

Commentary on Mexican Law for the CEC Secretariat Independent Report on the Transboundary Movement and Recycling of Spent Lead-acid Batteries

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On May 11, 2012, the CEC Secretariat solicited comments to assist in the preparation of a public report on environmental hazards and public health issues associated with the transboundary movement and recycling of SLABs in North America. This submission, based on research conducted by a Mexican legal scholar in affiliation with the independent environmental NGO Fronteras Comunes, responds directly to four [sic] specific questions identified in the CEC's request:

- 1) To what extent are different environmental regulatory requirements and lower compliance costs relative to those of the United States a factor in increasing the recycling of SLABs in Mexico or Canada?
- 2) Are the environmental controls on secondary lead smelting and recycling appropriate/adequate in Canada, Mexico, and the United States?
- 3) What are the public health and environmental consequences of any such growth in SLAB recycling in either Mexico or Canada?
- 4) How effective are the export/import controls and requirements governing SLABs in North America?
- 5) What steps can be taken to improve the environmental management of SLABs in Canada, Mexico, and the United States?"

The following discussion is based on independent legal and empirical research respecting Mexico's regulatory system governing the recycling and import of SLABs, and it compares Mexico's governing regime with that of the United States.

In its analysis of Mexico's domestic legal system, this study identifies specific gaps between legislative requirements, regulatory implementation and enforcement, and the publication of technical standards. These gaps, when assessed in the aggregate, represent a significant failure of Mexican authorities to implement and enforce Mexico's governing environmental legislation. In addition, this study identifies significant gaps in public health standards, which become even more relevant as operations of secondary lead smelters in Mexico increase.

Given the lower effective levels of regulatory standards, implementation and enforcement, it is clear that the regulatory requirements and compliance costs imposed on the operators of SLAB recycling facilities in Mexico are lower than the equivalent costs in the United States, a differential that correlates to recent increases in exports of SLABs from the U.S. to Mexico.

The CEC recognizes the shared responsibilities of North American nations to avoid creating regulatory havens that increase environmental damage in the region. These responsibilities extend to the common obligation to protect local communities and factory workers with excessive exposure to toxic lead emissions. Toward this goal, this submission recommends specific ways to improve the environmental framework regulating of SLABs in Mexico, and to increase Mexico’s capacity to effectively implement and enforce legislative requirements, with support and assistance from the U.S. and Canada on the basis of a common objective “green the North American economy.”

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1. Introduction to Mexico’s Environmental Legal Framework

Two federal laws comprise the main regulatory framework applicable to SLAB recycling: the 1988 General Law for Ecological Equilibrium and Environmental Protection (*Ley General del Equilibrio Ecológico y la Protección al Ambiente*, or LGEEPA), and the 2003 General Law for the Prevention and Integral Management of Waste (*Ley General para la Prevención y Gestión Integral de Residuos*, or LGPGIR). The LGEEPA provides the umbrella framework for environmental laws in Mexico, and is often referred to by other environmental laws. Such is the case of the LGPGIR, which is circumscribed to waste management.

On the basis of these federal laws, the Mexican Executive Branch has (or should have) issued secondary administrative regulation to define specific rights and obligations of regulated parties, but also for granting regulatory, investigatory, and prosecutorial powers to governmental departments and agencies. Secondary regulation in Mexico usually takes the form of regulatory enactments

(*reglamentos*) issued by the President, or decrees (*acuerdos*) and technical standards (*normas oficiales mexicanas*, or NOMs) issued by the corresponding ministry.

The Secretariat of Environment and Natural Resources (*Secretaría de Medio Ambiente y Recursos Naturales*, or SEMARNAT) is the cabinet level ministry in charge of federal environmental affairs in Mexico. Among its mandates, SEMARNAT issues regulation, and coordinates enforcement of environmental law at a federal, state or municipal level. The prosecutorial branch of SEMARNAT is known as the Federal Environmental Protection Prosecutor (*Procuraduría Federal de Protección al Ambiente*, or PROFEPA).

Despite a comprehensive legislative framework, the Mexican Executive Branch has not issued adequate secondary regulation related to SLAB recycling. As a result, existing environmental laws, including the LGEEPA and the LGPGIR, remain unenforced due to low quality standards, lack of standards altogether, or lack of enforcement powers. Related to the last issue, SEMARNAT and PROFEPA have a severely limited verification and inspection capacity. The next sections provide a detailed look into these regulatory shortcomings:

2. No comparable air emission limits for secondary lead smelters

Important differences exist in lead air emission limits for SLAB recycling plants in Mexico and the U.S. In the U.S., the EPA has set hazardous air pollutants limits for emission units of SLAB smelters.¹ In addition, plant operators have monitoring, reporting, testing, and recordkeeping obligations related to those emissions limits, plus any condition established by the regulator. By contrast, in Mexico there is no regulation setting hazardous air pollutant limits on emission units in secondary lead smelting plants.²

¹ These emission units include chemical processing, rotary material dryer, reverbetory furnaces, rotary furnaces, refining kettles, reverb feed bunkers, reverb slag bunkers, lead casting, etc. Air pollution control devices, such as wet scrubbers, baghouses, and bin vents are also mandatory. See 40 CFR Part 63 - Subpart X National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting; For more information on Title V permits, *see* <http://www.epa.gov/oaqps001/permits/obtain.html>; For a summary of the EPA's Final Air Toxics MACT Rules for Secondary Lead Smelter Industry, *see* <http://www.epa.gov/oar/oaqps/takingtoxics/sum2.html#11a>

² All NOMs for air emissions limits set by SEMARNAT are listed at <http://www.semarnat.gob.mx/leyesynormas/Pages/fuentesfijas.aspx>. There are two NOMs of general application to industry that establish air emissions limits in Mexico, one for solid particulates for stationary sources, and another that sets emissions limits from hydrocarbon combustion. Neither covers air emissions limits of lead, arsenic, cadmium, nickel, and 1, 3-Butadiene, typically associated to secondary lead smelting processes. *See*, NOM-043-ECOL-1993 establishes maximum permissible air emission of solid particulates from a stationary source –not for specific equipment– but facilities, and per zones in the country; and NOM-085-ECOL-1994 for stationary sources of emissions that use fossil fuels in any state. Maximum permissible levels of air emissions of smoke, total suspended particles, sulfur dioxide and nitrogen oxide. Requirements and conditions for the operation of equipment heating indirectly by combustion, and maximum permissible levels of air emissions of sulfur dioxide for equipment heating directly by combustion; *Also*, a technical standard which approximates to existing standards in the U.S. for emission units is NOM-098-SEMARNAT-2002, Environmental protection-incineration of waste, operation specifications and limits to emission of contaminants (*Protección ambiental-Incineración de residuos, especificaciones de operación y límites de emisión de contaminantes*). But this NOM is only applicable to the subindustry of waste incineration. Nonetheless, it could be seen as a precedent for the type of NOM that SEMARNAT could issue for emission units.

