the Arizona water quality standard of 4,000 colonies/100ml.³³⁹ For instance, in January and February of 1995, the fecal coliform levels were above standard on nine separate testing occasions.³⁴⁰ Four times during this period, the level recorded was over 20 times the allowable level at 80,000 colonies/100ml.³⁴¹

The International Boundary and Water Commission decided to begin a groundwater monitoring activity project in Ambos, Nogales.³⁴² The project was scheduled to begin in December, 1994, but has faced several delays.³⁴³

California/Baja California

Water quality problems on the California/Baja California border have been mostly associated with the New River and the Tijuana River. The New River runs from Mexicali, a booming maquiladora center of approximately 1 million people, into Calexico, California, and then to the Salton Sea in California. The New River has been a source of great concern for many years, and still has the ignominious distinction of being the dirtiest river in the United States. During the NAFTA debate, the New River's contamination was noted as the sort of problem NAFTA could improve.

"The New River is a time bomb waiting to explode on both sides of the border."

—Dr. Lee Cottrell,
former health officer for
Imperial County, California,
November 1995.³⁴⁴

Two years after NAFTA, the New River remains dangerously polluted. A November 29, 1995 L.A. Times ar-

ment officials are seeking funding for their contributions through the NADBank.³⁵⁷ The main focus of the IBWC's project at this point is hiring an engineering firm to draw up a plan for treatment plant needs. California EPA officials estimate it will be about a year before such a plan is completed.³⁵⁸

Tijuana, Baja California/San Diego, California

The sewage collection system in Tijuana was built to handle 17 million gallons/day of sewage.³⁵⁹ However, the city's current average sewage production is 35 to 40 million gallons/day.³⁶⁰ Because of the constant overload, sewage is typically not adequately treated or raw sewage is discharged straight into the ocean. With the California congressional delegation split over NAFTA, this severe example of inadequate environmental infrastructure along the border became a rallying point. Anti-NAFTA Representatives, such as San Diego Representatives Bob Filner (D-CA) and Duncan Hunter (R-CA), pointed to the massive sewage flow prior to NAFTA and predicted NAFTA would exacerbate the problem. NAFTA supporters argued that Tijuana-San Diego health problems would get worse *unless* NAFTA increased area prosperity and funds for cleanup.

Two years after NAFTA, sewage collection and treatment in the city of Tijuana is a serious problem, posing a health threat to residents of both Tijuana and nearby San Diego. The California EPA reported that the Tijuana wastewater system releases 25 million gallons per day of partially treated and undisinfected wastewater into the Pacific Ocean about six miles south of the U.S. border.³⁶¹ The California EPA found that the Tijuana wastewater collection system, on average, also releases 2 to 3 million gallons/day of raw sewage directly toward California beaches.³⁶²

Tijuana's wastewater and stormwater systems are combined; therefore, the industrial waste containing lead and pesticide residues, including DDT, ends up in the sewage system.³⁶³ Water in Tijuana is scarce, so the water has a high concentration of toxics, says Lori Saldaña, of the San Diego Sierra Club.³⁶⁴ During the winter months there is a different problem. Heavy rainfalls cause an even greater overload of the system, resulting in "large sewage flows into the United States via the Tijuana River," according to a May 1995 Report by the California Environmental Protection Agency.³⁶⁵

Two years after NAFTA, the Mexican coast and its residents are continually exposed to polluted water as untreated sewage pollutes beach communities. Dave Ewing, public works director for the City of Imperial Beach near San Diego recently lamented: "The problem of Imperial Beach has gotten worse. Collection and treatment facilities in Mexico have been taxed heavier and heavier," without improvements in infrastructure.³⁶⁶ Signs warning of contamination are often posted along the shoreline in Imperial Beach.³⁶⁷

In order to solve the Tijuana sewage problem, in 1990,

President Bush and President Salinas entered into an agreement to construct an International Wastewater Treatment Plant just inside the U.S. border.³⁶⁸ The plant was to be built by the U.S. EPA, the International Boundary and Water Commission, the city of San Diego, and the state of California.³⁶⁹ The plant was designed to treat 25 million gallons of sewage per day, with the capacity to partially treat 75 million gallons per day in emergency situations, such as the winter storm season.³⁷⁰

Four components of the plant were to be constructed: an advanced primary treatment facility, which uses chemicals to accelerate the settling out of wastewater solids; a secondary treatment facility, which breaks down additional organic matter; a land outfall, which is a pipe that would carry treated sewage 2.3 miles to the ocean; and an ocean outfall, which is an additional pipe that would carry the sewage 3.5 miles offshore and release it at a depth of 95 feet.³⁷¹ Adjacent to the plant being built for Tijuana wastewater, San Diego is planning an updated water reclamation facility.

As of December 1995, the land outfall was completed. The advanced primary treatment facility was scheduled to be completed in the spring of 1997. The ocean outfall was scheduled to be completed in June of 1998. The secondary treatment facility was delayed due to legal challenges.³⁷²

In June 1994, the Sierra Club and the Surfrider Foundation filed suit to force construction modifications on the secondary treatment facility.³⁷³ The complainants advocated a "ponding system" of secondary treatment which is "a biological system, a wetland system, that lets nature break down the bad components of sewage," according to the Sierra Club's Daniel Braun.³⁷⁴ According to David Fege, Assistant Director of the San Diego border office of the EPA, a ponding system would supposedly reduce the toxicity of the sludge, thus reducing the environmental impacts of the effluent. It might also make the water available for reuse, and would be more cost effective.³⁷⁵

The Sierra Club and the Surfrider Foundation reached a settlement in their law suit about the plant which requires the project managers to study the alternative method. Construction of the secondary facility is to be delayed until the study on the ponding system is complete. In the settlement, the project was given the option to object to the ponding proposal. According to the San Diego Sierra Club's Lori Saldaña, if time, money, and labor is invested in the project before a ponding system is sufficiently studied, then even if the ponding method turns out to be more cost effective, it won't be used.³⁷⁶

The proposed treatment plant was designed to do away with bacteria caused by residential sewage. Its design would do little to purify the water from industrial toxic compounds such as PCBs and DDT. Toxics may even damage the plant.³⁷⁷

According to the U.S. EPA's David Fege, factories in Mexico are supposed to pre-treat their waste so that

toxics cannot reach the sewage system. However, such laws are simply not being enforced. "Frankly, right now we are not off the ground," said Fege.³⁷⁸

It was estimated that the plant would cost \$379 million. As of mid-December 1995, the project had not experienced any cost overruns.³⁷⁹ Nonetheless, if the project does not use the cheaper ponding system, then it is unlikely sufficient funds will be available to finish the project.

The state of California provided \$5 million for the project and the city of San Diego gave \$84 million.³⁸⁰ The U.S. Congress was asked to appropriate \$274 million of U.S. EPA funds for the project.³⁸¹ The U.S. Congress only appropriated \$239 million for the project, leaving a shortfall of \$34 million.³⁸² The project plans to ask the U.S. Congress for additional funds as it finishes completion, but there are no assurances that additional funds will be appropriated.³⁸³

The U.S. Congress also provided Mexico with a \$16 million loan that must be paid back over the course of ten years.³⁸⁴ The \$16 million loan was to be Mexico's contribution to the project. The \$16 million figure was based on the cost of a treatment plant that had previously been planned for Tijuana. That plant would have discharged all of its effluent directly into the Tijuana river.³⁸⁵ The 1990 Bush-Salinas agreement asked Mexico to forgo that plant, and put the same amount of money toward the International Wastewater Treatment Plant.³⁸⁶ However, with the lower peso exchange rate, Mexico's capacity to put \$16 million toward the project is now in doubt.³⁸⁷ A source at the EPA points out that Mexico has little incentive to pay for a plant which is mired amid these controversies. "The best we can hope for is that they will send some sewage our way once the plant is done so it doesn't become too much of an embarrassment," joked the official, who wished to remain anonymous.

If legal and funding problems prevent construction of the secondary facility, a 1987 law would allow for the filing of a "301" waiver that would drop the requirement that the secondary facility be completed.³⁸⁸ Such a situation would be extremely problematic, since water needs to be treated at least to a secondary level, or better, in order to be reclaimed for industrial or agricultural uses.³⁸⁹

Another concern is that when the primary treatment facility is completed, in spring 1997, there would be at least 12 months before the ocean outfall line would be completed, in the spring of 1998.³⁹⁰ A number of alternative plans have been developed, including returning the partially treated effluent to Tijuana for further treatment, storing the effluent and treating it in San Diego, and discharging it into the ocean.³⁹¹ Some of the alternatives call for excess effluent to be discharged into the already polluted Tijuana River.³⁹² The Tijuana River flows into a fragile coastal estuary area. The pollution from the river damages the estuary, which is used by

humans for recreation and is home to numerous species, including commercially valuable shell fish and endangered species.³⁹³

The Tijuana River

A 1995 California EPA report documented that the Tijuana River, which flows through the rapidly growing city of Tijuana before reaching Chula Vista, California, has been known to have a flow consisting entirely of untreated domestic and industrial wastewater during dry weather.³⁹⁴ The Tecate Creek, which flows through Tecate, Baja California, and into the Tijuana River, poses yet another potential risk. According to an April 1995 California EPA Report, 8 to 10 million gallons of industrial and domestic wastewater from the Tecate maquiladora center were entering the creek each day, including 1 to 2 million gallons of untreated wastewater from the Tecate Brewery.³⁹⁵

Many environmentalists argue that a facility that does not reclaim the treated water would be the wrong approach to treating the on-going Tijuana/San Diego water problem. In San Diego, residents pay \$350-450 per acre foot (which is equivalent to 300,000 gallons) to get water to their homes and then pay \$700 per acre foot to treat that water after it is used and to dump it in the ocean. Tijuana's water costs are the highest in Mexico, costing \$15,000-25,000 per acre foot. If there were a water reclamation system, the region could dramatically increase its conservation of water.³⁹⁶

Water Availability: Pressing Problems Coming to a Head

One often overlooked issue regarding the growth of industry and population along the U.S.-Mexico border is the problem of water availability in this arid region. The severe drought that has plagued Northern Mexico and Southern Texas for the past three years may be bringing this issue, which was not considered during the NAFTA debate, to a head.

In simple terms, the region is facing a water shortage crisis and looming ecological disaster. Having exhausted its reserve of Rio Grande River water, Mexico appealed to Texas for a water distribution loan in the summer of 1995. However, with Texas nearing the critical reserve level on its allotment, Governor George W. Bush refused the request, stating that the water rights belong to private individuals and were not the state's to give away.

Even under normal conditions, the Rio Grande ranks low among the world's principle rivers in the amount of water discharged per square mile of basin.³⁹⁷ The river is, in fact, over-allocated, meaning the demand for water is greater than the supply. There are very few other sources of water in the area.

Not only does this looming water crisis threaten the region's residential population and its agricultural pro-

ducers, but the low levels of water in the river increase the likelihood of the outbreak of diseases such as cholera and other sanitation problems.

Another potentially explosive issue which the post-NAFTA development boom on the border is forcing to a head is the allocation of bi-national underground aquifers. Two years after NAFTA, there is still no agreement between the U.S. and Mexico on dividing this scarce and crucial resource despite increased residential, industrial and agricultural demand. Observers on both sides of the border have criticized the lack of attention paid to the issue by the International Boundary and Water Commission.³⁹⁸

Another immediate water availability issue concerns the Hueco Bolson aquifer in the El Paso-Ciudad Juarez area. This aquifer, 80 percent of which lies under the United States, has been exploited on both sides of the

border.³⁹⁹ "A lack of action to adequately manage and conserve the Hueco Bolson to prevent its total depletion can only lead to mounting problems, some of which may be impossible to solve," testified Mexican environmental attorney Alberto Szekeley before a recent meeting of the International Boundary and Water Commission.⁴⁰⁰ "There's a lack of political will in both the United States and Mexico... Unfortunately, with groundwater it seems to be a case of 'out of sight, out of mind.'" said Al Utton, director of the International Transboundary Resource Center based at the University of New Mexico.⁴⁰¹

In the meantime, growth and contamination in the region has continued to increase under NAFTA at a frenetic pace, with little concern on the part of private industry for the depletion of water resources—at least until the well, and then the profits, run dry.

Chapter 5

Border Air Pollution Under NAFTA

Promises

Without NAFTA, it is expected that the maquiladora program will continue to provide incentives for the construction of facilities in the border region, and that Mexican border populations will continue to increase, with resulting increases in air pollution emissions. Wages would be less likely to improve in a relative sense, so that widespread retirement of highly polluting automobiles and residential fuels would be less likely to occur. It is not clear, however, whether efforts by the Mexican government to control emissions will continue to increase without NAFTA.⁴⁰²

—Clinton Administration,
November, 1993.

Reality

As employment in the maquila industry has grown in two years of NAFTA, so have airborne pollution emissions from industry, and increased commercial and private transportation in the border area. The maquila workforce is up 20% since NAFTA passage and 3,500 trucks now cross the U.S.-Mexico border at Laredo, Texas alone, daily. Also, Mexican real wages have tumbled, with 14% devaluation of the peso in NAFTA's first year, and then a precipitous further 45% drop by the eve of NAFTA's second anniversary.

A very obvious example that pollution knows no borders is with air pollution. Emissions from cars, industry and utility plants in the U.S. and Mexico flow back and forth across the imaginary boundary we call a border or frontera. The air pollution issue became a focus of the 1993 NAFTA debate for several reasons: the Mexican capital, Mexico City, has disastrous air quality problems that became the focus of North American news stories during the NAFTA debate; U.S. investors in the then-proposed Carbon II Mexican border electric plant designed to burn low-grade, medium-sulfur coal with no emissions controls became targets of a high-profile campaign and were ultimately pushed to divest, as was the World Bank, from the plant whose emissions would threaten visibility as far away as the U.S. Grand Canyon; and television news brought pictures of the haze and word of the serious air pollution health effects in several border twin cities, such as Juarez-El Paso.

Air pollution in border cities such as Juarez, Chihuahua and El Paso, Texas was, and is, not just a matter of aesthetics and visibility—it has a staggering impact on public health on both sides of the border. "A lot of people still think of air pollution as more a nuisance than a threat... but pollution is not merely dangerous, but deadly," said American Lung Association president Alfred Munzer, M.D.⁴⁰³

"People who live in highly polluted cities die earlier. It's just that simple."

—C. Arden Pope, PhD
air pollutant specialist.⁴⁰⁵

Residents in several border cities face regular exposure to high levels of particulate matter. Particulate matter is a complex mixture of soot, ashes, dirt, dust, pollens, molds and other carbon-based particles and acid aerosols. "PM10" means airborne particles less than 10 micrometers in diameter. This measurement is used as a standard, because particles of this size or smaller can get into the lungs and can cause serious health effects. Exposure to high PM10s in air is associated with increased emergency hospital visits, and can lead to premature death.⁴⁰⁴ PM10s can be comprised of any variety of airborne particles, from dust to secondary particulates, such as carbon and hydrocarbon, and some aerosols.

The Harvard Six Cities Study, reported in 1993 in the *Journal of the American Medical Association* found a 26% higher rate of premature death in the most versus the least polluted cities in which it tracked 8,111 people for 14 to 16 years.⁴⁰⁶ "People who live in highly polluted cities die earlier. It's just that simple," says air pollutant specialist C. Arden Pope, PhD., an author of the report.⁴⁰⁷

In March 1995, the Houston Post reported on the most recent findings of the research team from Harvard, which has been working with Brigham Young University and the American Cancer Society. The new study, published in the *American Journal of Respiratory and Critical Care Medicine*, shows that airborne particles from traffic and smokestacks are killing people at an increased rate even in areas which meet EPA air quality rules,⁴⁰⁸ which many border twin cities do not. The study found a 30 percent difference in deaths from heart disease, respiratory diseases and lung cancer between cities with higher air pollution and less polluted cities.⁴⁰⁹

Polluting Industries in the Maquilas

Two industries which rank high on the EPA Toxic Release Inventory, chemical production and electronics, are also among the top industries operating in the maquiladora zone. The chemical industry ranks first on the EPA Toxic Release Inventory and electronics ranks ninth for all categories of toxic releases.⁴¹⁰ As of July, 1995, there were 191 maquiladora plants in the "chemical products" industry and 487 in the "electric and electronic parts and accessories" industry out of a total of 2,747 maquiladoras.⁴¹¹ Thus, these two industries combined account for 25 percent of the Mexican maquiladora factories.

Viskase Corporation, who produces casings for hot dogs and sausages, was the second worst polluter for toxic chemicals released into the air in Arkansas in 1990. In 1994 Viskase laid off 130 workers and moved to Mexico.⁴¹² General Electric has laid off 146 workers in the United States due to a "shift in production to Mexico," and is now operating in the maquiladora zone. In 1990, General Electric faced action by the state of Ohio for violations of air pollution regulations at its Circleville facility.⁴¹³

Despite promises from NAFTA supporters that the pact would improve border air pollution, the opposite has occurred in two years of NAFTA. The air along the border continues to get dirtier from the well-documented growth of industry in the maquiladora region and the increased overland traffic due to increased Mexican exports to the United States because of NAFTA. The majority of U.S.-Mexico trade is transported by truck.⁴¹⁴ The peso devaluation has increased these pressures.

The Mexican economy has sunk into a depression, with business sources reporting border workers will not regain their pre-NAFTA buying power until the next century. Thus, predictions that rising wages in the bor-

der zone would reduce reliance on highly polluting autos and residential fuels suggest that the economic downswing is now increasing such non-industrial pollution.

Meanwhile, the Border Environment Cooperation Council, created to develop border environmental improvement projects in a U.S.-Mexico agreement negotiated parallel to the NAFTA, has yet to consider any project aimed at cleaning up air pollution in the first two years of NAFTA. Instead, it has announced its priorities will be water and wastewater treatment projects, as well as solid waste management.⁴¹⁵

Juarez, Chihuahua/El Paso, Texas

Two years after NAFTA passage, the most serious air pollution problems along the U.S.-Mexico border exist at El Paso/Juarez, where the cities share an air basin surrounded by mountains. An ozone haze hangs over Juarez and El Paso much of the year, caused by the emissions from autos and industrial sources reacting with sunlight. Maquila emissions, coal-fired brick factories, burning rubbish and blown dust from the unpaved roads of Juarez add to the extremely high level of dangerous particulate matter in the air.

Border Non-Attainment Areas Recently Identified by EPA⁴¹⁶

	PM-10	SO ₂	CO	Ozone
El Paso, Texas	■		■	■
Dona Ana County, New Mexico	■			■
Imperial County, California	■		✕	▲
San Diego, California			■	■
Douglas, Arizona	■	■		
Nogales, Arizona	■			
Yuma, Arizona	■			

■ = Nonattainment area

✕ = Currently designated as "unclassifiable/attainment" although last year there were 11 violations. Based on 1994-1995 data, design value would be 12.9 ppm (high moderate).

▲ = County is currently designated as "transitional" nonattainment for ozone. Based on 1993-1995 data, the county value would likely be .16 or above (serious).

In 1995, El Paso regularly exceeded the EPA standard for carbon monoxide, particulate matter (PM10), and ozone, three of the six criteria pollutants for determining a Clean Air Act "non-attainment" area.⁴¹⁷ Non-attainment areas are those where levels of certain pol-

lutants are frequently so high that they pose a serious threat to human health, and drastic measures must be enacted to bring down those levels. Since NAFTA passage, El Paso is still on the "most wanted list" for air quality. According to Henry Del Rio of the City of El Paso Department of Air quality, El Paso's air quality is consistently rated among the worst in the nation.

While El Paso's air pollution problems certainly predate NAFTA, since NAFTA went into effect, the ozone levels in El Paso have been steadily increasing. In 1993, 58% of the days of the year had ozone levels that were considered unhealthy; this increased to 67 percent in 1994, and 75 percent for 11 months of 1995.⁴¹⁸ The El Paso area has been designated as having "serious" air quality problems under the Clean Air Act Amendments of 1990.

*The ozone levels in El Paso have
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percent for 11 months of
1995.⁴¹⁹*

Because the Juarez-El Paso region has been declared an international airshed, with the whole area considered as one metroplex, the U.S. EPA has entered into an agreement with Mexican environmental officials to monitor the Juarez region. However, part of this agreement is *not to release the data they record.*⁴²⁰

Meanwhile, elected officials from El Paso, Texas have been critical of federal requirements placed upon them by the federal Clean Air Act. According to Texas State Senator Peggy Rosson, the EPA fails to recognize that El Paso shares its airshed with a city twice its size. The state Senator made her comments during debate over an auto emissions testing program aimed at bringing El Paso up to EPA air quality standards, which it now does not meet.⁴²¹ To Rosson, the bottom line in the debate is that auto emissions testing requirements and restrictions placed only on the growth of El Paso industry will have little effect; the parties polluting El Paso would simply go to Juarez and find continuing unregulated and rapid industrialization just a few meters across the Rio Grande/Rio Bravo River.

Auto Emissions

Since NAFTA passage, air pollution in El Paso, Texas is still considered the worst among US border cities, according to Carlos Rincon, Project Director at the Texas Environmental Defense Fund.⁴²²

A new system for enforcing emissions testing was to be implemented across the border in Ciudad Juarez in 1995. Under the old system, a person could not get an automobile license sticker renewed without first passing an emissions test. However, to avoid the requirements, almost 50 percent of vehicles did not go through license plate renewal, meaning that 50% of the 309,000 car owners in the city of Juarez in 1994 were not paying the associated taxed on license renewal.⁴²³ The state lost significant revenue. As a result, in 1995, the state turned the enforcement of emissions testing over to the city, allowing car owners to renew their licenses without first passing emissions tests. Police were charged with monitoring emission testing stickers to verify if people were having their vehicles tested when they were required. The penalty is a 40 peso fine (less than \$6).⁴²⁴

As of April 1995, only 17,363 vehicles had been tested, well below the number of people in Ciudad Juarez who were required to have cars tested by then.⁴²⁵ A binational taskforce is now working on the project with two main goals: to educate the public on the necessity of emission testing by distributing fact sheets to encourage people to get their vehicles tested, and to convince the state to re-establish emissions testing requirement. It is expected that the total numbers of vehicles that pass the emissions test in 1995 will be well below the 50 percent that passed in 1994.⁴²⁶

Besides the auto emissions and industrial pollution, the many unpaved roads along the border are a factor in the high level of air contaminants. Increased traffic along these roads obviously has an affect on the level of particulates in the air. As well, such unpaved roads require more effort from automobile engines, and thus result in higher fuel consumption. Furthermore, because the unpaved roads are punishing to cars, people with newer vehicles leave them at home and 1970's cars, which are less efficient, and emit more pollution than newer cars, predominate.

To date, the only effort to address these serious problems involve monitoring, rather than actual remediation. The Texas Natural Resources Conservation Commission (TNRCC) is cooperating with Mexican officials in conducting a vehicle-miles traveled study to support emissions inventory and urban airshed modeling. The models are to be used to help develop effective pollutant control strategies for the air basin.

U.S. and Mexican federal, state and local governments' joint activities include a five station air monitoring network in Juarez, operation of 17 monitoring site in El Paso and "promotion of widespread community involvement in the implementation of innovative, cost-

effective air quality solutions.⁴²⁷

Unfortunately, the TNRCC reports that resources devoted to this program are extremely strained, and that even collecting good data from the monitoring sites in Juarez has been difficult.⁴²⁸

However, with Juarez' maquiladoras spewing tons of pollutants into the joint airshed, implementation of remediation programs are a public health emergency that has been left unattended. The intensified border maquila development spurred first by NAFTA, and then again by the peso devaluation, is only escalating this already serious problem.

The Lower Rio Grande Valley

With a historically small population and proximity to a predominantly southeastern breeze from the Gulf of Mexico, the Lower Rio Grande Valley has not had to be concerned with air quality, until recently. In 1994, the Texas Natural Resources Conservation Commission installed two air monitoring sites in Brownsville to sample for deadly carbon monoxide and for sulfur dioxide (the cause of acid rain) and Volatile Organic Compounds (VOC's), which are cancer-causing agents.⁴²⁹ The state of Texas and the state government of Tamaulipas (home to Lower Rio Grande Cities of Matamoros, Reynosa and, further upstream, Laredo) began working cooperatively on air quality monitoring, thanks in part to World Bank funding and Tamaulipas state being part of a pilot project to de-centralize authority in Mexico.⁴³⁰

The World Bank, in cooperation with Mexican officials, completed the first stage of development on the Tamaulipas facility which involved the building of a lab.⁴³¹ Mexican officials are to submit a proposal for second phase funding to the World Bank.

Nogales, Sonora/ Nogales, Arizona

Air pollution is a serious problem in this, most populated part of the Arizona/Sonora border. In addition to concerns over emissions from maquiladoras, a significant source of air pollution in the area was the Nogales, Sonora garbage dump.⁴³² The dump which burned trash and sometimes hazardous substances, had been located close to the border, thus covering both U.S. and Mexican cities with dump smoke. This dump is now closed, although a new dump opened 15 miles from the border.⁴³³ Though this may limit the smoke reaching the U.S. side of the border, the burning dump will still affect residents on the Mexican side.

Beginning in April of 1994, the Arizona Department of Environmental Quality conducted a one year study of the air on both sides of the border in the Nogales/Sonora region. The more than \$250,000 year-long monitoring project funded by the EPA was designed to test the air for hazardous air pollutants.⁴³⁴ Part of the motivation for such an extensive and costly project was the high incidence of multiple myeloma, a type of cancer, and of Lupus in the Nogales region. The results of the

testing have yet to be released.⁴³⁵

After the testing was completed in April 1995, just one monitoring station on each side of the border remained operational. Now these stations are only testing for particulate matter, PM10, and for no other pollutants, such as ozone, sulfur dioxide or carbon monoxide.⁴³⁶

Tijuana/San Diego

Another set of twin cities which share an air basin are Tijuana, Baja and San Diego, California which some say challenge Juarez/El Paso for the most-polluted air on the border.

Severe regional air pollution has made San Diego a non-attainment zone for carbon monoxide and ozone area under the federal Clean Air Act (see chart). Emissions from automobiles in both countries, and the maquiladora plants in Tijuana are the cause of most of the problem.⁴³⁷

Two years after NAFTA passage, still very little actual air quality data are available for the Tijuana/San Diego or nearby Mexicali/ Calexico areas. There are no efforts to ameliorate the serious air pollution, although there has been some cooperation between U.S. and Mexican officials in establishing more air monitoring stations. However, in April 1995, there were only three fully functioning monitoring stations in Tijuana, one in Calexico, and a proposed facility in Mexicali.⁴³⁸ According to the California Environmental Protection Agency, Tijuana is scheduled to have at least four full stations (which cost \$100,000 each) and two additional particulate sites, with the Mexicali area having a similar network.⁴³⁹ It is uncertain when any additional stations will be on-line because of U.S. budget concerns.⁴⁴⁰

While these air monitoring stations are important in assessing air quality problems, and monitoring the effectiveness of any future mitigation efforts, establishing any amelioration plan is unlikely with the Mexican economic depression and the U.S. government budget cuts. Best projections indicate that it will be spring of 1996 before sites are even selected for future monitoring stations, and then not until summer 1996 until they are actually in place in Tijuana.

According to Bill Jones of the EPA, since there will be such a long delay before any conclusive data can be gathered to analyze sources of area air pollution, air improvement projects in the area should focus on reducing waiting time for border crossing, which officials already know is now a large contributor to the area's air problems.⁴⁴¹

Greatly Increased Traffic After NAFTA Increases Air Pollution, Road and Bridge Construction Demands

Increased trade between Mexico and the United States under NAFTA is bringing with it increased traffic and pollution to the border region. The majority of the trade between the United States and Mexico is

trucked.⁴⁴² Texas Attorney General Dan Morales said in November, 1995, that \$73 billion of the \$100 billion in U.S. trade with Mexico is delivered by truck, and 70 percent of that cargo comes through Texas.⁴⁴³ Sixty-nine percent of U.S. exports to Mexico are reported to travel through the land ports of Laredo, El Paso and Brownsville.⁴⁴⁴ Currently, about 3,000 trucks from Mexico enter Texas daily.⁴⁴⁵ As of late September 1995, after twenty months under NAFTA, approximately 3,500 trucks were passing northbound daily just through the border at Laredo.⁴⁴⁶ According to the *Journal of Commerce*, this number may increase to 10-15,000 by early next century.⁴⁴⁷

Increased traffic means more emissions and longer lines at border customs check points. This means lines of idling vehicles waiting their turn to pass through the border while burning up much of the fuel in their gas tanks. There are discussions about how to cut these post-NAFTA border crossing delays. The pollution problem is caused not only by the lined up automobiles, but also by the trucks waiting for long periods of time running their diesel-operated refrigerator units.

Since NAFTA, most of the increased traffic flow has been north-bound, with Mexican exports to the United States up. As of December 18, 1995, trucks from NAFTA countries were to be permitted to travel within all adjoining border states. This NAFTA 'open border' rule may be postponed because border-state attorneys general, safety groups and the International Brotherhood of Teamsters have pressured the Clinton Administration to delay the opening until safety and environmental standards are developed.⁴⁴⁸

On January 1, 2000, trucks from NAFTA members will have unincumbered access to all parts of the United States, Canada and Mexico. The U.S. Department of Transportation is considering plans to accommodate the NAFTA traffic-increase by expanding Interstate 69 (I69), which currently links Port Huron, Michigan with Indianapolis, Indiana, into a NAFTA superhighway to run goods from Quebec, Canada, all the way to central Mexico.⁴⁴⁹

Overburdened roadways in the border states will be costly for taxpayers, as well as environmentally hazardous. Nine thousand six hundred cars do the same damage to a road as one 80,000 pound truck, according to Texas Attorney General Dan Morales.⁴⁵⁰ In Texas, a truck is allowed to carry 80,000 pounds. A typical Mexican truck carries 100,000 pounds, and some carry as much as 170,000 pounds.⁴⁵¹ Canada permits a maximum of 137,000 pounds.⁴⁵² With the increased burden of overweight Mexican and Canadian trucks, U.S. roads will wear out more quickly and require the expense and environmental strain of new construction.

The Texas Attorney General's office reports that Texas roads will wear out in 12 years instead of in 40 years with the increased NAFTA traffic.⁴⁵³ Increased traffic over the next 40 years will require an additional 10 lanes to each freeway just to maintain the congested traffic flow existing now, the Texas Attorney General reported.⁴⁵⁴ It costs Texas taxpayers \$350,000 for every mile of highway

repair.⁴⁵⁵ Furthermore, there are currently plans to double the number of bridges crossing the border in the Rio Grande Valley to the new post-NAFTA traffic.⁴⁵⁶

Bridge Construction without Environmental Impact Statements

According to statistics compiled by the Border Trade Institute in Laredo, Texas, trade flow through the Lower Rio Grande Valley bridges have increased substantially since NAFTA.⁴⁵⁷ In June 1995, the Texas Center for Policy Studies issued a report highlighting the need to engage in an evaluation and planning effort for the Lower Rio Grande Valley as a whole to determine how many bridges were needed, and how they could best be located so as to protect the local environment.⁴⁵⁸

Many elected officials and development interests have been extremely eager to be the first to enact a new bridge project.⁴⁵⁹ Proposed bridges include Los Tomates, Port of Brownsville, Anzalduas, Los Ebanos, Mission, and Donna.⁴⁶⁰ Some approvals for bridge construction have been made with limited concern for their environmental impacts and with environmental assessments that do not meet the letter or intent of the National Environmental Policy Act.⁴⁶¹ In fact, the U.S. Department of State is not requiring Environmental Impact Statement under the National Environmental Policy Act, but is instead relying solely on Environmental Assessments many of which are superficial and contain unsubstantiated, broad conclusions.⁴⁶² Environmental impact statements have been required by Mexican law as well.⁴⁶³ There have been no recorded Mexican Environmental Impact Assessments for the recently recently constructed built and proposed bridges, except for the Pharr-Reynosa bridge. In addition, because there has not been a coordinated planning effort, and has been very little local cooperation in planning or site selection, the proposed plans also do not take into effect other potentially adverse effects on surrounding neighborhoods and communities.⁴⁶⁴

In response to pressure from U.S. non-governmental organizations and the U.S. Fish and Wildlife Service, the State Department has agreed to discuss requiring a Programmatic Environmental Impact Statement (PEIS) to determine environmental impacts of existing and proposed bridge projects along the Texas/Mexico border.⁴⁶⁵ If implemented, the PEIS could be helpful in planning future projects. However, the State Department has said that the results of the PEIS will not delay processing of pending applications.⁴⁶⁶ If the results of the PEIS are released after the implementation of many more new projects, the effectiveness of these statements could be drastically reduced.

Top Polluters in North America: Carbon I, II Coal-fired Power Plants

In 1993, the NAFTA debate became the theatre for a contentious environmental fight over the construction

of an enormous, 1,400 megawatt power plant that would burn low grade, medium sulfur coal, and have no smoke-stack scrubbers or other air emissions reduction equipment. The plant, known as Carbon II, was to be added near an existing power plant of the same design at a site near Rio Escondido, Coahuila, across the border from Eagle Pass, Texas.⁴⁶⁷ Environmentalists and communities on both sides of the border, and Texas state officials protested the continued construction of the Carbon II electrical plant with its outmoded, environmentally threatening technology.

NAFTA proponents pointed to the Carbon II fight as the very sort of situation that could be remedied by NAFTA approval, and the enhanced U.S.-Mexico environmental cooperation they argued NAFTA would bring. According to Former Texas Governor and NAFTA-booster, Ann Richards, "Reducing pollution from the plant (Carbon II) will support my position that the NAFTA agreement is our best hope for cleaning up the border environment."⁴⁶⁸

Choking on Another Broken NAFTA Promise

"Reducing pollution from the plant (Carbon II) will support my position that the NAFTA agreement is our best hope for cleaning up the border environment."

—Former Texas Governor and NAFTA booster, Ann Richards, 1993

Now, two years later, both the World Bank and a major U.S. investor have pulled out of the project because of environmental concerns. The Texas state Government has conducted an official full court press to get the plant redesigned to reduce air pollution. The combined emissions of Carbon I and II will be the largest source of sulfur dioxide pollution in southwest Texas.⁴⁶⁹ The U.S. government offered a \$500,000 grant to Mexico to study feasibility of a new scrubber technology that would reduce the plant's emissions by 60 percent for one-fifth the cost of current technology. The U.S. offer was rejected.

Half of the new Carbon II plant has been operational since mid-1994 with no emissions controls and burning particularly sulfurous coal. In December 1995, full capacity operations were being tested to come on line in early 1996.⁴⁷⁰

At full capacity, the Carbon II plant will spew up to 230,000 tons of sulphur dioxide into the air annually, twice as much as was allowed for U.S. plants built in 1970.⁴⁷¹ It will generate enough electricity to power a city the size of Dallas⁴⁷² and provide 10 percent of Mexico's national electricity supply.⁴⁷³ Constructed to provide power for border development, it will be among the largest polluters in North America.⁴⁷⁴

World Bank Cancels Carbon II Funding

Midway through Carbon II's construction, the Mexican government decided to open the plant up to privatization. The winning bidder, Mission Energy of California, became the official project spon-

sor, and approached the International Finance Corporation (IFC), the private sector arm of The World Bank Group, for financing in terms of a loan.⁴⁷⁵ The IFC, in order to uphold its environmental criteria for funding, insisted on installation of scrubber technology at Carbon II.⁴⁷⁶ At this point, Carbon II was 70% completed. To comply with the IFC request would have resulted in a halt in the construction, and retrofitting of the four units⁴⁷⁷ costing an estimated \$250 million.⁴⁷⁸ Mission Energy would not agree to add the scrubbers, and in the fall of 1993, the IFC decided not to issue the loan.⁴⁷⁹ California environmental groups active in the anti-NAFTA movement brought increasing political pressure against the project. Mission Energy itself eventually backed out of the project too, leaving the Mexican government to finance the project through the public sector.⁴⁸⁰

In addition, Carbon II's pollution output would be so great as to reduce visibility by as much as 60 percent in Big Bend National Park in Texas, 130 miles northwest of Carbon I and II.⁴⁸¹ A national park service air monitoring system shows that sulfates represent 46 percent of the pollutants that now impair visibility over West Texas and Big Bend.⁴⁸² (Sulfur dioxide is primarily produced from burning coals. It converts to ammonium sulfate when it mixes with moisture in the atmosphere and this appears as a white haze over the park.)