Differences in air emissions regulation have recently become more acute, with U.S. emission limits becoming more stringent over the past years. SLAB recyclers in the U.S. are under pressure to invest in new technologies.³ State-of-the-art SLAB recycling technologies use fully enclosed facilities with improved furnaces and pollution control devices to reduce air emissions and hazardous waste.⁴ These technologies, however, are not economical, nor widely implemented in the U.S. or Mexico. In the past years, there has been an increased importation of SLABs to Mexico for recycling, where plant operators can avoid emission limits and related compliance costs.⁵

Other regulatory problems exist related to air emissions reporting thresholds, but these will be discussed as a matter of enforcement of reporting obligations in Sections 7 and 8 below.

3. Missing NOM for waste management plans for LAB producers

The LGPGIR mandates that manufacturers of certain products that become hazardous waste once spent must file a waste management plan.⁶ Article 31 of the LGPGIR recognizes lead- acid batteries (“LABs”) as such type of product, and obliges LAB producers to file and follow a hazardous waste management plan, according to NOMs issued by SEMARNAT.⁷

To date, SEMARNAT has not issued the NOMs mentioned in the LGPGIR to define the content, scope, or standards for hazardous waste management plans for LABs.⁸ The deadline to register LAB

³ See Secondary Lead Smelting - National Emissions Standards for Hazardous Air Pollutants Risk and Technology Review: Final Rule, (EPA), at http://www.epa.gov/ttn/caaa/t3/fr_notices/RTR2ndleadfinal.pdf

⁴ For a general overview on how to contain air emissions from waste processing, see Section 7. Capture and Containment in “General Industrial Issues: Sound Management of Solid Waste in the Lead Industry”, ILMC Toolbox Series, at <http://www.ilmc.org/toolbox/PDF/1-1%20Sound%20Management%20of%20Solid%20Waste%20in%20the%20Lead%20Industry.pdf> (hereinafter referred to as “ILMC General Industrial Issues”)

⁵ Environmental authorities of SEMARNAT analyze a list of plant equipment during the environmental impact review process, and corresponding filing for a license to operate in which estimates of emissions are provided. These review processes are not the same as establishing emissions limits for operating equipment. Review processes for proposed plant projects are mostly an administrative (desk) approval process based on information provided by the petitioner. See also, Elisabeth Rosenthal et al., “Lead From Old U.S. Batteries Sent to Mexico Raises Risks”, (8 Dec. 2011), The New York Times at <http://www.nytimes.com/2011/12/09/science/earth/recycled-battery-lead-puts-mexicans-in-danger.html?pagewanted=all>. (hereinafter referred to as, “Rosenthal et al., Lead From Old U.S. Batteries in Mexico”)

⁶ In this regard, the LGPGIR is more progressive than U.S. national legislation, since this norm is a type of “extended producer or product responsibility” (EPR) for the end-of-life costs of products. The U.S. does not have nationwide laws incorporating EPR concepts. Instead EPR regulations are put into effect by individual states, or voluntarily as internal company policies. For a general reference on EPR and list of U.S. states with EPR laws see, Extended Producer Responsibility, (Earth911) at <http://earth911.com/recycling/extended-producer-responsibility/>

⁷ Existing SEMARNAT NOMs may be found at <http://semarnat.gob.mx/leyesynormas/normas/Pages/normasoficialesmexicanasvigentes.aspx>

⁸ Article 29 of the LGPGIR establishes content guidelines for manufacturer waste management plans. However, Article 32 of the LGPGIR clearly states that specific elements and procedures for each type of hazardous waste will be determined in NOMs. Under Article 22 of the *Reglamento* of the LGPGIR, SEMARNAT could also opt to negotiate and create in coordination with the private sector, and/or state and municipal governments, a nationwide waste management plan, but this option has also not been exercised.

waste management plans passed in 2005 without industry compliance.⁹ But without issuing a specific NOM, SEMARNAT cannot enforce the requirement.¹⁰ This is the case of an appropriate measure of law, which is not being enforced by the relevant authority. As a consequence, intended costs of compliance are not generated for LAB manufacturers and SLAB handlers in Mexico.

4. Missing regulation for hazardous and industrial waste generated by secondary lead smelters

The LGPGIR calls for waste generated by mining and metallurgical industries to be specifically regulated. Article 17 of the LGPGIR mentions that the hazardous characteristics and integral management of waste from mining or metallurgical processes (which includes secondary lead smelting and refining) will be defined in secondary regulation.¹¹ In response, SEMARNAT has issued regulation regarding waste management for mining industries,¹² but none for primary or secondary metallurgical industries. The U.S., on the other hand, has specific regulation on how secondary lead smelters must manage waste, including a directive to remove the hazardous characteristics of solid waste prior to landfill disposal.¹³ These regulatory differences mark not only gaps between country legal regimes, but gaps in the enforcement of existing laws in Mexico.

⁹ Eighth Transitory Article of the LGPGIR; In addition, SEMARNAT is obliged by Transitory Article Tenth of the LGPGIR to have submitted drafts for all NOMs, within 120 calendar days after entry into force of the 2003 LGPGIR. This deadline may have been met for some NOMs, but they have not been issued. One complication for issuing NOMs would have been that the Regulations of the LGPGIR (that are necessary for detailing the terms of the LGPGIR) were not issued by the Office of the President, until 2006. Since NOMs are ministry regulation, they must attend first to any terms of norms issued by the President. In addition, the COFEMER (Commission for Federal Regulatory Improvement) reviews all new regulation.

¹⁰ At the request of SEMARNAT, one major car-battery manufacturer (Enertec) voluntarily filed a waste management plan, but this management plan does not follow or set any industry-wide standard. The plan does allow SLAB collectors, transporters, and otherwise handlers to adhere to the plan with company approval. Regardless, SEMARNAT would be hard-put to legally enforce commitments in a voluntary plan, which most closely resembles an internal company policy than a public policy given the lack of a NOM defining scope and content for such plans. *See*, “Plan de Manejo para Acumuladores de vehículos automotores conteniendo plomo”, Enertec, S. de R.L. de C.V.; For further information on voluntary compliance, *see also*, “Entrevista Al M. En C. Alfonso Flores Ramírez, Director General De Gestión Integral De Materiales Y Actividades Riesgosas De La Secretaría De Medio Ambiente Y Recursos Naturales, Para La Revista Derecho Ambiental Y Ecología” at www.ceja.org.mx/articulo.php?id_rubrique=343&id_article=4442

¹¹ Article 34 of the Reglamento of the LGPGIR (issued in 2006) reiterates that NOMs will define the terms for final disposal of mining and metallurgical industry waste. Article 33 of the Reglamento of the LGPGIR provides a general outline of the content and scope for waste management plans.

¹² In 2011, SEMARNAT issued a NOM on waste management plans for primary mining industries, and has otherwise generated NOMs regarding waste produced by primary mining industries. *See* NOM-157-SEMARNAT-2009 that establishes the elements and procedures for implementing waste management plans for mining residues (*Que establece los elementos y procedimientos para instrumentar planes de manejo de residuos mineros.*)

¹³ For example, the EPA has ordered secondary lead smelters to stabilize (i.e. make non-hazardous) slag before disposal. *See*, Characteristic Slags Generated from Thermal Recovery of Lead by Secondary Lead Smelters; Land Disposal Restrictions, Final Rule, Extension of compliance date of final rule, FR, Wednesday, 9/9/98, pp. 48124-48127 at <http://www.epa.gov/wastes/laws-regs/state/revision/frs/fr172.pdf>

In lieu of a specific industry standard for waste, SLAB recycling facilities in Mexico must comply with general waste management norms.¹⁴ Secondary lead smelting and refining processes generate solid waste in the form of dust, sludge, slag or dross. Hazardous waste from secondary lead smelting can be stabilized (made non-hazardous) through a chemical treatment process, and/or eliminated through improved technologies of metal recuperation.¹⁵ However, plant operators must test the end waste result to know whether waste is no longer hazardous. Industrial waste generators are required to test waste prior to disposal by applying the technical standard NOM-052-SEMARNAT-2005 that defines the characteristics of hazardous waste in Mexico.¹⁶ The U.S. has a similar technical standard.¹⁷ But compliance of SLAB recycling plants can only be ascertained through verification and inspection by the corresponding municipal, state, or federal authorities. For reasons that will be discussed in Sections 7 and 8 below, inspection capacity in Mexico is severely curtailed, leaving ample room for violation of hazardous waste management norms.

Assuming that a SLAB recycling plant stabilizes hazardous waste generated, the plant operator still has the obligation to follow regulation for special management waste.¹⁸ Article 11 of the *Reglamento* of the LGPGIR mentions that NOMs issued by the ministry will determine the characteristics of special management waste, as well as which special management waste is further subject to waste management plans. Article 12 of the *Reglamento* of the LGPGIR mentions that requirements for special waste management plans will also be set through a NOM. SEMARNAT has not issued NOMs to regulate special management waste.¹⁹

In a comparative context of North American environmental regimes, Mexico's stagnant enforcement of existing waste management legislation is probably one of the greatest factors contributing to lower compliance costs, not only in the secondary lead smelting and refining

¹⁴ Norms for the general handling of waste are found in Third and Fourth Titles of the LGPGIR; The Fifth Title of the LGPGIR provides general norms on the handling of hazardous waste; Waste management norms in the LGPGIR distinguish between urban waste, special management waste (also referred to as non hazardous industrial waste), and hazardous waste. The objective is to decrease waste generation, increase the valorization of waste products, and most importantly, handle different wastes separately to avoid contamination of soils and bodies of water.

¹⁵ For a general overview on managing solid waste from SLAB recycling, see ILMC General Industrial Issues.

¹⁶ NOM-052-SEMARNAT-2005 that establishes the characteristics, the procedure of identification, classification, and the lists of hazardous wastes, including maximum permissible levels of lead, arsenic, cadmium, nickel, and benzene in samples of leachate extracts.

¹⁷ The EPA considers slag from secondary lead manufacturing hazardous when it exhibits toxicity levels of arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver, as defined by the Resource Conservation and Recovery Act ("RCRA"). A List of the RCRA metals regulated by the EPA may be found at "The EPA TCLP: Toxicity Characteristic Leaching Procedure and Characteristic Wastes (D-codes)", Environment, Health and Safety Online (EHSO) at <http://ehso.com/cssepa/TCLP.htm>; For a description on the effects on health, see also, A Kathryn Gardella, eHow Contributor, "List of RCRA Metals" at http://www.ehow.com/info_8088217_list-rcra-metals.html#ixzz1WA9CN8LU.

¹⁸ Special management waste is non hazardous industrial waste. Article 5 subsection XXX of the LGPGIR

¹⁹ SEMARNAT has only issued one NOM regarding sites were special management waste can be disposed. NOM-083-SEMARNAT-2003, Specifications of environmental protection for the selection of the site, design, construction, operation, monitoring, closure, and complementary works for a final disposal site of urban solid or special management waste. (*Especificaciones de protección ambiental para la selección del sitio, diseño, construcción, operación, monitoreo, clausura y obras complementarias de un sitio de disposición final de residuos sólidos urbanos y de manejo especial*);

industry, but across all industries by comparison to the U.S. or Canada. More on this issue is addressed in Sections 7 and 8 below.

5. Missing NOM on characteristics of a contaminated site

SEMARNAT must be notified when a facility that generates hazardous waste closes its operations.²⁰ Under Article 34 of the *Reglamento* of the LGPGIR, the same NOM that SEMARNAT must issue to regulate waste from metallurgical industries, must also specify conditions for closing an operations site.²¹ This requirement helps SEMARNAT identify contaminated sites.²² However, as mentioned above, this NOM has not been issued.

Persons responsible for activities related to generation or management of hazardous materials or waste, who have caused a site to be contaminated by such hazardous materials or waste, have the obligation to carry out the remediation of that site.²³ Pursuant to Article 78 of the LGPGIR, a NOM issued by SEMARNAT, in coordination with the Secretariat of Health (*Secretaría de Salud* or SS), will specify the characteristics of a contaminated site.²⁴ This NOM has also not been issued, and without a NOM setting the technical standards that define a site as contaminated, enforcement of remediation actions against private parties in the country will not likely proceed.²⁵ In 2000, the Mexican government had only identified 61 contaminated sites, and by 2008, had only ordered remediation in a few cases where the federal government held responsibility for clean-up.²⁶ By

²⁰ Article 68 of the *Reglamento* of the LGPGIR

²¹ Article 34 of the *Reglamento* of the LGPGIR. See Section 4 above.

²² A contaminated site is a place (space, land, body of water, facility or a combination) that has been contaminated by materials or waste that given their amounts and characteristics represent a risk to human health, live organisms, and the beneficial use of goods and property. Article 5 subsection XL of the LGPGIR.

²³ Articles 68-69 of the LGPGIR; Title 6 of the Reglamento-LGPGIR details the different types of actions that a party needs to carry out, when its site is identified as contaminated. However, there is still a gap due to lack of regulation as to what is a contaminated site.