Two protected areas across from Big Bend in Mexico, Maderas del Carmen and Canyon de Santa Elena, will also be affected by the plant's emissions. (see map) According to EPA and National Park Service Officials, the degree of pollution from Carbon II has a real potential to impact visibility as far away as Carlsbad Canyon in New Mexico and the Grand Canyon National Park in Arizona.⁴⁸³ The plant is also likely to destroy the astronomy work done at the world-famous McDonald observatory near Fort Davis, Texas, including research using the new \$13.5 million Hobby-Eberly Telescope situated atop Mount Locke, directly northwest of Carbon II.⁴⁸⁴

Carbon II is planned to burn a low-grade, moderate-sulfur content coal mined from Minera Carbonifera de Rio Escondido, a nearby mine.⁴⁸⁵ A high-energy, low-sulfur coal should be used to produce the maximum amount of energy with the least amount of sulfur dioxide emissions. The planned use of lower grade coal heightens the plant's pollution problems. Carbon II is projected to emit 1.9 pounds of sulfur dioxide per million British Thermal Units (BTUs) of energy.⁴⁸⁶ Under U.S. law a maximum of 1.2 pounds per million BTUs is allowed.⁴⁸⁷

Is Carbon III Next?

Now another transboundary air pollution threat faces northern Mexico and Texas, according to Northern NAFTA Notes, published by the American consulate in Monterrey, Mexico.⁴⁸⁸ A consortium of Canadian firms is considering building a \$400 million electric power plant in Sabinas, Coahuila, which is about 50 miles south of Eagle Pass, Texas, to burn the same grade coal as Carbon II.⁴⁸⁹

In addition, neither Carbon I nor Carbon II are equipped with "scrubbers" on their smoke stacks to minimize sulfur dioxide levels.⁴⁹⁰ In June, the Mexican government rejected a U.S. offer of \$500,000 for a feasibility study of a new "scrubber" technology that would reduce emissions by 60 percent for one-fifth the current costs.⁴⁹¹ Nelly Rocha, director of the EPA's border liaison office in El Paso, told the San Francisco Examiner in September, 1995, "I'm totally appalled by the lack of action on this issue." She said that both the U.S. and Mexican governments are to blame: the Mexican government is planning to privatize the plant, and does not want to lower its selling price by requiring environmental improvements, and no one in the U.S. government wants to pressure Mexico.⁴⁹²

Mexican officials do not agree that Carbon II will even create visibility problems. "The Mexican government says there is no impact on the park," Mexico's Attorney General for environmental protection, Alfredo Gidi, told the *Washington Post*.⁴⁹³ Mexico wants the electricity which will be generated by Carbon II to support the growth of population and industry along the Texas border. In fact, the first two units of the four-carbine Carbon II, which are on-line commercially, have already reached their full capacity.⁴⁹⁴ Despite the enormous output of sulfur dioxide, Carbon II would be in full compliance with Mexican law.⁴⁹⁵

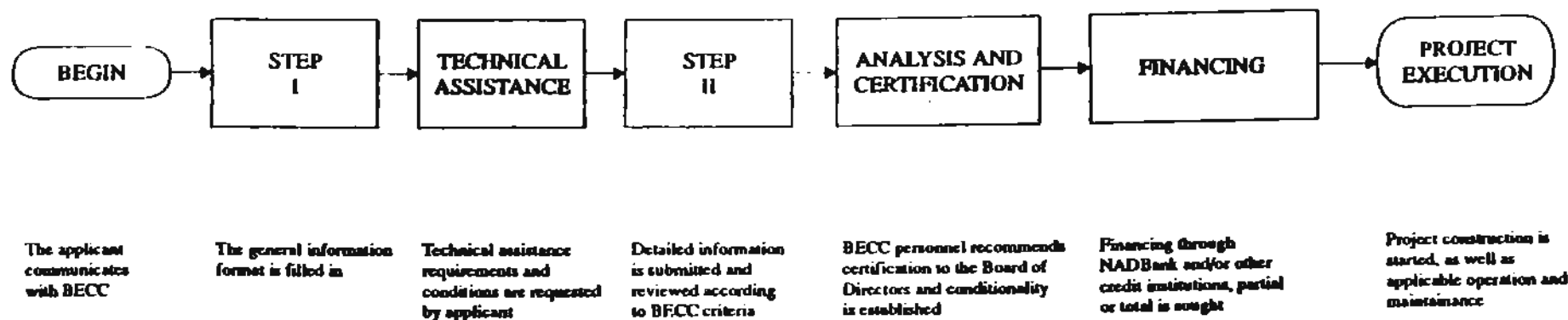
Carbon II and the NAFTA Side Agreement

In August 1993, the Texas Center for Policy Studies issued a report entitled "The Carbon II Dilemma: A Case Study of the Failings of US/Mexico Environmental Management in the Border Region." The case study examined applicable U.S. and Mexican environmental laws and the binational cooperative framework under existing international agreements. It concludes: "Carbon II is a perfect example of the relative weakness of the binational agreements for transboundary environmental problems."⁴⁹⁶

These findings on the ability of the United States and Mexico to sufficiently deal with major issues of transboundary pollution still hold true two years since the passage of the NAFTA and its side agreements. As the Center's report also concluded: the NAFTA's environmental side agreement is "...not adequate to deal with these kinds of complex situations with major sources of pollution."⁴⁹⁷ The narrow scope of the environmental side agreement allows only for study of cases, which involve a countries' non-enforcement of its own environmental laws. (see Chapter 6 on the environmental commission)

BORDER ENVIRONMENT COOPERATION COMMISSION

Certification process flow chart



Source: Guidelines for Project Submissions and Criteria for Project Certification, Border Environment Cooperation Commission, Chihuahua, Mexico, September, 1995.

Chapter 6

The Environmental Side Agreement and the Council on Environmental Cooperation

In judging what impact NAFTA would have on the environment during the NAFTA debate in 1993, proponents and opponents of NAFTA looked at two broad categories of issues:

□ Would NAFTA and its trade rules and investment incentives increase existing pollution and health problems?

□ Would the environmental and border institutions to be established parallel to NAFTA provide funding, political will and/or expertise to remedy existing environmental and health problems and/or new ones that NAFTA would create?

By considering both elements, analysts hoped to understand the net environmental and health effects of NAFTA.

This study takes the same approach, presenting two years of *net* NAFTA effects.

The first portion of this study analyzed what actually has occurred in two years of NAFTA in water, air and hazardous waste pollution and related human health problems in the border region. Unfortunately, our review of two years of data on pollution creation shows that since NAFTA passage, the maquiladora industrial work force has increased 20 percent rather than diminishing, as NAFTA proponents had promised. As well, the promised lessening of air and water pollution and toxic waste that NAFTA proponents said would accompany the shrinking of the maquila sector had not occurred. In fact, in many instances, since NAFTA passage, environmental contamination and related health problems have gotten worse.

In the following section we turn to the second broad inquiry: have the NAFTA environmental side agreement and/or the Border Environment Cooperation Committee (BECC) or its related North American Development Bank (NADBank) been able to ameliorate the significant environmental and health problems that existed in the border region prior to NAFTA? Are these institutions counteracting the increase in pollution and health problems that have occurred since NAFTA? Are they on target to be able to do so in the future? By looking at the effectiveness of these institutions, we can try to determine the net effect of two years of NAFTA on the border environment and on the health of the region's inhabitants.

The North American Agreement on Environmental Cooperation, the environmental side agreement to NAFTA, was conceived by then-presidential candidate

and Arkansas Governor Bill Clinton as a way to "fix" environmental deficiencies in NAFTA, which the Bush administration had finished negotiating in the summer of 1992.

In an October 1992 speech at North Carolina State University in Raleigh, the Democratic nominee announced that, if elected president, he would seek special congressional authority to negotiate "supplemental agreements" dealing with environmental, labor and agricultural issues.⁴⁹⁸

"Before we implement the [NAFTA]," then-Governor Clinton said, "we must establish an environmental protection commission with substantial powers and resources to prevent and clean up water pollution. The commission should also encourage the enforcement of the country's own environmental laws through the education, training and commitment of resources, and provide a forum to hear complaints."⁴⁹⁹ This environmental agreement, he said, "should contain a wide variety of procedural safeguards and remedies that we take for granted here in our country, such as easy access to the courts, public hearings, the right to present evidence, streamlined procedures and effective remedies."⁵⁰⁰

Clinton also expressed concern about challenges to U.S. environmental laws that could occur under NAFTA. "We ought to make sure that NAFTA, the trade agreement, doesn't override the democratic process. For example, in the provisions on the environment, the current agreement contains no mechanism for public participation in defending challenges to American laws if we apply our environmental laws against Mexican products, or in bringing challenges to the practices of other parties. I think the new Congress should pass legislation to provide for public participation in crafting our position and in ongoing disputes, and to give citizens the right to challenge objectionable environmental practices by the Mexicans or the Canadians."⁵⁰¹

Soon after taking office, President Clinton began negotiations with Mexican and Canadian officials on environmental and labor side agreements to NAFTA. The Clinton Administration concluded the North American Agreement on Environmental Cooperation (NAAEC) in the summer of 1993. The agreement led to the creation of the tri-national Montreal-based North American Commission for Environmental Cooperation (CEC). (See Chapter 7 for information on the two binational U.S.-Mexico border agreements on BECC and NADBank also completed parallel to NAFTA).

"The Environmental Agreement," the Clinton admin-

istration promised, "establishes a framework for the United States, Mexican and Canadian cooperation on environmental matters and commits the parties to effective enforcement of their environmental laws."⁵⁰²

Threatened NAFTA Challenges to U.S. Environmental Laws

NAFTA had only been in effect 13 months when chemical manufacturers and wine producers from several countries filed petitions with the U.S. EPA arguing that under NAFTA, the United States could not repeal residue tolerances for the carcinogenic fungicide, folpet. The EPA had announced plans to forbid sale of food containing folpet residues. Folpet's registration for use in the United States had been revoked in the late 1980s. Chemical industry and agribusiness interests argued that, absent justifying scientific data it would violate NAFTA, and also violate GATT, for the United States to have a standard more protective of health than those allowed by the relatively weak international standards of the Rome, Italy-based Codex Alimentarius Commission named that NAFTA recognizes for pesticides the company that produced folpet had refused to provide the needed data.

The environmental side agreement, along with the two U.S.-Mexico agreements establishing the Border Environment Cooperation Commission and the NADBANK, ameliorated the NAFTA concerns of some environmental groups. Citing their satisfaction with the side agreements, five major U.S. environmental organizations endorsed NAFTA: the National Wildlife Federation, the World Wildlife Fund, the Environmental Defense Fund, the Natural Resources Defense Council and the National Audubon Society. Most local and national environmental organizations continued to oppose NAFTA.

"We have broken new ground in the negotiation of trade agreements. The NAFTA package promises to be a powerful tool in harnessing economic resources in the name of environmental protection."⁵⁰³

*—Jay Hair, President,
National Wildlife Federation (NWF), 1993.*

The support of the five pro-NAFTA groups, however, provided political cover for some pro-environment Democrats who were being pressured by business interests and the White House to support the trade agreement. Just a few members of the U.S. Congress made

use of this environmental cover, however, and NAFTA was passed by only a narrow margin in the U.S. House of Representatives. The vote to pass NAFTA also followed a series of special deals granted to members of Congress by the Clinton Administration to fund bridge, university and military projects in home districts of some Members.⁵⁰⁴ Democratic House members who stated that their support for NAFTA was based on the proposed NAFTA institutions and the support of some environmental groups included: Edward Markey (MA), Gerry Studds (MA), Nancy Pelosi (CA), Karan Shepherd (UT) and Jim McDermott (WA). As well, several longtime congressional NAFTA boosters, such as Democratic Representative Ron Wyden (OR) and Bill Richardson (NM) claimed that their support, though pre-dating the environmental side agreement, was based largely on these supplemental agreements.

Environment Helped or Hurt by NAFTA

"Vote for cleaner air and water and less pollution in North America; support the NAFTA agreement."

—Rep. Ron Wyden (D-OR) 505

"...Our only hope of overcoming our environmental and labor problems begins with the groupwork laid by this agreement."

—Rep. Jim McDermott (D-WA) 506

"It is my view that this agreement represents a step backwards in terms of environmental laws; it presents a step backwards in terms of food safety laws..."

—Rep. Henry Waxman (D-CA) 507

"If you based your vote on the enforcement of the side agreements on labor and environment, you based your vote on a lie."

—Rep. Peter DeFazio (D-OR) 508

"We have broken new ground in the negotiation of trade agreements," said National Wildlife Federation (NWF) president Jay Hair in endorsing NAFTA. "The NAFTA package promises to be a powerful tool in harnessing economic resources in the name of environmental protection."⁵⁰⁹ Hair and the NWF argued that the NAFTA text and NAAEC would "impose trade sanctions on countries seeking to boost trade by lowering or ignoring their environmental standards... encourage public participation in resolving trade and environment disputes... assure that environmental clean-up projects along the U.S.-Mexican border will receive adequate funding..." and "address wildlife issues from an ecosystem approach—that is, spanning national borders to preserve international wildlife habitats."⁵¹⁰

Environmental Dumping??

Pro-NAFTA environmental groups such as the NWF have not necessarily gained the greater Clinton administration access or in-

fluence they may have anticipated in exchange for their help in pushing NAFTA through Congress, according to a recent book by Purdue University professor John Audley, who worked for the Sierra Club through much of the NAFTA debate.⁵¹¹ For instance, the book recalls, several months after the passage of NAFTA, a group led by the National Wildlife Federation's Stewart Hudson was snubbed by then-Deputy U.S. Trade Representative Rufus Yerxa.⁵¹² Yerxa bluntly rejected Hudson's appeal for environmental conditions to be included in negotiating authority for future trade agreements and brushed off his environmental concerns about the global GATT trade agreement.

National environmental organizations that opposed NAFTA include: the Sierra Club, Friends of the Earth, Greenpeace, the Humane Society of the United States, the American Society for the Prevention of Cruelty to Animals, Clean Water Action, Rainforest Action, Earth Island Institute, Environmental Action and hundreds of others.⁵¹³ These groups dubbed the proposed NAFTA institutions a "fig leaf," objecting to the fact that NAAEC failed to address key environmental concerns, including: adequate funding for environmental clean-up and infrastructure improvements; protection of process and product standards; the ability of states and local governments to set higher standards than those of the agreement; the ability of a nation to fulfill its obligations in international environmental treaties; and the protection of natural resources.⁵¹⁴

Environmental NAFTA opponents also objected to what they identified as major inadequacies and problems within the agreement itself, including the structure and mechanics of the CEC and its dispute resolution mechanism, as well as inadequate public participation.⁵¹⁵ They argued such an institution could not repair the existing environmental damage on the border, much less counter the new environmental problems opponents feared NAFTA would cause.

The Commission for Environmental Cooperation

The North American Agreement on Environmental Cooperation created the North American Commission for Environmental Cooperation (CEC). The stated goals of the Commission were to ensure high levels of environmental protection, foster public discussion of environmental concerns, formally advise trade representatives from the three countries, secure effective enforcement and provide for transparency and access to enforcement processes.⁵¹⁶

The CEC is composed of three bodies: the Council of Ministers, a Secretariat and a Joint Public Advisory Committee (JPAC).⁵¹⁷

CEC Council of Ministers

The Council, the governing body of the CEC, is comprised of cabinet-level or equivalent representatives.⁵¹⁸

Currently sitting on the Council are Mexican Secretary for the Environment, Natural Resources and Fisheries, Julia Carabias; U.S. Environmental Protection Agency Administrator, Carol Browner; and Deputy Prime Minister of Canada and Minister of Environment, Sheila Copps.

The Council meets at least once a year in regular session and can meet in special session at the request of any Council member. The Council "serves as a forum for the discussion of environmental matters" within the scope of the environmental side agreement.⁵¹⁹ The Council can conduct studies and develop recommendations on environmental issues for the three nations.⁵²⁰ The Council also oversees the Secretariat and approves its annual budget and work plan.⁵²¹

CEC Council of Ministers

Julia Carabias	Mexican Secretary for the Environment, Natural Resources and Fisheries,
Carol Browner	U.S. Environmental Protection Agency Administrator,
Sheila Copps	Deputy Prime Minister of Canada and Minister of Environment

To date, the Council has met twice. Council members held a preliminary meeting in Washington, D.C. in July 1994. The Council met a second time in Oaxaca, Mexico in October 1995 and plans to meet next in April 1996.⁵²² In its October 1995 meeting, the Council signed a flurry of sweeping cooperative agreements that were notably lacking in implementation, monitoring and compliance details. The accords call for voluntary cooperation between the three member countries to:

- 1) Reduce greenhouse gas emissions by promoting "green technology," forest conservation and energy efficiency;

- 2) Move toward "sound management" of bioaccumulative organic pollutants identified by the United Nations Environment Program (Council members have so far only agreed to target PCBs, DDT, lead and mercury were listed in an earlier draft, but were deleted at Mexico's behest;⁵²³

- 3) Create a North American Pollutant Release Inventory that will combine existing databases of the member countries on transportation and emissions of pollutants (though efforts are underway in the U.S. Congress to weaken U.S. reporting requirements, and emissions monitoring and controls in Mexico are notably lax⁵²⁴);

- 4) Ensure "wildlife habitat protection" and "protect songbirds," by which the Council modestly proposes to develop a region-wide set of "ecoregion maps" and an inventory of bird flight paths and habitats to catalogue essential habitats of migratory species.⁵²⁵

While the CEC staff are proud of this list of goals, a common complaint of members of the U.S. National Advisory Committee (NAC) that advises the Council representative from the United States is that the CEC has spread itself too thin in its first year, and must have a smaller agenda, but more depth, in 1996.

NAC MEMBERS

Ms. F. Lorraine Bodi
Co-Director, American Rivers, Northwest Region

Ms. Veronica Callaghan
Vice President, Kasco Ventures, Inc.

Mr. Raul Deju
President, Chemical Waste Management,
Western Regional Services

Mr. Stewart Hudson
Senior Legislative Representative,
National Wildlife Federation

Dr. Helen Ingram
Director, Udall Center for Studies in Public Policy

Ms. Mary Kelly
Executive Director, Texas Center for Policy Studies

Mr. J. Michael McCloskey
Chairman, Sierra Club

Mr. Dennis Phelan
Vice President, Pacific Seafood Processors Association

Ms. Ann Pizzonisso
Director, Environmental Affairs,
Phillips Electronics N.A. Corporation

Mr. David Schorr
World Wildlife Fund

Mr. David Simon
Southwest Regional Director,
National Parks and Conservation Association

Mr. Stephen Viederman
President, Jessie Smith Noyes Foundation

Dr. Margaret Wells-Diaz

Mr. Durwood Zaelke
President, Center for International Environmental Law

"The CEC is still organizing itself and trying to hit its stride," says NAC member and Sierra Club Chair Michael McCloskey. "The work plan it developed [for 1995] was very ambitious and, as far as I know, very little was accomplished. The U.S. National Advisory Committee has urged the CEC to focus its work plan more. We're afraid of little dribs and drabs of work over too broad an area not really amounting to anything with a real impact."⁵²⁶

CEC Secretariat

The Secretariat provides "technical, administrative and operational support to the Council and to committees and groups established by the Council."⁵²⁷ The Secretariat may, on its own or at the request of a non-governmental organization, prepare reports for the Council on North American environmental issues, provided that the Council does not object by a two-thirds vote.⁵²⁸ This body may also consider petitions from non-government organizations asking the CEC to write factual reports on an environmental problem (Article 13) or to look into allegations that a NAFTA member government has failed to enforce one of its own environmental laws (Article 14).⁵²⁹

The Secretariat's executive director is Victor Lichtinger. Before accepting this position, Lichtinger served as the General Director of the Mexico office of ICF Kaiser, an environmental consulting firm.⁵³⁰ Lichtinger was selected by the governments of the three NAFTA countries in the summer of 1994, and opened the CEC's offices in Montreal, Quebec in November 1994. The CEC now considers itself fully staffed with between 30 and 35 full-time workers, including approximately 20 internationally-recruited professionals. The agency's annual budget for 1995 and 1996 is \$9 million, with each country paying a \$3 million share.⁵³¹ NAAEC does not guarantee CEC funding.

U.S. Congressional Threat to NAFTA Institutions

The U.S. FY1996 contribution to the CEC came under attack in the U.S. House of Representatives Ways and Means Committee in the fall of 1995. Members of the Committee were hoping to expand NAFTA tariff cuts and market access benefits to 23 Central American and Caribbean nations under a program called the Caribbean Basin Initiative (CBI). The Ways and Means Committee's Republican leadership targeted the \$3 million U.S. CEC contribution as a source of funds to offset the revenue loss that would occur due to the tariff cuts in the proposed NAFTA expansion. However, many aspects of the proposed NAFTA expansion and its funding plan came under fire, the CBI legislation was stalled and the CEC funding survived.

The CEC's \$9 million budget is considerably less than some environmental groups estimated that the agency would need. In November 1993, at a time when an annual budget of approximately \$15 million was being considered, Roger Schlickeisen, President of Defenders of Wildlife, testified that this amount would "pale in comparison to the \$30 million to \$70 million recommended by the NWF/EDF [Environmental Defense Fund] study and the \$240 million recommended by the Sierra Club."⁵³²

While the CEC's annual budget is less than anticipated, some observers say it is adequate. "I don't really

think they are constrained by finances at this point," said Mary Kelly of the Texas Center for Policy Studies who heads the U.S. National Public Advisory Committee (NAC), which advises the United States government on CEC matters.⁵³³ "Anyone who has visited their headquarters [in Montreal, Quebec] will tell you they are not hurting for money." The spokesperson in those headquarters concurs. "It's a small budget," said Rachel Vincent, spokesperson for the CEC, "but given that much of what we do is in the area of policy—we don't build waste facilities—it's not entirely unreasonable."⁵³⁴

"The best thing they [the CEC] have going for them is a talented, creative, energetic and smart staff," said Mary Kelly.⁵³⁵ "They've got some individuals up there who are talented and really want to do the right thing." CEC staff member Rachel Vincent agrees, "I think we have a fantastic team of people from different disciplines who have demonstrated that they are independent thinkers and independent action-oriented people."⁵³⁶

According to Kelly, however, the staff are "highly constrained by the limited authority they have under the agreement and the reluctance of the governments to let them even exercise that limited authority to its fullest interpretation. The governments are very hesitant to let the Secretariat be too independent."⁵³⁷

Although the central function of the CEC is to investigate environmental problems and prepare reports, the institution has no authority to inspect environmental sites and lacks subpoena power. Its investigations must rely on documents that are already in the public domain or submitted voluntarily.⁵³⁸

The CEC can only review particular environmental problems or non-enforcement of a nation's existing environmental law.⁵³⁹ There are even limitations on the types of environmental laws which may be involved in a petition. Nonenforcement of environmental laws concerning commercial harvest or exploitation of natural resources cannot be addressed by the CEC.⁵⁴⁰ As well, one NAFTA nation's challenge against another NAFTA nation's environmental law, such as laws that use trade restrictions to enforce domestic environmental standards (such as a law banning import of food with illegal pesticide residue) or exploitation of natural resources of another nation, would be heard by NAFTA's commercial dispute settlement procedure without CEC involvement.⁵⁴¹

The CEC must have a two-third's majority Council vote to initiate an investigative report or to prepare a factual record on an outside submission asserting non-compliance of an environmental law.⁵⁴² This is quite different from the NAFTA's commercial dispute rules, under which a review is initiated simply by merit of a country filing a complaint. The CEC Secretariat recently made a controversial interpretation which narrowed its mandate even further, rejecting a petition with a ruling that legislative actions that result in failures to enforce environmental laws do not fall within the CEC's man-

date of investigating non-enforcement. (This decision is discussed in detail below.)

The CEC must clear another hurdle in order to pursue sanctions for nonenforcement of an environmental law. For such cases, the CEC must find "a persistent pattern of failure by the Party complained against to effectively enforce its environmental law," a burden of proof that is significantly more demanding than NAFTA's commercial provisions. This type of CEC case—which can result in fines or sanctions—can only be initiated by a government, not by a nongovernmental organization. Fines under this provision are capped at \$20 million, even if actual damage is found to be significantly higher. Fines are to be paid by the government, not the polluting industry.⁵⁴³ If the fines are not paid, the CEC can then authorize limited sanctions against that industry.

"What they [the Secretariat] can do is develop factual records, if the governments let them go ahead with a complaint," according to the NAC's Kelly. "And those factual records are just that—factual records—there are not binding recommendations. They are limited to doing studies and trying to foster tri-national cooperation."

On this count, CEC spokesperson Rachel Vincent says the CEC has already excelled. "I think that we proved that cooperation works and that there is something to be accomplished by bringing three countries together to work on environmental issues in a non-confrontational, cooperative way," she said. "The best thing we've done is made citizens aware that there is now a way to raise what appear to be local problems to the regional level."⁵⁴⁴ As discussed below, however, for many observers outside the agency, it is still too early to judge the CEC's effectiveness in facilitating effective environmental cooperation.

CEC Joint Public Advisory Committee

The third body within the CEC is the Joint Public Advisory Committee (JPAC), the purpose of which is to "ensure that the citizens of the three countries play a strong part in efficient execution of the CEC mandate." Also the JPAC "advises the Council and Secretariat on the direction of future policy decisions and provides relevant technical, scientific and other information to the Secretariat upon request."⁵⁴⁵ JPAC, which is required to meet at least once a year, will have held five meetings by the end of 1995.⁵⁴⁶ In addition to the tri-national JPAC, the three member countries each have National Advisory Committees that advise their Commission Member on CEC matters.

JPAC chairs serve for one year terms and alternate between nationals of each of the three NAFTA countries. The 1995 chair is Jacques Gerin, a former Canadian Deputy Minister of the Environment who is now president of Montreal-based Hatch & Associates Inc., an engineering consulting firm in the metallurgy industry. In December 1995, JPAC will select a 1996 chair from among the five U.S. JPAC members; the 1997 chair will be a Mexican national.⁵⁴⁷

JPAC's access to information is limited to copies of the CEC's proposed annual program and budget, the Council of Ministers' draft annual report and any report the Secretariat prepares relating to the preparation of a report to the Council of Ministers.⁵⁴⁸ Information relating to consideration of submissions on the enforcement of a nation's laws is off limits to the JPAC, unless authorized by a two-thirds vote of the Council.⁵⁴⁹ There is limited public participation in these proceedings.⁵⁵⁰

"Public access to the CEC is a hard issue," said JPAC Chair Gerin. "Obviously, we will hold open meetings, but how much input can we get from a one-half or hour session? We are looking at different formulas to ensure effective public consultations."⁵⁵¹

The CEC "process

*is not judicial. It's not one of those
'no ex parte contacts, no lobbying
the judge' situations. It's more free-
wheeling and political. You can
get the Secretariat and decision
makers on the phone, and there's
no ethical bar against it."*⁵⁵⁷

*—Jay Tutchton,
lawyer who filed a case at CEC*

In terms of public access to CEC documents, the language of the NAAEC is ambiguous. There are very few provisions for public access to documents or Council decisions, with the exception of certain final reports and one annual report.⁵⁵² A two-thirds vote by the Council is sufficient to block access to most documents.⁵⁵³ "Everything JPAC does and the commission does is really public, but it takes time" for work to be finalized and released, according to Gerin. If nothing else, self-preservation will prod the CEC and JPAC to openness, he said. "We will only survive if we operate publicly."⁵⁵⁴

Explaining how the CEC stretches its budget, spokesperson Rachel Vincent said, "To save on telecommunications expenses and reach people over great distances we rely heavily on the information highway."⁵⁵⁵ On the anniversary of its first year in its Montreal headquarters, however, the CEC's information dissemination skills were still sluggish. When the Council unveiled the first Secretariat report responding to a petition from environmental groups (concerning the deaths of tens of thousands of birds at a Mexican dam) following an October meeting in Oaxaca, Mexico, the report was not made available to the public (electronically or in hard copy) for more than one month. In fact, a representative from Grupo de los 100 (Group of 100), one

of the organizations that filed the petition, said they did not receive a copy of the report from the CEC until mid-November 1995. Moreover, when the Mexico City-based group finally received a copy, it was in English.⁵⁵⁶

Citing the challenge of setting up a paper and electronic distribution system for documents prepared in three languages, Vincent acknowledged that the CEC still has some information dissemination kinks to iron out. She said, however, that the fact that the report was completed and would be distributed publicly was a victory for CEC openness.

"It's no secret that Mexico would have preferred us not release the bird report, but the majority view was that it should be released," Vincent said. "Almost everything we do is absolutely public and transparent. Our procedures are available to the public as they're developed. What's not available to the public is usually what has not been finalized yet. An example of that is the guidelines for Articles 14 and 15, which are meant to make the [petition] process easier," she said.⁵⁵⁸

Gerin says one of JPAC's major accomplishments in 1995 was holding public consultations in all three NAFTA countries on these guidelines for those who wish to petition the CEC under NAAEC Articles 14 and 15. While Gerin and Vincent characterized these guidelines as an aid to petitioners, Sierra Club Chair Michael McCloskey, a member of the U.S. National Advisory Committee, noted environmental groups and the NAC are concerned that these CEC petitioner guidelines might actually be used to deprive some would-be petitioners of standing. "A recurring problem in any international fora is most countries not wanting to hear from nongovernmental organizations or certify them as observers," McCloskey said.⁵⁶⁰

Consistent with this pattern, McCloskey reported that some drafts of the petitioner guidelines sought to narrow eligibility. For instance, by limiting would-be petitioners who have pursued other remedies by requiring would-be petitioners to have *exhausted* all other remedies. Similarly, some drafts narrowed eligibility from petitioners who allege that they have been harmed by a failure to enforce environmental law, to those who can prove such a harm, McCloskey reported. Other efforts to narrow eligibility, McCloskey said, would disqualify outright any petition with allegations based solely on media reports or that the Secretariat determined were motivated by a desire to harass industry. Since the petitioner guidelines have not been finalized or made public, it is too early to determine whether the final product will help or hinder petitioners. In its first year of operation, JPAC has not devoted much attention to one area that clearly falls within its mandate, CEC conflict-of-interest guidelines. Secretariat staff and JPAC members say no formal guidelines exist or are being drafted to prevent appearances of conflicts of interest by, for example, having top CEC staff put certain assets into blind trusts or compelling corporate members of JPAC to recuse themselves if their companies have an interest in business before the CEC.

The JPAC Members⁵⁵⁹

Mexico

Francisco Jose Barnes de Castro

Director General,

Instituto Mexicano del Petroleo

Guillermo Barroso Montul

Representante,

Sector Empresarial Mexicano

Maria Cristina Castro

Coordinadora General,

Coordinacion Estatal de Desarrollo Municipal

Ivan Restrepo

Director,

Centro de Ecologica y Desarrollo, A.C.

Jorge A. Bustamante

Presidente,

El Colegio de la Frontera Norte

The United States

Jonathan Plaut

Director Environmental Quality,

Allied Signal

Dan Morales

Attorney General,

State of Texas

Peter Berle

Former President and CEO,

National Audubon Society

Jean Richardson

Environmental Program Director,

EPIC Program University of Vermont

John D. Wirth

President,

North American Institute

Canada

T. Mike Apsey

President and Chief Operating Officer,

BC Council of Forestry Industries

Rosemarie Kuptana

President

Inuit Tapirsat of Canada

Jacques Gerin

President

Hatch & Associates

Louise Anne-Marie Comeau

Sierra Club of Canada

Michael E. Cloghesy

President,

Centre Patronel de l'Environnement du Quebec

JPAC provides only the most bare bones guidelines that say JPAC members shall not: a) Receive instruction from any government; b) Accept gifts from any source that would compromise their independence as JPAC members; and c) Not use for personal gain information acquired in their official capacity.⁵⁶¹

"We have general rules of comportment that address this in a very general sense," according to JPAC Chair Gerin. "I think this is probably adequate for the time being, but I suppose that could be tested. At the moment, knowing the people that are there, I know that [potential conflicts of interest] would come out as a matter of course, though of course that's not always enough."⁵⁶² According to CEC spokesperson Rachel Vincent, the CEC tries "to maintain the highest standards in the way we conduct business and give out contracts," but, she said, "nothing has been written and I don't know at what point that will be written. We are a young organization, so some of this is getting done as we go along and discover the need for it. So far it has not been an issue."⁵⁶³

Jay Tutchton, a lawyer at the University of Denver, who filed a petition with the CEC that argued that certain U.S. budget cuts amount to a failure to enforce the Endangered Species Act, suggests that the political nature of the CEC could present problems down the road. The CEC "process is not judicial," Tutchton said. "It's not one of those 'no *ex parte* contacts, no lobbying the judge' situations. It's more free-wheeling and political. You can get the Secretariat and decision makers on the phone, and there's no ethical bar against it."⁵⁶⁴

First CEC Case: Tens of Thousands of Dead Birds

In 1995, the CEC accepted its first petition to investigate an environmental problem: between 20,000 and 40,000 birds had died in the Silva Reservoir in the central Mexican state of Guanajuato in the winter of 1994-1995.⁵⁶⁵ The Grupo de los 100 (Group of 100), an organization of environmentally-minded writers, artists and scientists from throughout Mexico, joined by the Mexican Center for Environmental Law (Cemda) and the U.S.-based National Audubon Society, petitioned the CEC Secretariat to investigate the bird deaths.

The reservoir, located 200 miles northwest of Mexico City, is used as a migratory haven for birds that spend the warmer months in the United States and Canada. In mid-December 1994, thousands of dead and dying birds were found each day in the reservoir in the Turbio River Basin. The reservoir was subsequently drained by the Mexican government and the migratory season ended, but not before 20 species of birds, including ducks, egrets, ibis, black-necked stilts, sandpipers and American coots, perished.⁵⁶⁶ Doctors in the area also reported unusual health problems in area residents, including skin rashes, headaches and intestinal problems among children who came into contact with the water or the affected birds.⁵⁶⁷

The cause of the bird deaths became a source of heated debate. Mexico's National Water Commission initially claimed that a large, one-time dumping of the pesticide endosulfan by unknown parties was responsible for the deaths.⁵⁶⁸ Environmentalists pointed out that this was implausible because endosulfan is not commonly used in the area, is more deadly to fish than birds, and is not very water soluble.⁵⁶⁹ Mexican environmentalists such as Grupo de la 100 (Group of 100), speculated that the bird deaths were caused by chromium pollution, and that this pollution was overlooked to protect industry.⁵⁷⁰ Chromium is manufactured by a nearby chemical plant and is used by area tanneries.

Environmentalists were especially critical of what they perceived as the Mexican government's lack of resolve to get to the bottom of the problem before the next bird migration season in December 1995. "The [government's] investigations reflect the defects of all Mexican investigations, including the economic, penal and environmental ones," said Mexican novelist Homero Aridjis, president of the Grupo de los 100 (Group of 100). "They don't go beyond vagueness, and impossibilities and, in the end, there is no one responsible for anything. It's a smokescreen over the violations."⁵⁷¹

The Secretariat accepted the Silva Reservoir petition in June 1995, forming a tri-national scientific advisory panel in late July 1995 to study and report on the problem. Significantly, the Secretariat did not address whether the bird deaths and the contamination of the reservoir were a result of Mexico's failure to enforce its environmental regulations. The petitioners did not invoke this NAAEC provision, Article 14.