²⁴ Article 78 of the LGPGIR

²⁵ NOM-147-SEMARNAT/SSA1-2004 (effective 2007) informs parties with an obligation to remediate land (soil) the levels at which the land has to be remediated in terms of toxic substances. The problem with NOM-147-SEMARNAT/SSA1-2004 is that it applies post-factum once a site has been characterized as contaminated.

²⁶ From 1995-2000, PROFEPA informed that 61 sites has been identified as contaminated. (The introduction to NOM-147-SEMARNAT/SSA1-2004 cites PROFEPA Informe 1995-2000 as the source of this information. I checked PROFEPA's 2009 Informe de Labores but could not find an updated figure.) From reading an online document published in 2008 by SEMARNAT, it seems that the entire National Program for the Remediation of Contaminated Sites is at an early development stage. This document cites a couple of cases of remediation carried out by the federal government, but these involve cases of environmental emergencies, and former state enterprises such as a railroad yard. "Programa Nacional de Remediación de Sitios Contaminados: Misión, Visión, Objetivos, Metas y Proyectos", DGGIMAR/SEMARNAT, (October 2008); Article 75 of the LGPGIR requires SEMARNAT establish an Inventory of Contaminated Sites, however, this inventory is only just being developed. For more information on current efforts, see National Program for the Remediation of Contaminated Sites (*Programa Nacional de Remediación de Sitios Contaminados*) (2010) SEMARNAT, at

http://www.semarnat.gob.mx/programas/documents/programa_nacional_remediacion_sitios.pdf

contrast, the U.S. has a fully functional system funding site remediation and litigation against offending parties, based on comprehensive regulation often referred to as the “Superfund Act”.²⁷

Site contamination by unlicensed and licensed SLAB recyclers is already an unattended problem in Mexico. Marissa Jacott, Director of Fronteras Comunes identified a plant - Industrial Mondelo – that operated in Naucalpan de Juárez, within the greater valley of Mexico City, as an authorized SLAB recycler.²⁸ Although this site was eventually closed, it simply moved its operations to another location, and it was still operating at least at the start of 2010. Jacott was informed by workers that the plant lacked the proper technology to effectively control air emission and water discharges.²⁹ A sample of soil recovered from a next door schoolyard “showed a lead level of 2,000 parts per million”, which in the U.S. would be immediate cause for remediation.³⁰ The plant was also fined by PROFEPA several times over the course of its operations, but never shut down.³¹ After the plant closed, residents informed Jacott, and she later verified, that the location has been put up for rent, without any remediation. In 2010, PROFEPA accepted a petition from Industrial Mondelo to open a new SLAB recycling plant in Lerma, State of Mexico,³² and authorized this petition in 2011.³³

²⁷ Under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), the Agency for Toxic Substances and Disease Registry (ATSDR) tracks hazardous substance releases, and the EPA identifies responsible parties of site contamination. In Mexico, SEMARNAT and PROFEPA can carry out similar functions, however, without further regulation their powers to enforce remediation are curtailed. *See also* Articles 5 subsection XXVIII, and Chapter V (Articles 68-79) of the LGPRMIR; Title Six of the *Reglamento* of the LGPRMIR; LGEEPA: Article 152 BIS of the LGEEPA

²⁸ Source: Interview with Marissa Jacott (2011); *Also*, Rosenthal et al., Lead From Old U.S. Batteries in Mexico: “...[A]t the vast recycling compound of Industrial Mondelo here, batteries have been dismantled by men wielding hammers, and their lead melted in furnaces whose smokestacks vent to the air outside, where lead particles can settle everywhere from schoolyards to food carts. Officials of the plant, which has been given more than a dozen citations and fines for lead emissions and improper storage of dangerous materials, did not respond to repeated requests for comment.”

At the time it was operating at that location, Industrial Mondelo appeared on SEMARNAT’s List of Authorized Hazardous Waste Recyclers, as having been authorized an extension of a permit to recycle hazardous waste, authorization number 15-IV-90-10 (Extension), effective 26 July 2010 until 26 July 2015, with a capacity of 7, 200 tons.

²⁹ *Ibid.*

³⁰ Rosenthal et al., Lead From Old U.S. Batteries in Mexico:

“[...] A sample of soil collected by The Times in the schoolyard showed a lead level of 2,000 parts per million, five times the limit for children’s play areas in the United States set by the Environmental Protection Agency. In most states, that would rate as a “significant environmental lead hazard” and require immediate remediation, like covering the area with concrete or disposing of the soil.”

³¹ A response to a Petition of Public Information # 1613100006811 filed by Jacott in July 2011, reveals that PROFEPA fined Industrial Mondelo at least 5 times between 2005 and 2010, each amount between MEX\$20,000 pesos to \$32,000 approximately (USD\$1,600 dollars to USD\$2,500 dollars). Source: Interview with Marissa Jacott (2011).

³² The Declaration of Environmental Impact (*Manifestación de Impacto Ambiental* or MIA) filed by Industrial Mondelo is available at <http://sinat.semarnat.gob.mx/dgiraDocs/documentos/mex/estudios/2010/15EM2010I0005.pdf>

³³ Industrial Mondelo has a new registry on the list of authorized companies to recycle hazardous waste. <http://tramites.semarnat.gob.mx/images/stories/menu/empresas/rubro1.pdf>

6. The maquiladora regime compounds problems of waste management

SLABs may enter Mexico under the temporary import regime program called IMMEX (previously known as the *maquiladora* program).³⁴ Material entering under the IMMEX program is exempt from paying import tariffs.³⁵ The Secretariat of Economy (*Secretaría de Economía* or SE) manages the IMMEX and maintains a registry of companies operating in the program. Companies, such as Enertec Exports (a wholly owned subsidiary of JCI attached to its SLAB recycling operations in Mexico), appear on the IMMEX registry.³⁶

Under Article 94 of the LGPGIR, SLABs (or any other hazardous waste) introduced under the temporary import regime can only enter Mexico for the purpose of recycling. Otherwise, they must be accounted for and taken back out of Mexico. Closely related, Article 93 of the LGPGIR states that the importer of any product or input that is destined to a productive process under the “temporary import regime” must take any hazardous waste generated by such process back out. The objective is for importers not to generate greater hazardous waste than they introduce.

In this manner, waste management legislation in Mexico dovetails into import-export laws and international treaties that aim to protect the country against hazardous waste entry for disposal in the country. Under the current terms of the law, an IMMEX-registered SLAB recycler may not generate more hazardous waste than it imported originally. However, without enforcement of waste management legislation and regulation, and inspection from both federal and local authorities, it is impossible to know whether importers of SLABs are violating import-export regulations by dumping hazardous waste, under the guise of urban solid or industrial waste, into municipal waste sites and water systems of Mexico.

A related issue is the transport of hazardous waste (SLABs) through Mexico and through the border. Transporters of SLABs must comply with a variety of requirements oriented towards keeping control of hazardous waste and materials.³⁷ For transport over highways, the Secretariat of Communication and Transport (*Secretaría de Comunicaciones y Transporte* or SCT) requires transporters

³⁴ Program for Manufacturing, Maquiladora, and Export Services Industry (*Programa de Industria Manufacturera, Maquiladora y de Servicios de Exportación*, or IMMEX).

³⁵ Chapter 85 of the Law of General Taxes on Importation and Exportation (*Ley de los Impuestos Generales de Importación y de Exportación*) gives SLABs the import tariff code 8548.10.01, setting the tariff per 20kg; The exemption is established by Article 104 of the Customs Law (*Ley Aduanera*).

³⁶ The IMMEX registry is available at <http://www.economia.gob.mx/comunidad-negocios/industria-y-comercio/instrumentos-de-comercio-exterior/directorios-y-discos-de-captura>

³⁷ Hazardous waste collection and transportation service providers must comply with the requirements established in Article 85 Reglamento-LGPMIR. These include adequate packaging and labeling for hazardous waste; maintaining a contingency plan for emergencies and appropriate equipment for such a case; staffing adequately trained employees; keeping a manifesto from the original generator of hazardous waste, including volumes delivered; and keeping incompatible hazardous waste separate for transport, including biological-infectious waste, which must be maintained separate from all other waste.

to have special permits, and careful recordkeeping.³⁸ In addition, the Decree of Transportation on the 20km Strip Parallel to the Border requires that any cargo vehicles moving on the 20km strip parallel to the U.S.-Mexico border, or picking up or dropping trailers and semitrailers at the border checkpoints require a special permit and license plate from the SCT.³⁹ SCT requirements help avoid the illegal crossing of cargo vehicles into Mexico as they transfer cargo at checkpoints. However, recordkeeping is one of the most essential issues around SLAB and other hazardous waste transportation since it establishes a chain of custody.⁴⁰ The chain of custody matters in the transport of hazardous waste not only as a matter of public health and environmental protection, but also as a public security issue requiring serious inspection and verification practices.

7. Public's right to information is weakly enforced

The environmental regulatory system in Mexico is built around the notion that industrial operators will report required information to municipal, state, and federal environmental authorities, and that there will be compatible systems of information that allow SEMARNAT and other environmental authorities to create adequate environmental policies and strategic decisions about enforcement. Articles 159BIS of the LGEEPA and 37 to 39 of the LGPGIR define this also as the public's right to information about their environment, which burden to protect is placed on government authorities. To that end, the LGEEPA calls for a National Information System for Environmental and Natural Resources (*Sistema Nacional de Información Ambiental y de Recursos Naturales* or SNIARN) to be managed by SEMARNAT. The SNIARN aggregates information received from other registries at a municipal, state and federal level.

Information in these systems is a result of reporting obligations compliance by regulated parties. For example, to maintain a license to operate, a SLAB recycling facility (as a federal source of emissions) must file an Annual Operation Report (*Cédula de Operación Annual*, or COA).⁴¹ The COA is an annual report on pollutants transferred in the course of operations to air, water, and soil. Furthermore, a recycling facility must report on hazardous materials and waste used or managed in

³⁸ In order to receive authorization from SEMARNAT to provide hazardous waste transportation services, the petitioner must have the appropriate permits from SCT. SCT permits are required for cargo transportation on highways, and in this case, for specialized cargo of hazardous waste. These permits create a record of parties responsible for cargo vehicles in Mexico.

³⁹ *Acuerdo por el que se establecen las modalidades en el servicio de autotransporte federal de carga, denominados transporte o arrastre de remolques y semirremolques en los cruces fronterizos, cuyo ámbito de operación exclusivamente comprende la franja de 20 kilómetros paralela a la línea divisoria internacional con los Estados Unidos de América*, (DOF 18 March 2003), SCT

⁴⁰ Pursuant to Article 86 of the Reglamento-LGPMIR, transporters must maintain the chain of custody of hazardous waste. The chain of custody requires that the original generator deliver an original signed manifesto and two copies to the transporter. The transporter will sign the original manifesto as well and keep it and a copy. When the transporter reaches the receiving party at the designated destination, she will deliver the original manifesto to the receiving party, plus an additional copy. The receiving party will then keep the copy, and sign the original manifesto and send it back to the generator. If within 60 days, generator has not received the signed original from the designated receiving party, then the generator has an obligation to inform SEMARNAT. SEMARNAT must then take appropriate measures.

⁴¹ Articles 111BIS LGEEPA; and 17BIS-D (Subsections VIII, XIII, XXI, and XXV), and 21 of the *Reglamento-LGEEPA-MPCCA*

the facility that exceed a threshold amount.⁴² To collect this information, SEMARNAT manages a federal Registry of Emissions and Transfer of Pollutants (*Registro de Emisiones y Transferencia de Contaminantes* or “RETC”).⁴³ Reporting obligations to the RETC only apply to federal sources of emissions and large scale waste generators.⁴⁴

Another set of information system exist with regards to waste management. At a federal level, SEMARNAT maintains a Registry of Hazardous Waste Generators, and an Inventory of Hazardous Waste.⁴⁵ State and municipal authorities maintain their own registries of waste generators, waste management plans, and inventory of waste substances, but these registries must also follow federal regulations under LGEEPA Article 109bis. Depending on the type of waste generated (hazardous, special management, or solid waste), and the scale at which it is generated (large, small, or micro scale), a SLAB recycling facility will have to comply with registration, reporting, and management requirements at a federal, state, and/or municipal level.

SEMARNAT aggregates information from all three levels of government to create its national databases, which are used to define policymaking, regulatory, and prosecutorial priorities. However, all of these registries and inventories are fairly new. The National Inventory of Waste Generation was only rolled out by SEMARNAT in late August 2010.⁴⁶ Likewise, states and municipalities are at different stages of maintaining and developing their inventories and registries, which means that overall, the basic instruments for determining the programs, policies, and regulation for waste management are only in a developmental stage. In addition, the accuracy of information on the registries and inventories is entirely reliant on information provided by the private sector, unless authorities actually verify this information. Inconsistencies are easily found between lists of authorized companies, registries of sources of emissions, inventories of waste, etc. Internally, PROFEPA also seems to collect a database for inspections that is distinct from the databases used by other departments of SEMARNAT.⁴⁷

⁴² For more information on report requirements to the RETC, see DECREE which modifies and expands upon previous decree by which the guidelines and format for the COA to the RETC were established (*ACUERDO por el que se modifica y adiciona el diverso por el que se da a conocer el instructivo y formato de la Cédula de Operación Anual para el Reporte Anual del Registro de Emisiones y Transferencia de Contaminantes*), DOF 5 February 2009.