Mary Minette, an attorney with the National Audubon Society, said their petition invoked Article 13, instead of the tougher Article 14, because Article 13 is a less adversarial procedure.⁵⁷² Under Article 13, the petitioners urged the CEC to focus international attention on the problem and to recommend solutions. Minette said Audubon did not want to charge the Mexican government with failing to enforce its laws, since Audubon believes the government has tried to reduce area pollution through the Turbio Basin Initiative, a voluntary government-industry agreement.⁵⁷³

The Secretariat's report was unveiled at the October 1995 meeting of the Council of Ministers in Oaxaca, although a month later it was still unavailable to the general public.⁵⁷⁴ The CEC's rapid turn-around on the report won it the praise of one of the Silva petitioners, the Audubon Society.⁵⁷⁵

The scientific panel assembled by the CEC concluded that "the overriding cause of mortality of waterbirds at the Silva Reservoir was botulism; however, a small percentage of birds may have died of other causes."⁵⁷⁶ Among these other causes, noted the report, "The panel found that exposure to heavy metals, in particular chromium, lead and mercury, was indicated in some of the birds that the panel analyzed."⁵⁷⁷ In particular, the panel

report noted the elevated levels of chromium in surface sediment in the Silva Reservoir. Chromium is a heavy metal that is widely used by the industry of the region. The panel also pointed out that pollution from untreated sewage contributes to the extremely eutrophic state [in which excessive nutrients stimulate plant growth, exhausting oxygen supplies in the water] of the reservoir, a condition that is often a precursor to outbreaks of botulism.⁵⁷⁸

To prevent a recurrence of the bird deaths, the CEC's scientific panel made four recommendations that the CEC Secretariat endorsed:

- 1) Monitor the reservoir for bird deaths and prepare an emergency response plan in case of another die-off;
- 2) Drain the reservoir if there is evidence of another die-off;⁵⁷⁹
- 3) Keep birds off the reservoir and develop more attractive habitats;
- 4) Alter the reservoir's topography to make it less conducive to botulism outbreaks.

A striking aspect of the report is how little it directly targets the sources of industrial and sewage pollution in the Silva Reservoir.

"The reservoir was drained in late November at the approach of the 1995-1996 winter migratory season.

One of the Silva petitioners, the Grupo de los 100 (Group of 100), criticized the report for downplaying the role of industrial toxins. "We are not terribly satisfied with the findings because they are weighted towards saying that the main cause of mortality was botulism," said Betty Ferber. "Just based on a cursory review of it, we think it does not give enough prominence to the presence of heavy metals, especially chrome, in the dead animals."⁵⁸⁰

Other observers and petitioners expressed overall satisfaction with the report's findings, but raised concerns about whether its recommended solutions would prevent a recurrence of the problem and, indeed, whether the recommendations would be carried out. In fact, when the Secretariat submitted its report to the Council, it linguistically downgraded the recommendations to "suggestions," giving the Council in general, and Mexico in particular, more wiggle room.⁵⁸¹

"While neither the panel nor the Secretariat examined regulatory and compliance issues, it is clear that the Turbio River Basin is a highly polluted ecosystem and that much effort is needed to ensure an important decrease of industrial pollution in the region," the Secretariat's report said.⁵⁸² However, it is unclear whether any report suggestions are likely to translate into policies that would actually reduce the pollution in the Turbio River Basin. The scientists who wrote the report for the Secretariat urged the Council to "recom-

mend to the Mexican government to conduct a comprehensive evaluation of the environmental compliance situation in the Turbio River Basin area and that it design and implement a targeted pollution prevention program so as to decrease industrial pollution in a substantial way."

The report refers to a voluntary pollution-reduction program in the area, the Turbio Basin Initiative, which the Mexican government launched in February 1995. The initiative lacks a systematic way to monitor whether any environmental progress is being made in the Turbio Basin, a problem alluded to by the Secretariat. The report suggests "the establishment of an independent mechanism for monitoring and reporting on the progress and results of the implementation of the Turbio Basin Initiative."⁵⁸³

Asked why the scientific panel and the CEC did not make more aggressive recommendations to reduce source pollution, Andrew Hamilton, who heads the CEC's Science Division, and who helped assemble the panel, offers some insights into the calculus behind the report. According to Hamilton, the panel regarded the Turbio Basin Initiative as a "pretty serious effort, at least on paper, to involve a broad coalition of stake holders and to get some commitments on paper to reduce in a very substantive way both the industrial and the municipal sewage coming into that system."⁵⁸⁴ Hamilton reported that the panel believed it had two choices. "We could spend a lot of our effort looking for which particular industry contributed the most chromium into the system, when we really couldn't say definitely that chromium was the cause of the problem. We felt that, in the long haul, we would gain more by emphasizing the need to hold them to their commitments on [the Turbio Basin Initiative] and work hard to implement this rather ambitious initiative, given the scale of things in that part of the world," he said. "I think that, without a lot of encouragement, that [initiative] will fade back, and this [initiative] may fade too."⁵⁸⁵

Although strong calls for concrete steps that might address the sources of contamination in the highly polluted reservoir are absent from the Secretariat's Silva report, some observers say that, nonetheless, it was harder hitting than the Council wanted. "The governments, I think, expected that [the Secretariat] would just say what the cause was and that would be the end of it," said NAC Chair Mary Kelly. "The Secretariat took it a little further and made some recommendations," she said. "I think the governments got really worried about that Article 13 authority." Yet, Kelly said, the Secretariat is too weak to seriously challenge the Council. "The Secretariat has no authority to make sure that those recommendations are in any way implemented," she noted. "It is just this kind of concept that, 'Well, if we say publicly that it is sewage and what should be done, somehow it will get done.'"⁵⁸⁶

The CEC confirms that it has no enforcement powers beyond public pressure. "If the [CEC Silva Reservoir] report makes recommendations and Mexico doesn't follow them, we can't do anything," CEC spokesperson Rachel Vincent acknowledged.⁵⁸⁷

The CEC confirms that it has no enforcement powers beyond public pressure. "If the report makes recommendations and Mexico doesn't follow them, we can't do anything," CEC spokesperson Rachel Vincent acknowledged.⁵⁸⁸

Audubon Society lawyer Mary Minette says Audubon is generally satisfied with the Secretariat report's analysis of what caused the bird deaths. She says, however, that Audubon was concerned about whether enough steps were being taken fast enough to prevent a recurrence of the incident at the Silva Reservoir or elsewhere in that watershed, especially given mid-November 1995 reports that six new dead birds were found at the site and sent to the main campus of the National Autonomous University of Mexico for analysis.⁵⁸⁹ Betty Ferber of the Grupo de los 100 (Group of 100), however, says that a repeat of last year's massive Silva die off is unlikely in the 1995-1996 migratory season because the reservoir has been drained and only a small amount of water remains standing there.⁵⁹⁰

Endangered Species Petition

As noted above, in calling for the environmental side agreement that established the CEC, then candidate Bill Clinton cited the need to: promote "procedural safeguards and remedies that we take for granted in our country," and "to give citizens the right to challenge objectionable environmental practices by the Mexicans or Canadians."⁵⁹¹ While the first CEC petition was consistent with such concerns about foreign environmental enforcement, the next two petitions addressed U.S. issues.

Two Republican initiatives to stop enforcement of U.S. environmental laws that have been the subject of CEC petitions so far concern the U.S. Endangered Species Act (ESA) of 1973 and logging rules for federal lands. In contrast to the Article 13 petition on the bird deaths at Silva Reservoir, both of these later petitions have been Article 14 challenges that charge a government (in this case the United States) with failing to en-

force its own environmental laws.

The Endangered Species Act challenge was filed in July 1995 by Jay Tutchton on behalf of the Earthlaw Center at the University of Denver for five environmental groups: the Biodiversity Legal Foundation, Consejo Asesor Sierra Madre, Forest Guardians, Greater Gila Biodiversity Project and the Southwest Center for Biological Diversity.⁵⁹²

The ESA petition responds to an amendment that Senator Kay Bailey Hutchison (R-Texas) attached to a defense appropriations bill that President Clinton signed into law in April 1995.⁵⁹³

The Hutchison amendment:

1) Rescinds \$1.5 million from the 1995 budget that had been earmarked to make ESA determinations about whether a habitat should be designated "critical" or a species should be declared "threatened" or "endangered" under the ESA; and

2) Prohibits the U.S. Fish and Wildlife Service from applying other funds at its disposal to making such ESA habitat and species determinations.

The Earthlaw petition to the CEC argues that the Hutchison Amendment, without repealing or modifying the Endangered Species Act law, effectively halted the habitat and species listing process, depriving federal agencies of their ability to protect endangered species and enforce important ESA provisions. The petitioners argued that this amounted to an Article 14 failure of the United States to enforce U.S. environmental law.⁵⁹⁴

The Secretariat rejected the ESA petition. The Secretariat's process of rejecting a petition involves evaluating whether: 1) the submission alleges harm to the petitioner; 2) the submission raises matters for further study that would advance the goals of the agreement; 3) private remedies available have been pursued; 4) the submission is based just on mass media reports.⁵⁹⁵

The Secretariat's September 1995 decision rejecting the petition noted that "the alleged failure to enforce environmental law results from competing legislative mandates, and not from other action or inaction taken by agencies or officials. Consequently, the submission impels the Secretariat to consider whether a 'failure to enforce' under Article 14 may result from the enactment of a law which suspends the implementation of certain provisions of another statute."⁵⁹⁶

In the ESA opinion, the Secretariat interpreted Article 14 as being limited to "administrative breakdowns (failures) resulting from acts or omissions of an agency or official charged with implementing environmental laws."⁵⁹⁷ The Secretariat concluded that, although Article 14 is ambiguous on this point, it was nonetheless intended to be limited to administrative or regulatory failures to enforce environmental laws, and not to encompass legislative actions such as in the Hutchison Amendment. "The Secretariat therefore cannot characterize the application of a new legal regime as a fail-

ure to enforce the old one," the Secretariat's decision concluded.⁵⁹⁸

NAAEC provides that after the Secretariat rejects a petition, the petitioners have 30 days to submit new or supplemental information for the Secretariat's consideration.⁵⁹⁹ Responding under this provision in October 1995, Tutchton argued that the Secretariat erred in interpreting a budget cut as a legislative amendment of an environmental law. In so doing, "the Secretariat has effectively granted the legislative branch of government an exemption to the effective enforcement promise in NAAEC," Tutchton wrote.⁶⁰⁰ By creating this "emerging loophole" in NAAEC, he argued, the Secretariat was simply encouraging business lobbyists to shift targets. They will spend less time influencing agency officials to soft-pedal on environmental enforcement, he predicted, and focus more on getting legislators to undercut environmental laws with budget rescissions, a process that Tutchton argued is already well under way in the United States. The petitioners requested, that at the very least, the Secretariat should prepare an Article 13 report examining alternative ways to protect biodiversity.

Others agree with Tutchton that the Secretariat could interpret the agreement more broadly. "I think it's a narrow reading of the agreement," says Mary Kelly, head of the U.S. NAC. "This is one time where [Secretariat leaders] haven't pushed as hard as they could have."

Tutchton also reported that politics may help explain why the Secretariat did not tackle the ESA petition. "Some of the environmental groups that supported NAFTA criticized us when we filed our petition," he said. "We filed the thing within a week or so of the Congress looking at the [Environmental Protection Agency's] budget in which the contributions to the Secretariat were a line item," he said. "There may have been some desire at the Secretariat not to do anything against the U.S. Congress, which could zero out their funding."⁶⁰¹

Stressing that he was speaking as an individual, not as the JPAC Chair, Gerin acknowledges that the CEC does not exist in a political vacuum. "I went through the reasoning that the [ESA] petitioners put forth and it's good reasoning, it's sustainable," he said. "But I'm not sure you could say to the U.S. Congress that they were *ultra vires* [beyond their legal authority] of themselves. I don't think that would have gotten us very far. I think that one pretty much had to go down that way."⁶⁰²

Of course, whether an action is beyond a government's jurisdiction is not the standard of review at the CEC. Rather, the agreement establishing the CEC set the standard of review as an examination of a nation's failure to enforce certain types of domestic environmental laws.

A related political factor, Tutchton says is that some conservative members of Congress are concerned about the loss of U.S. sovereignty under trade agreements, and the ESA petition was filed at a time when NAFTA proponents were seeking fast-track negotiating authority to

expand NAFTA to Chile. "I think the Secretariat is trying to thwart this sovereignty argument by sort of writing a check to Congress to say, 'Amend the law in any way you see fit,'" Tutchton said.⁶⁰³

Timber Petition

The third CEC petition was filed by the U.S. Sierra Club Legal Defense Fund (SCLDF) in August 1995 on behalf of 26 environmental groups from all three NAFTA countries. That case argued an Article 14 failure to enforce U.S. environmental law. In this case, SCLDF Seattle, Washington office co-director Patti Goldman, who filed the case, argued that a logging rider attached to a disaster assistance appropriations bill⁶⁰⁴ in the U.S. Congress which became law in July 1995, suspends "enforcement of U.S. environmental laws" for two important programs governing logging on public lands. These include: the so-called salvage logging program, which permits harvests of timber on lands where a portion of land has timber that has burned or died of disease; and the Option 9 plan that seeks to balance timber industry interests in logging old-growth forests with the interests of the species that depend on this ecosystem, such as salmon and the spotted owl.

Goldman's brief to the CEC pointed out that for both of these programs, the logging rider "provides that whatever environmental analysis is produced and whatever procedures are followed by federal agencies for such timber sales 'shall be deemed to satisfy the requirements' of several specifically listed and 'all other applicable Federal environmental and natural resource laws.'"⁶⁰⁵ The logging rider specifically waives requirements to comply with the other laws that would otherwise apply. The logging riders' definition of 'sufficiency' would effectively trump important provisions of the Clean Water Act, the Endangered Species Act, the National Forest Management Act and the National Environmental Policy Act by declaring their provisions as satisfied whether or not they were.

In passing such sweeping legislation as a rider to a popular budget-cutting and disaster-assistance bill, Goldman argued that the logging rider's sponsors sidestepped the normal legislative process, which provides for public input and congressional hearings and scrutiny. Citizens are also shut out, the SCLDF brief argued, by the fact that the rider rules out many of the usual administrative and judicial recourses to challenge violations of environmental law carried out under the rider's authority.⁶⁰⁶

Like the ESA petition that the Secretariat rejected, the logging rider petition responds to congressional budget cuts that undermine enforcement of U.S. environmental law. Reflecting the fact that some, though not all, of the facts in these first two Article 14 petitions are similar, Goldman sent a supplementary submission to the Secretariat on October 20, 1995, in the wake of the Secretariat's ESA decision.⁶⁰⁷

This supplemental submission argued that the Secretariat erred in concluding that Articles 14 and 15 refer to only to the failures of executive branch agencies and officials to "effectively enforce" environmental laws. The brief noted that there is no evidence for such a conclusion in those articles themselves and that the Secretariat drew an unrealistically bright line between legislative functions and regulatory, administrative, executive and judicial functions in U.S. government.

"By drawing a bright line between legislative enactments and administrative enforcement shortcomings, the Secretariat treats legislative enactments as one homogeneous set of actions," Goldman argued in the October brief.⁶⁰⁸ In the supplemental brief, Goldman noted that legislative enactments that repeal an environmental law "do not constitute the type of enforcement shortcomings that may [be] addressed under Articles 14 and 15." However, she argued, a legislative enactment that, for example, defunds enforcement activities, prohibits prosecution of a pending enforcement action, or otherwise makes effective enforcement impossible are enforcement failures that are clearly in the scope of Articles 14 and 15.⁶⁰⁹

Citing effects of the logging rider that would appear to cut to the heart of the CEC's mission, Goldman wrote: "It allows timber sales to proceed with little, or sometimes no, citizen input or enforcement; and has already allowed timber sales that 'experts have concluded may jeopardize the survival of imperiled aquatic species.'"⁶¹⁰

As with the ESA petition, however, the CEC Secretariat rejected the timber challenge on December 8, 1995.⁶¹¹ The Secretariat's decision acknowledged that some of the petition's alleged failures to enforce environmental laws "clearly meet the definitional requirements established in NAAEC Article 45."⁶¹² Yet, returning to its ESA rationale, the decision says, "The Secretariat considers that the enactment of legislation which specifically alters the operation of pre-existing environmental law in essence becomes part of the greater body of laws and statutes on the books. This is true even if pre-existing law is not amended or rescinded and the new legislation is limited in time. The Secretariat therefore cannot characterize the application of a new legal regime as a failure to enforce an old one."⁶¹³

Responding to the petition's allegation that the logging rider limited the usual channels of administrative and judicial review available to citizens, the Secretariat's decision said insufficient facts had been submitted to make this case. "The enactment of a law does not, without more, provide facts upon which to charge a failure to enforce. Essentially, the submission is prospective in nature, alleging anticipated but unrealized enforcement consequences." [page 4]

With environmental groups such as the Sierra Club and Sierra Club Legal Defense Fund already concerned that the Secretariat has drawn an unrealistically bright line between legislative and executive administrative

functions for two U.S. cases, questions are being raised about how much blurrier the lines are in Mexico. In Mexico, political power is even more concentrated in the executive branch, with the executive and other branches tightly controlled by one party for almost 70 years. "If NAFTA means anything about obligations to enforce substantive standards it would go exactly to this point of failure to enforce regardless of which branch of government is orchestrating the failure," McCloskey says. "If you had a unitary government, a government such as that of Mexico, it would decide it was not going to enforce, and that's the end of the story. You don't go into deciding who failed to do it — the government failed to do it."⁶¹⁴

Mexico Test Brewing?

The first two Article 14 CEC petitions have addressed deregulatory actions by the Republican-dominated U.S. Congress that weaken U.S. environmental law enforcement. Now, a recent action of the executive branch in Mexico, to waive environmental impact statement (EIS) requirements for many new Mexican investments, has incensed environmentalists in all three NAFTA countries. Members of some of the environmental groups that have already filed petitions, such as the Sierra Club and the Grupo de los 100 (Group of 100), say that if Mexican courts do not properly resolve the EIS waiver problem, then the issue will be ripe for a CEC challenge.

On October 23, 1995, Mexico's Secretary of the Environment, Natural Resources and Fishing, headed by CEC Council Member Julia Carabias, published in the official government organ,⁵ *El Diario Oficial*, a decree that waives the obligation of those making new investments in many industries in Mexico from submitting an Environmental Impact Statement.⁶¹⁵ Instead, investors can now submit a "preventative statement" that would be automatically approved by default if SENRF did not respond within 30 days. The decree subjects numerous industries to the EIS waiver, including some of the most polluting industries.