⁴³ Article 109BIS LGEEPA, and Article 21 of the *Reglamento-LGEEPA-MPCCA*

⁴⁴ Please note that states and municipalities will have their own registries of emissions for sources not under federal supervision.

⁴⁵ The Registry of Hazardous Waste Generators and the Inventory of Hazardous Waste is available at <http://www.semarnat.gob.mx/temas/gestionambiental/materialesactividades/Paginas/ResPel.aspx>

⁴⁶ “Presenta la SEMARNAT el Inventario Nacional de Generación de Residuos Peligrosos”, 25 Agosto 2010, http://saladeprensa.semarnat.gob.mx/index.php?option=com_content&view=article&id=2224:presenta-la-sermarnat-el-inventario-nacional-de-generacion-de-residuos-peligrosos&catid=50:comunicados&Itemid=110

⁴⁷ Source: Interview with Marissa Jacott. A list of companies inspected by PROFEPA in 2008-2011 was provided to Jacott in response to Public Information Petition #1613100025611. The Petition requested information about inspection visits to SLAB storage, collection and recycling facilities. When comparing SEMARNAT’s List of Authorized Companies to store, collect or transport hazardous waste to the list of companies inspected by PROFEPA there were inconsistencies. For example, Enertec’s offices in Monterrey, N.L and its facility in Queretaro, Queretaro had been inspected, but these two facilities are not authorized to store, collect or transport hazardous waste on SEMARNAT’s List of Authorized Companies. One of several questions arise from an apparent inaccuracy, including whether Enertec

All in all, the need to verify information and make databases compatible is required at a federal, state and municipal capacity to create a functional system of information that the general public, and authorities can rely on.

8. Insufficient inspection and verification capacity of environmental law authorities

PROFEPA has broad oversight capacity regarding compliance and enforcement of the LGEEPA, LGPGIR, and other applicable environmental norms and regulations. However, its enforcement capacity is limited in some respects by its legal nature, and limits to powers granted in existing regulation.⁴⁸ For example, while PROFEPA may recommend fines based on its inspection and verification visits, it may not impose them directly, because another department of SEMARNAT must issue the fines. There are definite bottlenecks in the enforcement capacity between PROFEPA and internal SEMARNAT departments that could be fixed by redesigning decision-making processes coupled with appropriate powers through an amendment of the existing *Reglamentos* attached to the LGEEPA, by way of Presidential decree(s). The maximum cap on fines may also limit enforcement actions, in some cases.⁴⁹

facilities are operating without proper authorization, or whether SEMARNAT's list of authorized companies is incomplete, or whether the inspection list provided by PROFEPA mistakenly portrays those facilities as providing hazardous waste services, or PROFEPA provided Jacott with information not limited to recycling, storage or collection of SLABs but of other services. The simplest explanation for the difference in information is that PROFEPA's registries handle different information from SEMARNAT's other registries, which questions the efficiency and effectiveness of SEMARNAT's database management overall.

⁴⁸ PROFEPA is structured as an *órgano desconcentrado* or quasi-independent agency of SEMARNAT. This means that while PROFEPA is semi-autonomous in the execution of its functions, it is dependent on SEMARNAT for its budget. Therefore, PROFEPA is not entirely independent from the hierarchical influence of a cabinet-level ministry; Quasi-independent agencies under Mexican law are "semi-autonomous institutions that lack legal personality and are placed under the overall authority of Secretariats, on which they depend for funding". Stephen Zamora et al., "Mexican Law", Oxford University Press, (2004), p. 289, 295-296

⁴⁹ A fine will never exceed USD\$218,000 dollars; even for a repeat violation a fine will never exceed \$436,000USD. Depending on the case, this may or may not constitute a deterrent to a large-scale industrial SLAB recycling operator. The following is an explanation: Article 171 Subsection I of the LGEEPA provides that fines imposed will not exceed 50,000 minimum wages (approximately USD\$218,000 dollars). Article 171 of the LGEEPA paragraph eight, provides that if a fined party does not take corrective actions in the time allotted by the SEMARNAT, then SEMARNAT may impose a daily fine until the mandated corrective actions are completed. However, the aggregate amount of these fines may not exceed the maximum fine amount of 50,000 minimum wages. Similarly, pursuant to Article 171 of the LGEEPA paragraph nine, in cases of a repeat violation, SEMARNAT may impose double the same amount as the original fine on the responsible party, but never more than twice the maximum amount of 50,000 wages, i.e. 100,000 wages (or \$436,000USD, per exchange rates at OANDA for June 5th). A repeat violation is circumscribed to violation of the same precept first violated, and to a term of two years since the date of the first infraction. Maximum fine amounts may not be increased by SEMARNAT, since they can only be increased by Congressional amendment of the LGEEPA. Such amendment would require a lengthier lobbying process. For 2012, the general minimum salary in the Federal District is \$62.33 pesos per day (\$4.36USD, considering OANDA exchange rates for June 5). The General Minimum Salaries in Mexico for 2012 are set by CONSAMI (National Commission For Minimum Wages or *Comisión Nacional de Salario Mínimo*). For a table of salaries, see http://www.conasami.gob.mx/pdf/tabla_salarios_minimos/2012/01_01_2012.pdf; Aside from fining, SEMARNAT may choose to proceed on closing (temporarily or permanently) a facility; decommissioning products causing environmental harm; 36 hour administrative arrest; or revoking a license or permit.

Despite the legal limitations to PROFEPA's capacity, the most critical limit is the lack of adequate personnel and resources to cover the vast amount of inspection and verification duties for which it is responsible.⁵⁰ In PROFEPA's 2009 Report on State of Affairs (*Informe Anual de Labores 2009*)⁵¹, the agency explained that for 44,861 registered sources of emissions of federal jurisdiction, it had "125 federal inspectors, which is 3.9 inspectors per federal entity, but amount which actually oscillates between 1 to 12 inspectors per state. Considering that each visit is carried out by a brigade of two inspectors, each brigade would have to visit more than 718 facilities, almost 359 facilities per inspectors."⁵²

Understandably, PROFEPA has had to establish priorities for its inspection actions given its extremely limited human resources. In 2009, PROFEPA's five top priorities were facilities operating in hazardous waste services, metallurgic industries, gas, chemical, petrochemical and oil industries. Among these, PROFEPA carried out a total of 9,982 inspection and verification actions on stationary sources of federal jurisdiction over 8,175 facilities. Of these, 77.57 % (7,743) were small to micro companies and 22.43 % were medium to large enterprises. PROFEPA reasoned that small to medium outfits were the focus, because they were more likely to be operating outside the law. From its inspections, PROFEPA found that only 0.6% of facilities were in grave violation of norms that implied immediate harm to health or environment.⁵³ In general, violations of the laws were transgressions that only accrued an administrative sanction (no fines). As extensive as this effort must have been for PROFEPA, without adequate technical standards and capacity to impose meaningful fines and administrative sanctions, inspectors are not likely to have an important impact on shifting industrial practices that are damaging the environment and public health.