Among the industries given an exclusion would be the petrochemical industry, which has long been the exclusive domain of the state oil company, Pemex. At about the same time as the EIS-eliminating decree was published, the Mexican government was preparing parts of the state petrochemical monopoly for auction to foreign investors—who could now look forward to investing in this highly polluted sector with diminished prospects of having to file an Environmental Impact Statement.

"This decree can be seen as part of proposed reforms to the General Environmental Law," reported Betty Ferber. "If this [reforms to the General Environmental Law] is coming up for debate between now and the end of December in Congress, why did they jump the gun on this particular part?" It appears, she says, "that this was done in order to pave the way for foreign bidding

on the petrochemical plants."⁶¹⁶

The EIS issue is particularly sensitive in Mexico because disputes over the adequacy of EISs has been at the heart of some of the fiercest environmental battles in Mexico today. These include the plans of: the California-based Metalclad Corporation to build a toxic waste dump in San Luis Potosi against the wishes of the local population;⁶¹⁷ and the Salt Exporting Company (jointly owned by Mitsubishi and the Mexican government) to build a sea salt extraction facility in the federally-protected Vizcaino Reserve in Baja California, where gray whales from all over North America mate.⁶¹⁸

On November 7, 1995, crying foul at the EIS-waiving decree, a lawyer from the Grupo de los 100 (Group of 100) filed a legal instrument in Mexico known as a "Recurso of Administrative Review" with the executive branch seeking an administrative review of the decree. Under Mexico's Federal Law of Administrative Procedures, if the government does not respond to such a recourse within five days, the contested regulation is automatically suspended until the issue is resolved. Having not heard from the government seven days later, Grupo de los 100 published a notice saying that it had not received a response and that the EIS decree was therefore suspended. That same day the environmental organization received a response from SENRF that argued that the Grupo de los 100 had no standing in the matter because it was just an administrative measure that seeks to simplify legal processing requirements and, therefore, did not affect the environment.

Rejecting this argument as "preposterous,"⁶¹⁹ the Grupo de los 100 (Group of 100) filed an injunction against the decree with an administrative law judge in Mexico City on November 17, alleging that the decree violates Mexican laws, including the General Law of Ecological Equilibrium and Environmental Protection, the Planning Law and the National Plan of Development 1995-2000. Grupo de los 100 also alleged that the EIS waiver violates NAAEC.

If this issue is not resolved in Mexico, it is likely to surface as an Article 14 petition with an interesting new set of trade-and-environment facts for the CEC to consider. Asked if the Grupo de los 100 would be likely to petition the CEC if it fails to resolve the EIS waiver issue in Mexican courts, the group's International Coordinator Betty Ferber said, "Absolutely. There is no doubt."

Such a petition would likely argue that Mexico's executive branch failed to enforce its environmental laws in an attempt to attract foreign investment in environmentally sensitive industries such as petrochemicals. The decree "clearly was an administrative move to not enforce environmental law," says NAC Chair Mary Kelly.⁶²⁰ Although the decree was issued by SENRF, Kelly says she suspects it originated with the trade and finance ministries "to promote investment and streamline the regulatory environment."⁶²¹ The case could be an important test of the CEC's ability to resolve collisions be-

tween trade interests and the environment. "If we come to bringing this environmental impact business before the CEC, then we'll have an opportunity to see whether they are really serious about the side agreements or whether it's just going to be an ornamental body that commissions studies and sets up databases," concluded Betty Ferber.⁶²²

Report Card For NAFTA Environmental Side Agreement

With NAFTA's second anniversary on January 1, 1996, many environmentalists say it is still too early to say for certain whether or not the CEC will do what it was originally hyped to accomplish: Soften at least part of the blow that North America's environment is absorbing as a result of expanded trade in the region under NAFTA. What is clear is that to date, while two years of NAFTA has exacerbated environmental problems, the NAFTA environmental side agreements has had little or no effect in countering environmental and health problems existing before NAFTA nor the intensification of those problems under NAFTA. Is the CEC likely to be able to meet its stated goals in the future?

One source active with the Commission for Environmental Cooperation questioned the commitment of the pro-NAFTA environmental groups to ensure that NAFTA actually will not harm the environment as they so vigorously argued during the campaign to pass the agreement in 1993. "Where are the groups that supported NAFTA? The groups that have made this work?" the source said. "The ones that said, 'The CEC is going to solve all our problems, therefore we support NAFTA,' have either disappeared and are not participating in the CEC or are playing around the edges and looking out for political minefields everywhere they turn," the source said. Of the pro-NAFTA environmental organizations, both the Audubon Society and the World Wildlife Federation are working closely with the CEC.

As well, in its very mandate in the NAAEC, the CEC has negligible authority over a NAFTA country that elects not to cooperate on environmental issues. As such, the CEC's influence will depend upon its willingness to as-

sert itself to investigate and publicize regional environmental problems and possible solutions. When necessary, to be effective, the CEC will have to put the interests of the environment over the Mexican government's interests in the rapid privatization of its petro-chemical industry or the reluctance on the part of the U.S. Congress to be second-guessed on environmental policy. Decisions the CEC will make in the coming months will go a long way toward answering questions about the Commission's relevancy.

"They're in an interesting position," said Michael McCloskey, chair of the Sierra Club, which is prodding the CEC to assert itself on behalf of the region's environment in late November 1995. "Article 13 and 14 give them a lot of opportunity for high-profile work. If they start turning down most of the petitions they are going to make themselves irrelevant. On the other hand, they have an eye to the political viability of their institution. They are walking a very delicate line. I think it will be very interesting to see how they handle our petition [on the U.S. logging rider]. Now, they've turned down one and taken one. Are they going to turn down two-thirds and send the message that petitioners don't have much of a chance, or are they going to take these and show that something is going to move to the fore?" Two weeks later the CEC turned down the logging rider petition.⁶²³

The CEC "has been very cautious and fearful of antagonizing the [three government] parties and at the same time runs the risk of being irrelevant because their natural constituency is the environmental community," McCloskey noted. "If they appear to be ducking the big issues and doing little they will have no constituency. Many of us thought at the time that their being established was merely a passing gesture to the environmental community to try to get some [NAFTA] votes in Congress and that there was little serious intent to make them a viable institution. Now that NAFTA is a fact, it is to our interest that they become a viable, significant institution. But the caution that they're showing to date is raising questions about whether they are going to amount to a whole lot."⁶²⁴

Border Environmental Cooperation Commission and the North American Development Bank

Border Environmental Cleanup: Big Questions About Funding

The promise of funding to clean up border environmental and health problems was instrumental in convincing some undecided Democratic members of the U.S. Congress to vote in favor of NAFTA. Realizing that secure funding was vital to any plan to improve health and environmental conditions in the border area, a coalition of House members, led by Representative Esteban Torres (D-CA), worked to create the development fund. "If the NAFTA is to succeed it must address the critical infrastructure needs along our border and throughout North America. My [NADBank] proposal is designed to meet these needs and make, if possible, the NAFTA work for all North Americans,"⁶³⁰ argued Representative Torres during the 1993 NAFTA debate.

The coalition of House members was initially organized through the efforts of Raul Hinojosa, a professor of urban planning at the University of California at Los Angeles. Hinojosa was the architect of the NADBank concept; it was his paper on the idea of a border development bank that was turned into the NADBank proposal.⁶³¹ Hinojosa sold the border bank concept on Capitol Hill as a way to make passage more palatable. "For the positive potential of [North American] integration to be realized there must be substantial investment of resources in four areas: environmental upgrading; infrastructure creation; community development; and improving labor productivity...NADBank is proposed as a highly cost effective method of financing

environmental, infrastructure, labor and regional economic development projects...NADBank would be organized to specifically invest in the environmental and social infrastructure that will be needed to bring an upward convergence in environmental and social standards and practices." Hinojosa also supported the NADBank operating in Canada, not just the United States and Mexico.

The NADBank proposal was strongly endorsed by several large U.S. environmental organizations who believed that NAFTA and the proposed institution would assure funding for border cleanup. The National Wildlife Federation, which made NAFTA passage a top legislative priority, promised, "The NAFTA in combination with the newly formed North American Commission on Environmental Cooperation will assure that...environmental clean-up projects along the U.S.-Mexico border will receive adequate funding."⁶³² The BECC and NADBank also were promoted by the Clinton Administration as mechanisms which would generate the financial resources to do the promised cleanup work.⁶³³

However, even before NAFTA was passed, it became apparent that the BECC and NADBank had serious legal and financial constraints. For instance, BECC is legally constrained by program scoping that gives preference to certifying projects that are "projects relating to water pollution, wastewater treatment, municipal solid waste, and related matters." Since the NADBank is limited to funding only BECC-certified projects, it too is limited to these areas. Therefore, numerous essential

Background

Parallel to negotiation of the NAFTA and its official tri-national side agreements on environment and labor, the United States and Mexico negotiated an agreement establishing two separate binational agencies to work on environmental problems along the border.⁶²⁵ The agreement that established these institutions was an "international executive agreement". The agreement was never ratified by Congress because international executive agreements do not require Congressional approval as, for instance, treaties do. Only the authorization of funds for the institutions established by the agreements required Congressional action. The funding was authorized in miscellaneous provisions of the NAFTA implementing legislation.⁶²⁶

The Border Environment Cooperation Commission (BECC), headquartered in Ciudad Juarez, Mexico, was designed to assist in developing border environmental infrastructure proposals and to certify such projects for funding. Funding of certified projects is to be facilitated by the North American Development Bank (NADBank), BECC's companion financial institution, headquartered in San Antonio, Texas.⁶²⁷

The NADBank's role is to provide financing for border environmental projects through long-term loans and loan guarantees. NADBank's stated goal is to encourage private financing and risk taking in health and environmental projects.⁶²⁸ The NADBank is tightly joined to BECC, in that it can only fund projects approved by BECC.⁶²⁹

environmental and health projects, such as air quality projects and natural resources and species conservation and management, are unlikely to be funded by the NADBank.

As well, since NADBank only administers loans and loan guarantees, applicants must demonstrate a capacity to repay NADBank in order to receive financing. According to NADBank credit analyst Sara Fort, "The ability to pay back loans is the most important financial consideration for NADBank."⁶³⁴ Communities may also be asked to provide equity financing for their projects. Equity financing, similar to a down payment, is money to be used for a project that is raised by the community before the project begins. Equity financing requirements under NADBank will vary from project to project.⁶³⁵ Poor communities that cannot demonstrate the capacity to pay back loans, or provide for equity financing, may not be able to have any access to NADBank financing. The University of Texas' Jan Gilbreath points out that these considerable problems could be dealt with if NADBank was able administer grants.⁶³⁶

On the financial side, there is uncertainty about exactly where funding for border projects will come from. Since the NADBank cannot administer grants, NADBank funding is not available for communities' projects where loans (at market interest rates) are not an option. As of mid-December 1995, after almost two years, no projects have been funded by NADBank, and the capacity of the NADBank to adequately finance border cleanup remains highly questionable. It is also uncertain as to where the significant non-NADBank funds, that are required for each border project in addition to NADBank funds, will come from.

Funding NADBank and BECC

During the NAFTA debate in the U.S. Congress, Andrew Hernandez, president of Southwest Voter Research Institution and a key organizer of Latino Consensus, an ad hoc pro-NAFTA lobbying group, claimed, "By leveraging \$2.8 billion in capital, [NADBank] will generate about \$20 billion in projects to clean up the water, air, and toxic waste sites along the U.S.-Mexico border."⁶³⁷

The Sierra Club had estimated that \$20.7 billion would be needed to properly deal with the border environmental situation.⁶³⁸ They recommend that projects be paid for by charging a fee on transactions between the two countries, including trade and international investment. "The beneficiaries of NAFTA should pay the costs of expanded trade," said Sierra Club Chairman Mike McCloskey.⁶³⁹

Government officials never agreed that \$20 billion would be needed for border environmental projects, or that the NADBank could generate such funds. A Clinton administration plan called for NADBank money to be a portion of an \$8 billion border environmental initiative which then-Treasury Secretary Lloyd Bentsen called "the best thing I've ever seen for the border."⁶⁴⁰

As part of this \$8 billion initiative, NADBank was expected to generate \$2 billion to be available for loans and loan guarantees. NADBank now expects to generate \$3 billion.⁶⁴¹ Of the money, \$450 million would come from "paid-in" capital contributions made directly to NADBank by the U.S. and Mexican governments.⁶⁴² The treasuries of the U.S. and Mexico are to make equal contributions of \$225 million. The United States is expected to contribute four annual payments of \$56.25 million and Mexico is expected to make equal contributions.⁶⁴³

The remaining \$2.55 billion of the expected \$3 billion loaning capacity was to come from "callable capital".⁶⁴⁴ Callable-capital means that the treasuries of the U.S. and Mexico transfer financial instruments that can be exchanged for cash if there is not enough paid-in capital in the NADBank to meet its obligations. According to NADBank spokesperson Lisa Roberts, callable capital only would be used to pay off a defaulted loan.⁶⁴⁵

Continued NADBank funding has been less than certain in both the United States and Mexico. As of November 1995, the two countries had made their initial contributions, and the NADBank had total reserves of \$112.5 million.⁶⁴⁶ However, the second infusion of funds from the United States has been delayed due to the protracted debate over the budget in the U.S. Congress.⁶⁴⁷ The Mexican government is awaiting the outcome of the U.S. debate before making their matching contribution of \$56.25 million per a United States request to the Mexican Government.⁶⁴⁸ In the U.S. Congress, the authorization of U.S. callable capital is linked to that of the paid-in capital. Thus, the first annual contribution of \$318.75 million in callable capital has been made by each country, with the second contribution being held up by the U.S. budget process.⁶⁴⁹

Rep. Esteban Torres Speaks Out on BECC and NADBank After Two Years

Representative Esteban Torres (D-CA) was one of the BECC and NADBank's champions during the NAFTA debate and remains a strong supporter of the institutions. "It [the NADBank] is the one development bank that will directly assist U.S. citizens," Torres said as he fought for NADBank's FY96 appropriation.⁶⁵⁰

However, Representative Torres also has been frustrated by the difficulty and pace of making BECC and NADBank operational. Torres joined citizen activists and pushed for BECC and NADBank rules to reflect the charters provision on public participation "I am saying: please make this [BECC and NADBank] happen. It is the law. I'm as frustrated as anyone else. It has taken me personally as a Member of Congress to ride hard on the Administration to make sure this moves forward." While Torres recognizes that starting up a new program from scratch is often a slow process, his sense of urgency is ignited by the desperate need for environmental and infrastructure funding along the border. Torres played a key role in the fall of 1995 in reversing Administration attempts to weaken the

institution's procedural and public access rules. "The long term strength of the NADBank and BECC will be decided by its procedures. That's why I've pushed so hard for public participation."⁶⁵¹

U.S. and Mexican political and economic events have also called into question the NADBank's ability to meet its available capital goal. Under the U.S. Congress' current budget proposal, which had not been enacted as of the writing of this report, NADBank is slated to receive its second full contribution from the U.S.⁶⁵² However, U.S. contributions are not yet guaranteed. While the U.S. House of Representatives had appropriated the full annual contribution to NADBank, the Senate originally provided no money for NADBank, though it later approved \$25 million of paid in capital.⁶⁵³ Border activists waged an intense lobbying campaign to secure full NADBank funding. It was only after the House and the Senate met in a conference committee on the Foreign Operations Appropriations bill, that the full contribution to NADBank was finally guaranteed for FY1996.⁶⁵⁴ The United States is supposed to provide two additional contributions to NADBank in the next two years, and each of those contributions risks having to go through the same budget process as the NADBank contribution for FY96.

The U.S. commitment to BECC has also been threatened by the budget battle. As part of the NAFTA implementing legislation, BECC was guaranteed an automatic reauthorization by the U.S. Congress, unless otherwise legislated. In the FY96 State Department Appropriations bill, BECC's guaranteed reauthorization remains intact, and BECC is appropriated \$1.8 million.⁶⁵⁵ However, other legislation has been used to attack BECC funding. Legislation currently proposed which would dismantle the Commerce Department contains language that would remove BECC's guaranteed reauthorization. The legislation dismantling the Commerce Department had been an amendment to a larger appropriations bill.⁶⁵⁶ However, in late 1995, the provisions were forced out of the budget. Proponents have were put forth plans to submit the legislation eliminating the Commerce Department in the future as a free standing bill.

The government of Mexican President Ernesto Zedillo has pledged to make Mexico's contributions to NADBank in full as long as the U.S. does likewise. "That's an obligation under the treaty," said Mexican Embassy spokesperson Jamie Palafox.⁶⁵⁷ Even so, the massive peso devaluation and Mexico's ongoing economic crisis have led to skepticism as to whether Mexico has the capacity to provide credible callable capital.

NADBank spokesperson Lisa Roberts admitted, "Investors are skeptical about Mexico's callable capital."⁶⁵⁸ The NADBank wishes to maintain a AAA bond rating, the highest possible.⁶⁵⁹ In order to maintain a AAA bond rating, reliance on Mexican callable capital will be limited until Mexico improves their credit rating.⁶⁶⁰

This improvement of Mexico's credit rating is unlikely.⁶⁶¹ In fact, Chris Whalen, publisher of the *Mexico Report*, believes that Mexico will likely default on the loans made to bail out Mexico from the peso crisis by the United States and international financial institutions, and, as a result, Mexico's credit rating will be downgraded even further.⁶⁶² The Mexican government claims Gross Domestic Product will rise 3 percent in 1996,⁶⁶³ a figure analysts have dismissed as improbable.⁶⁶⁴ Jorge Castaneda, a political scientist at the National Autonomous University of Mexico, points out that in 1995 Mexico's economy has experienced a negative growth of 6 percent and that slight political or social surprises could send the economy reeling further.⁶⁶⁵ In the third quarter of 1995, Mexico's Gross Domestic Product declined by 9.6 percent.⁶⁶⁶

The NADBank's credit guidelines, which were scheduled to be released in draft form on December 18, 1995, will likely call for loans not to exceed one half of NADBank's callable capital.⁶⁶⁷ In other words, loans from NADBank are not to exceed the sum of the paid-in capital plus the U.S. callable capital.⁶⁶⁸ If Mexico cannot credibly put forth callable capital, and the NADBank's capacity is limited to several years of paid-in capital from both countries plus U.S. callable capital, the financing capacity of NADBank would be seriously diminished. Under this scenario, even if all the paid-in capital were received, NADBank's total financing capacity would fall from \$3 billion to \$1.725 billion.

Even if NADBank funding can be secured, it is uncertain how effective the institution can be. To secure Congressional approval of NADBank, proponents had to agree to a provision supported by conservative Republicans to set NADBank interest rates at market rates.⁶⁶⁹ In many instances, the poorest and neediest border communities, including the colonias, have chosen not to approach NADBank for financing due to the fact that NADBank cannot offer cheaper, low interest rate loans.⁶⁷⁰

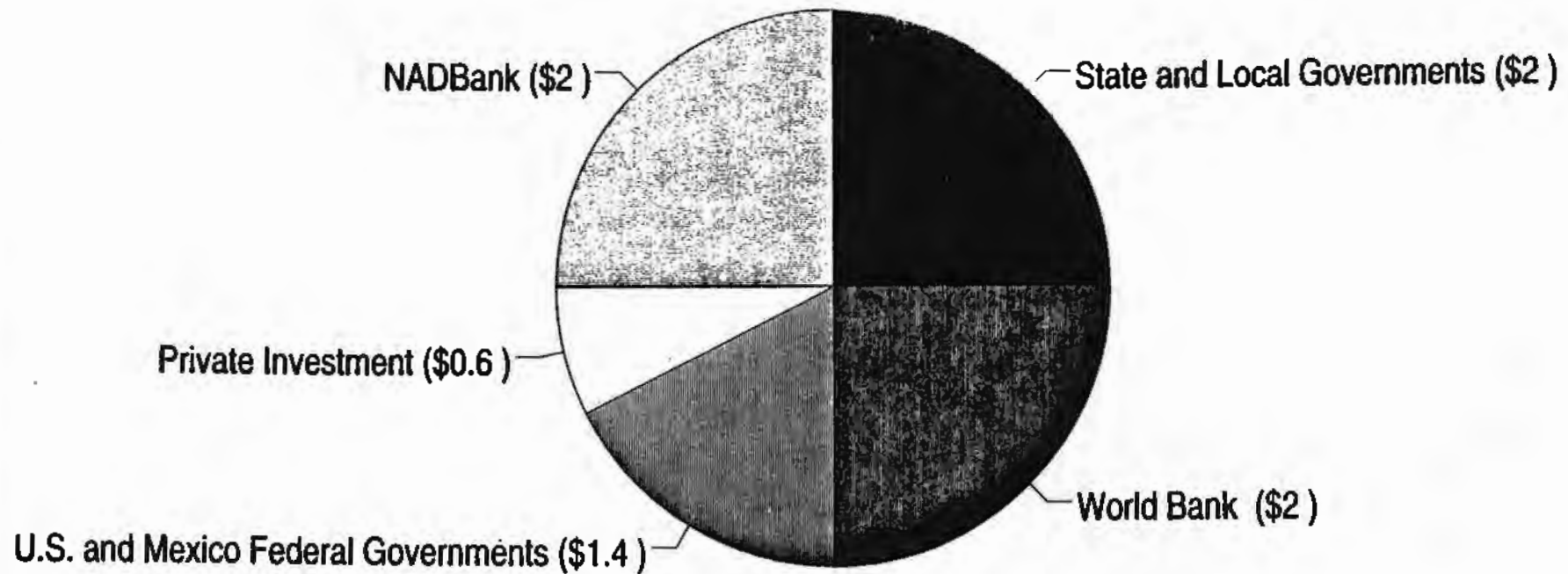
Border Project Funding in Addition to NADBank

Even if the NADBank is able to provide \$2 billion to \$3 billion in loans for border cleanup projects, additional funds will be necessary to properly complete the border clean up job. Where this funding will come from is unclear. During the NAFTA debate, the Clinton Administration promised an \$8 billion border clean-up plan. The plan would rely on funds not only from NADBank, but also from other federal, state, and local government programs on both sides of the border, private investors, and other multilateral development banks, such as the World Bank. The plan was to be funded as follows:

- \$2 billion from state and local governments
- \$2 billion from external multilateral banks, such as the World Bank

Clinton Administration Border Plan

In Billions of Dollars (U.S.) -- 1993



□ \$1.4 billion in federal funds from Mexico and the United States

□ \$600 million from private investment

□ \$2 billion from NADBank⁶⁷¹

The Administration border plan has not been enacted. Today, NADBank spokesperson Sara Fort claims that \$10 billion over the next ten years will be necessary for border clean up and infrastructure projects.⁶⁷² According to Fort, the NADBank hopes to provide \$3 billion and the remaining \$7 billion will need to be raised from other sources.

Viability of Obtaining U.S. and Mexican Federal Funds and State Funds

NADBank doesn't expect any additional funds from the Mexican federal government to be put into border clean up. "We're not going to be hitting up the Mexican government for anything else," stated the NADBank's Fort.⁶⁷³ Some U.S. state and local governments are likely to contribute funds under the current plan, but it is uncertain if Mexican localities, devastated by the national economic crisis, will be contributing additional funds. "We really don't know what the situation on the Mexican side is," said Fort.⁶⁷⁴ For the time being, Mexico's austerity program of less public spending means Mexico's border cities cannot expect to receive aid from Mexico City to fund environmental infrastructure projects.

As well, the U.S. federal budget cuts ax threaten to eliminate, or at least limit, any additional funds for border environmental projects on which the Clinton Administration's proposed \$8 billion plan relied. Some U.S. federal government programs that conduct border environmental projects already have seen their funding targeted for cuts. For instance, the Department of Agriculture's grant program to the colonias for drinking water projects has been cut by \$6.3 million, to \$18.7 million in the department's FY96 budget, down from \$25 million in FY95.⁶⁷⁵

Budget proposals for other programs conducting border projects leave funding levels stable as compared to FY95, but have not included increases necessary to take on the more ambitious border environmental projects. For example, President Clinton's proposed FY96 budget increased the budget of the International Boundary and Water Commission (IBWC) by \$4.8 million, up from FY95's \$19.5 million appropriation.⁶⁷⁶ However, congressional budget proposals call for an appropriation on par with FY95 levels.⁶⁷⁷ "It [the proposed Congressional appropriation] would make it rough, because we have taken on additional commitments," said Paul Storing of the U.S. Office of the International Boundary and Water Commission.⁶⁷⁸

Private Funding for Border Infrastructure

According to the NADBank's Deputy Director Victor Miramontes, "the NADBank's policy requires it to be a

self sustaining institution."⁶⁷⁹ In order for NADBank projects to be self-sustaining, localities must generate money to pay for the projects. In most cases this would mean they must generate revenue in the form of charges to local service users.⁶⁸⁰ Local governments could also require user fees as a means of recapturing their costs.

NADBank credit analyst Sara Fort believes that Mexican border residents would be willing to pay up to 3 percent of their annual income to fund these projects.⁶⁸¹ According to the *Los Angeles Times*, the prospect of shell-shocked Mexican workers being able to afford fees for services that have long been free is unlikely.⁶⁸² In the poor border regions of Mexico consumer buying power has been ravaged by a drop in the value of the peso from 3.44 pesos to the dollar before the December 1994 peso collapse to 7.74 pesos to the dollar in December 1995, and an inflation rate expected to be 50 percent for 1995.⁶⁸³ The peso devaluation has reduced average wages 30 percent below 1994 levels.⁶⁸⁴ Given these economic conditions, the private institutions NADBank is relying on to invest in the region's infrastructure are approaching such investment with skepticism, doubting that fee-based schemes would be successful in the current climate.⁶⁸⁵

The risk of employing user fees is acknowledged by border experts. According to BECC financial officer Alberto Perez Schoelly, there is concern about user fees and that their effectiveness will have to be evaluated "on a case by case basis."⁶⁸⁶ Jan Gilbreath, of the University of Texas at Austin, noted that one project up for NADBank funding has been postponed because user fees were not a viable option for financing.⁶⁸⁷ The project, a waste water treatment plant in Ciudad Juarez, was postponed because the city could not come up with the equity financing required by the NADBank. User fees were to be part of that financing, but the public "simply could not afford it," according to Gilbreath.⁶⁸⁸

If user fees cannot be relied upon to fund projects, environmental infrastructure development at the border obtaining funds from the NAFTA-related notifications or private financing is not likely. The NADBank's Miramontes views user fees as essential to the NADBank's mission, "User fees are the only way to make large systems self sustaining. Practically, every system has to have them."⁶⁸⁹ Miramontes stated that if a community cannot afford to pay for a project, then NADBank would assist them in soliciting grants from sources such as EPA programs.⁶⁹⁰ However, Miramontes admits that fiscal constraints on both sides of the border will likely limit the availability of grants, at least in the short term. "Practically speaking, there will be less grant money over the next year or two," Miramontes said.⁶⁹¹

Recently Opened Window

Many NADBank activists might be surprised to know that the development fund has a "domestic window." This NADBank pro-

gram was demanded by one of NADBank's leading champions. Representative Esteban Torres (D-CA). It is to provide up to 10 percent of U.S. NADBank contributions for "projects to help U.S. communities make necessary adjustments to NAFTA's effects," Torres said.⁶⁹²

"It's to allow affected communities to create alternatives, like to buy out a company that says it is going to move to Mexico," Torres said. Nearly two years after the NADBank was approved, the "domestic window" opened up in early December 1995 with the selection of an advisory committee and an interim director.⁶⁹³

A number of border observers, including BECC board of directors member Lynda Taylor, suspect that loans and fees alone cannot address the needs of very low income areas which are in most urgent need of environmental infrastructure projects.⁶⁹⁴ Even with user fees, low-income communities often cannot demonstrate the ability to pay back NADBank loans. One solution would be to give NADBank the authority to provide grants.⁶⁹⁵ However NADBank Deputy Director Miramontes claims it is in the best interest of the border environment for NADBank not to have grant making authority. He believes if NADBank provided grants, the proponents of border environmental projects would rely solely on NADBank grants for funding. Without NADBank being able to make grants Miramontes feels that other institutions such as the EPA, state and local governments, and private investors, are forced to remain involved in border environmental funding.⁶⁹⁶

Multinational Bank Investment

In June 1994 the World Bank's board of directors approved three environmental infrastructure loans to Mexico totaling roughly \$1 billion.⁶⁹⁷ Much of this money was to be used for northern border environmental projects. Mexico agreed to provide funds matching at least 50 percent of the World Bank's contribution, thus providing the border region with between \$1.5 and \$2 billion in funds for environmental infrastructure projects.⁶⁹⁸

Since the peso devaluation the World Bank loans have been renegotiated to lower levels. The largest of these loans, the Northern Border Environmental Project, has been reduced by approximately \$160 million.⁶⁹⁹ The loan amounts have been reduced in part because goods and services have become cheaper in Mexico since the devaluation, meaning Mexico and the World Bank can accomplish more with less money. However, the reduction was also made because Mexico wished to avoid increasing its foreign debt. Mexico's foreign debt has grown to over \$170 billion in 1995 up from between \$120-130 billion in 1993, before NAFTA.⁷⁰⁰ Furthermore, Mexico is planning to scale back a program to reloan World Bank money to Mexican localities. With interest rates fluctuating between 50 percent and 75 percent, many localities simply cannot afford the loans.⁷⁰¹

BECC and the Certification Process

The BECC

The BECC is comprised of a Board of Directors, its staff, and an Advisory Council. The Board of Directors is the decision-making body of the BECC on issues relating to BECC operating procedure, priorities, and certification of border infrastructure projects for NADBank financing.⁷⁰² The Board also has the capacity to place conditions on certification of projects.⁷⁰³ The Board meets at least once quarterly, and has the ability to call special meetings.⁷⁰⁴ Each quarterly meeting must have a session with public participation. Both the United States and Mexico appoint five representatives each to sit on the Board of Directors.⁷⁰⁵ The chair of the Board alternates annually between U.S. and Mexican members. Currently Jorge Bustamante, President of Mexico's Northern Frontier Association, is the chairman.⁷⁰⁶ The members of the Board are:⁷⁰⁷

Julia Carabias

SEMARNAP

Mexico City, D.F. Mexico

or

Antonio Azuela de la Cueva

Environmental Attorney

Mexico City, D.F. Mexico

Arturo Herrera Solis

International Boundary and

Water Commission

Ciudad Juarez, Chihuahua, Mexico

Rogelio Montemayor Seguy-Ramos

Social Development Secretary

Governor, State of Coahuila

Saltillo, Coahuila, Mexico

Horacio Garza-Garza

Municipal President

Nuevo Laredo, Tamaulipas, Mexico

Jorge Bustamante

President, Northern Frontier Association

Tijuana, Baja California, Mexico

Carol Browner

Administrator

U.S. EPA

Washington, D.C., U.S.

or

William A Nitze

Assistant Administrator

Office of International Activities

U.S. EPA

Washington, D.C., U.S.

John M. Bernal
U.S. Commissioner
International Boundary and
Water Commission
El Paso, Texas, U.S.

Ygnacio Garza
Chairman, Texas Parks and Wildlife
Brownsville, Texas, U.S.

Peter Silva
Deputy Director, San Diego Water Utilities
San Diego, California, U.S.

Lynda Taylor
Director, Radiations, Toxics,
and Health Project
Southwest Research and Education Center
Albuquerque, New Mexico, U.S.

The staff of the BECC is directed by a General Manager and a Deputy General Manager. Currently, the General Manager is Roger Frauenfelder, a U.S. citizen, and the Deputy General Manager is Luis Raul Dominguez, a Mexican citizen.⁷⁰⁸ The role of the staff is to communicate with project applicants, provide technical assistance in the development of project applications, and make recommendations on project certification to the Board of Directors.⁷⁰⁹

The Advisory Council provides guidance to the Board of Directors. The Advisory Council is supposed to have 16-18 members, but currently only 13 people sit on the Council.⁷¹⁰ Mexico and the United States are each required to appoint three members of the public. One representative is supposed to be appointed from each of the four U.S. states on the border, and each of the six Mexican border states. The U.S. can appoint up to two additional border state representatives.⁷¹¹ Members of the Advisory Council were to include academics, community activists, and business people. The Advisory Council meets with the Board of Directors at each public meeting. According to border activist Harry Browne, of the Inter-Hemispheric Resource Center, the Advisory Council has been involved in the BECC decision-making process only on a very limited level. According to Browne, "They have only been nominally involved. In some cases, documents have not been made available to them."⁷¹² Member of the advisory committee include:⁷¹³

From Mexico: Oscar Romo
Refugio Del Campo
Elida Rizo Garcia
Vernon Pirez Rubio
Arturo Speulveda Lerma
Rene Franco Barreno

From the U.S.: Thomas Soto
Kathleen Marr
Daniel W. Eckstrom
Deborah Kastrin
Sandra Farniza
Travis C. Johnson
Rick Reyes
Arthur Trujillo

The North American Development Bank

The NADBank is comprised of a Board of Directors and staff. The Board is made up of the U.S. Secretaries of Treasury (Robert Rubin), State (Warren Christopher) and the EPA Administrator (Carol Browner), and Mexico's Secretaries of Finance (Guillermo Ortiz), Foreign Trade (Herminio Blanco), and SEDESOL (Carlos Rojas).⁷¹⁴ As with the BECC, the NADBank's Board is the institution's final decision-making body. Chairmanship of the Board alternates between a U.S. and Mexican member annually.⁷¹⁵ Currently, U.S. Treasury Secretary Rubin is Chair of the Board of Directors. The Board of Directors will meet only "as often as the business of the bank may require."⁷¹⁶ There is no public access requirement for NADBank.

A BECC Appointee Profits Off Of Colonia Subdivisions

An October 8, 1995 CBS "60 Minutes" investigation entitled "The Other America" documented not only the deplorable environmental and health conditions in the U.S. colonias, but also how U.S. government officials may be benefiting financially from colonia development. Colonias are rural border slums on both sides of the border where residents live in abysmal conditions without basic water or sewer infrastructure. According to the 60 Minutes report, Deborah Kastrin, who sits on the Border Environment Cooperation Commission (BECC) advisory council, also works for Kasco Corporation, a family real estate company that is profiting from the colonias' problem. Records show Kasco Company either directly, or through subsidiaries, owned or currently owns land in at least nine colonias near El Paso, some of which do not have healthy drinking water.⁷¹⁷

According to a Texas Water Development Board February 1995 report entitled "Water and Wastewater Needs of Texas Colonias: 1995 Update," despite the conclusion that establishment of new colonias is not a serious widespread problem, serious concerns remain regarding growth of existing colonias and public health conditions in the colonias.⁷¹⁸ While there are financial incentives, most notably the Model Subdivision Rules, in roughly half of Texas' border counties to prevent the development of new colonias, there is growing concern among state officials of the continued growth in the use of "grandfathered" colonias—subdivisions legally platted before the adoption of the new rules which do not yet have water and wastewater services are not subject to the new rules.⁷¹⁹ However, Texas House Bill 1001 is aimed at reducing the use of colonia

"grandfather" loop-holes by restricting the sales of land by developers.⁷²⁰

The staff of NADBank is headed by Director Alfredo Phillips Olmeda, a Mexican Citizen, and Deputy Director Victor Miramontes, a U.S. citizen.⁷²¹ The role of the staff is, according to Annie Alvarado, NADBank Community and Government Affairs Officer, to provide environmental infrastructure projects with " cursory oversight and [once projects have been certified by BECC] some financial analysis."⁷²² NADBank's staff also makes recommendations to the Board of Directors on decisions related to loans and loan guarantees.