In addition to its inspection duties, PROFEPA must attend to "Citizen Denunciations" of potential or actual environmental damage⁵⁴. Without an extensive field operations, Citizen Denunciations are probably the best means by which PROFEPA can identify illegal industrial operations. In 2009, PROFEPA received 8,154 Citizen Denunciations, and 99.3% were attended to in the time limits established by the law. At the end of 2009, 76.05% of Citizen Denunciations had been concluded,

⁵⁰ PROFEPA has legal capacity to initiate administrative cases over the violation of environmental laws and regulations; to denounce the commission of environmental crimes to criminal prosecutorial bodies (ministerios públicos); attend to citizen complaints or other denunciations regarding violations of the environmental laws; carry out inspection and verification visits and environmental audits, as well as issue expert opinions; determine corrective measures and emergency measures; coordinate attention to environmental contingencies and emergencies with relevant federal, state and municipal authorities; impose fines and penalties; when deemed necessary, recommend to the relevant authorities that licenses, permits and authorizations be revoked; protect and defend the public interest, and promote public participation in the vigilance of laws and implementation of measures to prevent or manage environmental emergencies; gain access to the databases maintained by SEMARNAT to carry out its mandate; maintain records of its activities; among other things. LGEEPA: Chapter II on Inspections and Oversight (Articles 162 – 169), Chapter III on Security Measures (Articles 170 – 170BIS), Chapter IV on Administrative Penalties (Articles 171 – 175BIS), Article 182 and 202; LGPGIR: Articles 101, 106; Reglamento-LGPGIR: Title Seven (Articles 154-163); and Internal Regulations of the SEMARNAT (*Reglamento Interior de la Secretaría de Medio Ambiente y Recursos Naturales*): Chapter 11 (Articles 118-140)

⁵¹ Informe Anual de Labores, (2009) PROFEPA, available at

http://www.profepa.gob.mx/innovaportal/v/3423/1/mx/informe_anual_profepa_2009.html

⁵² Id. Cit. Pg. 80

⁵³ Id. Cit. Pg. 84

⁵⁴ Article 189 of the LGEEPA

either by proceeding to an inspection, *or dismissing the case*. The report does not provide information as to which percentage of cases was resolved by inspection or dismissal. Nevertheless, PROFEPA noted that it had a 29% improvement in resolving cases through such means over the previous year. This implies that PROFEPA is carrying over a backlog of cases, from prior years, with the extent of the problem unknown. In brief, PROFEPA is stretched too thin to fully carry out its mandates of inspection and prosecution leaving unlicensed and licensed operators to comply mostly on their own terms to environmental laws.

9. Public health and environmental consequences from increased SLAB recycling in Mexico

Without enforcement and protection of the public's right to information about toxic industries in their surroundings, negative public health and environmental consequences are difficult to prevent. In Mexico, the lack of functional, coordinated, and public information systems about sources of emissions, discharges, and waste in a community is compounded by the lack of environmental authorities capable of identifying, fining, and even closing down polluting operations (licensed and unlicensed). This means that damage to the environment and public health can be as extensive as the lack of law enforcement allows.

With respect to public health, increased SLAB recycling in Mexico raises concerns about increased exposure to toxins by the general population, in particular lead exposure. In Mexico, the blood lead level limit for non-occupational population is set by NOM-199-SSA1-2000 at (a) 10µg/dl for children, pregnant women, and lactating women; and (b) 25µg/dl for the rest of the non-occupational exposed population.⁵⁵ Unfortunately, unless a person is found by a health service provider, field researcher or laboratory to have excessive blood lead levels, there is no preventive mechanism or means of knowing that a population is being exposed to increased levels of lead. Without adequate standards limiting air emissions, water discharges, and waste management practices from SLAB recyclers, blood lead level limits in Mexico do not provide any public health protection.⁵⁶

The other major public health issue in Mexico is the lack of an occupational health standard for blood lead levels for workers. Mexico only has an occupational-environmental health standard for limits to exposure to toxins (including lead) in the workplace. This is NOM-010-STPS-1999, which came into force in 2002.⁵⁷ Pursuant to Section 9 of NOM-010-STPS-1999, when a worker or a work

⁵⁵ NOM-199-SSA1-2000, Environmental Health. Levels of lead in blood and actions as criteria to protect the health of the exposed non-occupational population.

⁵⁶ NOM-199-SSA1-2000 may be used to generate responsibility for a polluter if an SS laboratories or a reputable SS certified laboratory assists in monitoring blood-lead levels in a community to identify lead poisoning within that population to a degree that triggers the SS into tracking the source of emission or contamination.

⁵⁷ NOM-010-STPS-1999 establishes a maximum permissible exposure to chemical substances for workers on a weighted average over time (*límite máximo permisible de exposición promedio ponderado en tiempo*). The basic measure of time is an 8 hour a day, 40 hour week. This NOM covers a vast number of substances. The national labor health standard limits worker lead (ambient) exposure to 0.15 mg/m³ (or 0.00015µg/m³). NOM-010-STPS-1999 imposes obligations on plant facility

area is exposed to levels of listed toxic substances above a specified limit, workers must be subjected to a medical examination pursuant to an occupational health NOM issued by the Secretariat of Health (*Secretaría de Salud* or SS) for each substance.⁵⁸ Since no such NOM has been issued by the SS, NOM-010-STPS-1999 operates on a default mechanism, whereby the plant doctor determines the necessary medical exams for a worker overexposed to toxins.⁵⁹ By leaving appropriate medical attention to the discretion of a plant doctor, ample room is open for unethical medical practices and grave inattention to workers.⁶⁰ Since this is a nationwide legal gap, the lack of a blood lead level limit and testing standard for lead and other toxic substances, rises to the level of a major public health problem in Mexico. In the U.S., testing blood lead levels in workers is mandatory in workplaces where a laborer is routinely exposed to toxins.⁶¹