Public Access to the BECC Decision Making Process

Beginning with its first public meeting in November 1994, the BECC undertook a policy of limiting public access to the decision-making process through which it selected criteria for project applications and choosing projects for certification. At its initial public meeting, BECC officials dealt with the large numbers of people who came to comment by cutting the time allotted to each speaker from

BECC's PROCEDURAL RULES

BECC's procedural rules which limit public access, identified by Harry Brown include:

- ☐ Decisions will be made in closed sessions unless the board votes otherwise. As with all Board decisions, such a vote requires a majority of each country's commissioners, not merely a majority of the Board as a whole.
- ☐ Each of the regular quarterly meetings will have at least one public session, but closed sessions are unlimited in scope. Furthermore, there are no restrictions on "special sessions," which need not meet the requirements for public notice, and need not have any public input.
- ☐ The agenda for regular and special meetings may be changed without public notice up to the day of the meeting, making preparation of public comment very difficult. The agenda for closed sessions need not be published at all.
- ☐ People desiring to offer testimony to the Board must request permission 15 days in advance of a regular meeting and may be turned down without reason.
- ☐ No individual Director's comments or vote on a specific proposal will be included in meeting minutes, unless that Director specifically requests that his or her comments be recorded.

10 to three minutes.⁷²³ The procedural rules adopted at this meeting for future public meetings allow BECC's Board of Directors to hold discussions and make decisions behind closed doors, limit public participation in "open sessions", and expand document confidentiality, according to representatives from the Texas Center for Policy Studies and the Border Ecology Project.⁷²⁴ The rules prompted objections by Democratic Representatives Richard Gephardt (MO) and Esteban Torres (CA). In a letter to Secretary of State Warren Christopher Torres said, "These procedural rules violate the spirit of openness upon which the BECC and NADBank were founded. The credibility of BECC...has also been put in jeopardy."⁷²⁵ Representative Gephardt also sent a strong letter insisting on public access to BECC.

Project Certification Standards

In the spring of 1995, BECC officials announced plans to use draft certification criteria to approve projects. They intended to use these criteria despite public objections to their shortcomings. The draft criteria lacked a number of elements that were considered essential by border observers. U.S. Congressman Gephardt sent another letter to BECC calling for the criteria to contain "comprehensive sustainable development language."⁷²⁶ The Texas Center for Policy Studies also commented that "the public component should be better defined."⁷²⁷ Arizona Toxics Information noted that the draft criteria did not establish a mechanism to ensure the NADBank and other financial institutions would follow BECC certification criteria.⁷²⁸ BECC eventually held a special public meeting on August 31, 1995 to adopt final criteria and address these concerns.

BECC's final criteria were adopted in a surprisingly open meeting held on August 31, 1995. At a September 28, 1995 public meeting BECC certified its first two projects for NADBank funding, which may have been an attempt to show a skeptical U.S. Congress that it is progressing in its mission. These two projects were rushed through the process and certified without final guidelines for public participation being in place.⁷²⁹ Michael Gregory of Arizona Toxics Information stated in a letter to BECC General Manager Roger Frauenfelder that BECC was required by the BECC/NADBank bi-national agreement to provide "members of the public reasonable opportunity to comment...on all applications for certification received by the Commission."⁷³⁰

Frauenfelder replied that most of the public participation guidelines were met, although the process did not occur under BECC's guidelines. According to Frauenfelder "Even though most of the process did not involve BECC... the public was sufficiently involved at the local level to meet BECC requirements... It is important that BECC move forward to certify projects for NADBank consideration or risk losing public support."⁷³¹

The BECC's public participation criteria require a "Comprehensive Community Participation Plan." A meeting with local organizations and at least one advertised public meeting are required as part of the "Comprehensive Community Participation Plan," and a local steering committee is also recommended. A "Post-certification Participation Plan" is also required as part of the BECC community participation criteria.⁷³² Neither of the two projects that were certified at the BECC meeting on September 28, 1995, a \$17.2 million wastewater treatment plant in Brawley, California (U.S.) and an \$8 million wastewater treatment plant in Ensenada, Baja California (Mexico), met these public participation criteria.⁷³³ Documents supporting the applications of projects up for review were not available at the local level. For example, Californians were unable to obtain information from within California on the Brawley, CA project. As of September 27, 1995, one day before the project was approved, Mark Spaulding, Chairman of the Environmental Law Subcommittee of the California State Bar, was not able to obtain a copy of the application.

In the case of the application of another project in Mexico, the FINSA industrial wastewater treatment project, a public meeting was not held prior to the project being considered for certification. The project would exclusively serve the FINSA industrial park, a private complex owned by one of Mexico's richest families. A meeting between the BECC and representatives of industry, government, and academia was to be held on September 26, 1995, two days prior to the BECC public meeting where certification would be considered.⁷³⁴ BECC's staff prepared a letter for distribution to the BECC Board of Directors claiming that at the September 26th meeting participants widely approved of the project.⁷³⁵ This letter was prepared in advance of September 26th. The Texas Center for Policy Studies received a copy of the letter on September 20th, six days before the meeting was supposed to have occurred.⁷³⁶ The meeting never actually took place.

While the FINSA project was not certified at the September 28th meeting, the lack of public participation in its application process was especially problematic. Because it benefits private interests and not the public, FINSA remains a very controversial project and it is expected to be reviewed again by the BECC. Furthermore, the project could potentially be funded by its wealthy owners, instead of NADBank.⁷³⁷

Public Concern for Sustainable Development and Public Participation Criteria Voiced at Meeting

It was expected that public input at the August 31, 1995 public meeting to approve BECC's project certification criteria would be stifled by BECC's procedural rules, as it had at other meetings.

However, contentious issues, primarily financial feasibility and sustainable development criteria, as well as last minute comments by the U.S. EPA, forced the decision-making process out of the closed door morning session of the meeting, and into the public afternoon session.

Comments on the draft criteria submitted by the U.S. Treasury Department attacked a number of key components of the criteria. The theme of Treasury's comments was that the dominant criteria for BECC/NADBank projects should be cost effectiveness. The Treasury document attacked sustainable development criteria, the inclusion of environmental and social aspects in the criteria, and the community development criteria: "While it is imperative that the BECC/NADBank projects themselves be 'environmentally friendly,' the Treasury document stated, 'many of the proposed [environmental] priorities...could significantly increase project costs.'⁷³⁸ The comments also stated that if BECC attempted to specifically promote "community economic development, that their efforts would be "counter-productive and likely to decrease the economic and financial feasibility of the project."⁷³⁹

The U.S. EPA also submitted comments expressing concerns about the criteria. EPA's comments, which were received only three days prior to the BECC meeting, attacked the inclusion of "social issues" in the BECC criteria, saying it was not fundamental to BECC's core mission. EPA also provided recommendations to overcome what EPA viewed as vague and cumbersome aspects of the sustainable development criteria and the community participation criteria.⁷⁴⁰

These issues, particularly EPA's recently-received comments, were debated during the closed session of the BECC meeting and could not be resolved, guaranteeing substantial discussion during the open session. This public discussion led to the adoption of sustainable development criteria that was championed by members of the public in attendance. BECC board member Lynda Taylor broke from the majority of the board by favoring a system within the criteria to reward projects that demonstrated sustainable development characteristics beyond the minimum criteria.⁷⁴¹ Victor Miramontes of NADBank agreed, saying that a rating system was crucial in order for BECC to demonstrate to the NADBank which projects were most worthy of funding.⁷⁴² Supporters of the rating system also argued that without the system, project developers would have no incentive to go beyond the minimum sustainable development requirements. A rating system would reward projects that excelled in the category of sustainable development. Taylor threatened to vote no on the criteria without the provision. After Taylor's

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comments, Board Chairman Jorge Bustamante opened the meeting to comments and a dozen members of the public spoke of their desire to prioritize projects based on sustainable development and social issues and to have requirements for public input.⁷⁴³

In the end the public input had a positive impact. The Board reached a unanimous decision to "recognize projects that incorporate a large number of sustainable development criteria."⁷⁴⁴ "It's a victory for the public. The public showed up and spoke out,

and the board listened," said Taylor after the meeting.⁷⁴⁵

At a November 15, 1995 special public meeting of the BECC, seven projects were introduced for review. As of four weeks prior to the meeting, materials on the projects were incomplete⁷⁴⁶ and could not be obtained by members of the public who were unable to go personally to the BECC's Ciudad Juarez office. BECC requires that public comments be submitted 15 days prior to a meeting.⁷⁴⁷ As well, BECC had not received required documents from many of the projects, and therefore was unable to make those documents available to the public. The ability of citizens to make informed comments on the projects that were to be considered at the November 15th meeting was greatly limited by the absence of some of the documents, and the inaccessibility of those that had been filed. "We're wondering how we... are going to have time to review the materials and make informed comment," wrote Michael Gregory of Arizona Toxics Information in an October 16, 1995 letter to Roger Frauenfelder, General Manager of BECC.⁷⁴⁸ At the urging of BECC board member Lynda Taylor, a special BECC board meeting was held December 2, 1995 where the BECC Board advised it would only review the four most prepared project applications at its January public meeting.⁷⁴⁹

In order to address the concerns of border activists on notification and public access issues BECC held a special meeting with U.S. and Mexican activists as part of its November 15th meetings. In the end, BECC accepted, for the most part, the comments of activists and is incorporating them into their rules.⁷⁵⁰ A formal procedure for providing notification of public meetings, a requirement that BECC publish regular updates on projects that have applied for certification, and a procedure for making documents available to the public were included among the recommendations.⁷⁵¹

Projects Reviewed for Certification by BECC

At the September 28, 1995 public meeting of the BECC, five projects were reviewed for certification for NADBank funding. Two of these projects were certified and three were scheduled to be re-reviewed at a later date. One project, the Northwest Reclaimed Water System Phases I and II for El Paso, Texas, was conditionally certified at the special BECC public meeting on November 15, 1995. The following describes the characteristics of, and the concerns about, the reviewed projects.

Wastewater Treatment and Agricultural Reuse for the City of Ensenada, Baja California

Description: Insufficiently treated wastewater has been flowing into Ensenada Bay affecting public health and

the city's tourism industry. The plant would treat this wastewater and the effluent would be used for agricultural purposes.

Estimated population benefiting from project: 250,000

Total cost: \$8 million; \$2 million from private equity, \$6 million from federal and state grants. It is unclear what NADBank's role in the project will be.⁷⁵²

BECC Board Decision: Certified for NADBank financing

Criticisms: A "Comprehensive Community Participation Plan" that includes a "local steering committee" and a "post-certification participation plan" had not been implemented prior to approval.⁷⁵³

Water Treatment Plant for the City of Brawley, CA⁷⁵⁴

Description: Currently the Brawley water treatment plant does not use approved technology as defined by the California Department of Health Services (DOHS). The future plant will meet the DOHS and is expected to meet future requirements that are even more stringent.

Estimated population benefiting from project: 24,000

Total cost of project: \$17.2 million; anticipate \$3.85 million in federal and state grants, \$5 million loan from State Water Resources, and a \$8.34 million loan from NADBank.

BECC board decision: Certified for NADBank financing

Criticisms: A "Comprehensive Community Participation Plan" that includes a "local steering committee" and a "post-certification participation plan" had not been implemented prior to approval.⁷⁵⁵

The BECC Certification Criteria

Under the final certification criteria adopted by the BECC, applicants will have to meet fundamental criteria in eight areas.⁷⁵⁶

1. General Project Description

Applicants must provide information on the characteristics of the project applicants, the project location, environmental issues, project alternatives, project justification, transboundary aspects, and project work tasks.

2. Environmental and Human Health

Applicants must supply documentation of environmental regulatory compliance, conformance with local and regional conservation and development plans, and an environmental assessment.

3. Technical Feasibility

Applicants must supply information on project specifications, the project's technical process, a quality control program,

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Recommendations

There are many lessons to be learned from the two years of real life experience with NAFTA and its effect on U.S.-Mexico border environmental and health conditions. An underlying goal of Public Citizen's series of NAFTA monitoring reports is to carefully document these effects and make them widely available so that the information can guide decisions about how to proceed with the future of economic, environmental, and political relations in North America.

Along both sides of the U.S.-Mexican border are numerous environmental and health experts, citizen activists and organizations rich with recommendations of how to improve the environmental and health conditions of their region. With the stakes as high as their families' health and the state of the environment in which they pass every day of their lives, carefully developed ideas and public support for border improvements have never been absent. Rather, such ideas have been too often been ignored — by the politicians and companies who pushed NAFTA approval and by local governments and businesses lusting for investment under NAFTA at any environmental or public health cost.

Absent some government control over the behavior of investors and producers who NAFTA has increasingly brought into the border area and absent the generation of new funds to clean up the new post-NAFTA environmental mess, much less the massive pre-NAFTA problems, there is only one outcome for the environment and health in the border region: further decline.

Public Citizen has several general recommendations.

1. No NAFTA Expansion

We must not expand NAFTA's environmental and health problem to South or Central America or the Caribbean Basin.

NAFTA has already caused additional environmental degradation and harm to human health on both sides of the U.S. Mexico border. The situation should not be made worse by expanding the agreement to additional countries.

Under a proposal supported by the Clinton Administration and some of the same Members of Congress who gave us NAFTA, NAFTA expansion would not include even the weak side agreement on the environment nor the border environmental institutions. Called the Caribbean Basin Initiative, this proposal would provide full NAFTA market access and tariff reductions treatment for 23 Central American and Caribbean nations. The CBI proposal would have not reciprocity in the commercial area or would not include any of the parallel agreements and institutions to NAFTA.

The Clinton Administration and many of NAFTA's original supporters also want to expand NAFTA to South America. While a declaration to conduct such expansion quickly made at the December 1994 Miami Summit of the Americas has run into public and political opposition in many countries, some talk continues of

expanding to Chile in the upcoming year. Republican Members of Congress have insisted that such an expansion must not include any of the parallel agreements or institutions. However, even if the environmental side agreement were to be expanded to Chile, it would be irrelevant to the Chilean situation absent significant changes, even if it had proved to be highly effective in its first two years. This is the case because 90% of Chile's exports are in four natural resources sectors, forestry, mining, fisheries and agriculture. Natural resources are specifically not covered in the NAFTA environmental side agreement. Chile does not have a significant manufacturing sector, which is the limited target of the NAFTA environmental side agreement. Thus, the severe natural resource-related environmental problems that are now the cause of national debate in Chile would not be included in any way.

2. Objective Measurement of NAFTA's Real Life Effects; Withdrawal or Renegotiation if Conditions in North America Are Worsening Since NAFTA

We must *increase monitoring* of NAFTA's real life environmental and human health effects in all three NAFTA countries and take seriously the findings of such monitoring. The U.S. Congress must provide *trigger mechanisms* to force renegotiation or withdrawal of NAFTA if it cannot pass a "do no harm" test. Measurements of NAFTA's effects must be concrete comparisons of, for instance, government data on air and water pollution rates, hazardous waste production and management, and specific incidence of human disease such as cholera, tuberculosis, and hepatitis-A occurring in the border area. If the situation after NAFTA is worse than before NAFTA was passed, NAFTA should be terminated as an experiment that did not work. Considering all of the improvements on border environmental and health that were promised because of NAFTA, it is a very conservative measure to merely compare the current situation to the status quo prior to NAFTA.

On November 17, 1995, the second anniversary of the NAFTA vote in the House of Representatives, a bill called the "NAFTA Accountability Act," was introduced by a bipartisan contingent of 30 Member of the House of Representatives and three Senators that requires objective measures of NAFTA's real performance. The bill requires the Administration either to certify that NAFTA has performed as promised or to conduct remedial negotiations for the key goals set forth in the agreement's own preamble, including: jobs, wages, environmental and health quality and human and labor rights. The NAFTA Accountability Act provides for termination of Congressional authorization of NAFTA's implementing bill if NAFTA's real outcomes cannot pass a "do no harm test." Termination of such authorization would trigger NAFTA's 6 month exit clause. At the end of 1995, the bill had about 65 House cosponsors.

3. A Different Type of North American Agreement

We need to a *different type of agreement for the United States, Mexico and Canada*. We need a trade agreement that protects the North American environment and its residents' health, not intensifies problems in these areas. To accomplish these outcomes, such an agreement would need to be more responsive to the needs of all citizens that it affects, providing more public access and mechanisms for public oversight. The current NAFTA provides lopsided protection for investment rights, while sublimating the North American peoples' environmental, health, democracy and prosperity rights. Many specific proposals developed cooperatively between citizens of the three NAFTA countries have been put forward, both before NAFTA and since it went into effect. Such alternatives have been largely ignored.

4. Helping Those NAFTA Has Hurt

We need to *help those already hurt by NAFTA* by :

a) *Providing standing in U.S. courts of citizens of NAFTA countries for citizen suits*. Even accepting that the lack of action at the NAFTA environmental commission is due only to its infancy, the remedies available at the commission are too limited. Mexican and Canadian citizens must be able to seek personal remedy for personal environmental and health damage done to them by U.S. companies given new freedom to invest and operate in their countries by merit of NAFTA. The same access to justice must be available for citizens of each NAFTA country in any of the country's courts, as is already provided by the European Union as part of its trade zone in regard to a list of labor and human rights. This legal reform would be merited even if NAFTA were not in

place, as the very companies who tout the globalization of the economy take advantage of it to avoid liability for any environmental and health harms they cause.

b) *Transaction Tax on North American Trade*. NAFTA's supporters brag that the agreement has increased the volume of trade between the United States, Mexico and Canada. At the same time, wages in all three countries are declining, and the United States and Mexico have both documented significant NAFTA-related job loss in the past two years. While the increased volume of trade has not led to greater prosperity for most people in North America, it certainly has led to more environmental wear and tear for our region. Meanwhile, the Mexican economy is in depression; the U.S. Congress is cutting government environmental and health funding; and the pre-NAFTA costs of environmental clean up and infrastructure are greater than the best estimates of what the NAFTA-related institution could generate even absent these new developments. It is clear an additional source of funding is needed. Thus, we revisit a meritorious proposal put forth by several governmental and nongovernmental analysts at the time of the 1993 NAFTA debate, a transaction tax on all NAFTA trade.

c) *Environmental and Health Grant Program for Poorest Border Communities*. Some of the revenue generated by the transaction tax must go into grants and no interest long term loans to make it possible for the poorest border communities on both sides of the border to afford sanitation and clean drinking water systems. Even if the current NAFTA institutions miraculously spring into constructive action in the near future, the communities most in need are limited from access to these resources by the market imperatives of the NADBank and the BECC.