10. Recommendations for improving Mexican environmental regulation for SLAB recycling

This section submits to the consideration of the CEC Secretariat a few proposals that could lead to improved regulation and enforcement capacity of Mexican environmental authorities, in the short to medium term:

- (1) To address missing regulation mandated by the LGEEPA and LGPGIR, request that SEMARNAT provide a report on actions being taken to issue regulation on the following:
 - a. Air emissions limits standard for emissions units in SLAB smelters, per Article 16 of the *Reglamento-LGEEPA-MPCCA*. In this case, SEMARNAT should also clarify whether it has sufficient powers to issue said standard under existing regulation;
 - b. NOM for waste management plans for LAB producers, per Article 31 of the LGPGIR;
 - c. Regulation for hazardous waste generated by secondary lead smelters, per Article 17 of the LGPGIR;
 - d. NOM to regulate special management waste, as required by Article 11 of the *Reglamento* of the LGPGIR; and
 - e. NOM establishing the characteristics of a contaminated site, per Article 78 of the LGPGIR.

owners to protect worker health by establishing procedures for how to (a) monitor toxins in the workplace, (b) monitor exposure of workers to those toxins, (c) keep records of monitoring practices for verification by the STPS, and (d) most importantly, how to respond when workers are over-exposed to toxins.

⁵⁸ Ibid.

⁵⁹ Please note that although issuing an occupational health NOM is the purview of the SS, Article 128 of the General Law of Health (*Ley General de Salud*, or LGS) mentions that any occupational health standard for workers in Mexico is to be issued by the SS, in coordination with the STPS. The lack of this secondary regulation is a lack of enforcement of health and labor laws by those Secretariats.

⁶⁰ In lieu of a specific blood lead level for workers, medical practitioners in ULAB recycling plants could follow the basic medical attention practices established by the national non-occupational blood lead level standard in NOM-199-SSA1-2000 for blood-lead levels over 25µg/dl.

⁶¹ Occupational Health and Safety Administration, 1910.1025, "Lead Standard" Available at: http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=standards&p_id=10030.

- (2) To address incomplete databases of pollutant emitters and waste generators managed by SEMARNAT:
 - a. Request SEMARNAT to inform on the state of affairs of the various registries for air emissions, water discharges, and waste generation that are part of the SNIARN, and the state of implementation of such registries at a municipal, state, and federal level.
 - b. The CEC could offer technical assistance and resources, if available, to complete and improve such registries and inventories. A pilot program or staggered program on a timetable could be applied to improve database systems and reporting obligations in municipalities and states where SLAB operations are known to exist.

- (3) To address the role of IMMEX in the importation of SLAB recycling into Mexico:
 - a. Request SEMARNAT to inform on the state of affairs of PROFEPA and its other internal departments with respect to field inspections of (a) transport units carrying SLABs into Mexico, (b) companies registered under IMMEX and (c) recycling facilities associated to such IMMEX registered companies with respect to waste management practices;
 - b. Support a program to be executed jointly by PROFEPA and customs agents of the *Servicio Tributario Administrativo* (Administrative Tributary Services or SAT) of the Secretariat of Treasury and Public Credit (*Secretaría de Hacienda y Crédito Público* or SHCP) to increase inspection and verification at border checkpoints of import and waste management regulation documentation carried by transport vehicles carrying SLABs into Mexico;
 - c. Support a program to be executed jointly by SEMARNAT and SE to verify that IMMEX tax exemptions are being applied only to companies that are complying with IMMEX rules, Mexican waste norms, and international treaties protecting against prohibited disposal of hazardous waste in Mexico; and
 - d. Support a program to be executed jointly by SEMARNAT and SCT to verify that SLAB transporters through the border and on Mexican highways are maintaining proper equipment, practices, and chain of custody of their material, and also to verify and track their final destination.

- (4) To address SEMARNAT's lack of inspection, verification, and prosecutorial capacity:
 - a. Request SEMARNAT to inform on the state of affairs of PROFEPA and its other internal departments carrying out enforcement actions over reporting obligations;
 - b. Request SEMARNAT to inform on the state of affairs of PROFEPA and its other internal departments with respect to field inspections to SLAB recycling operations, and results, including any administrative sanctions or fines imposed;
 - c. Support a pilot program to increase inspection, verification, and prosecutorial actions in specific states and municipalities where there are known SLAB recycling operations;

- d. Support a campaign –with involvement of licensed industry actors - that increases citizen education around their right to know about toxins in their environment, and their role in identifying illicit SLAB recycling operations. Citizens are PROFEPA’s best allies;
 - e. Request that PROFEPA’s Citizen Denunciations department inform on its state of affairs, and its limitations to respond to a greater number of cases, specifically oriented to SLAB recycling operations;
 - f. The CEC could offer technical assistance and resources, if available, to carry out regulatory amendments to improve the internal organizational structure and operations of SEMARNAT. Regarding the types of problems that PROFEPA faces, these are not different from those of other prosecutorial offices within the Mexican justice system. There is valuable consulting experience available with regards to prosecutorial regulatory reform in Mexico.
- (5) To address health and environmental concerns:
- a. Support a joint campaign with the Secretariat of Health and SEMARNAT to monitor blood lead levels in communities in proximity to a SLAB recycler; and
 - b. Request SEMARNAT to inform on progress made with the SS and STPS on issuing an occupational blood lead level limit and testing standard; and
 - c. Support domestic NGOs working to strengthen regulation of SLAB recycling and reduce the risk of lead contamination from secondary lead smelters.

11. Conclusion: Environmental Wellbeing is a Collaborative Process between North American countries

This Article 13 process, initiated by the CEC Executive Director, provides an opportunity to focus on specific actions that can be taken by Mexico: to rectify deficiencies in the regulatory system governing SLAB transport and recycling; to promulgate NOMs and related technical standards necessary to implement the requirements of foundational Mexican legislation; and to narrow the gap between environmental standards and regulatory enforcement in Canada, Mexico, and the United States. This submission, made in response to the May 11, 2012 request by the CEC Secretariat, has identified a number of specific areas of technical standards, statutory implementation, and regulatory enforcement that Mexico can effectively strengthen by unilateral action to increase the protection of neighboring communities, smelter workers, and the environment from exposure to toxins.

At the same time, the CEC Secretariat must issue a final Article 13 report that realistically addresses Mexico’s capacity deficiencies and related budgetary, manpower, and technical requirements, and that draws upon comparative strengths in U.S. and Canadian capacity in these areas. The purpose and spirit of the CEC requires that the final Article 13 report identify actions that can be taken by the United States and Canada to assist Mexico’s efforts to build its capacity in this important field of

environmental regulation. Potential actions include providing financial and technical support, information sharing, technical assistance, and professional consultation and training.

In defining the core strategic objectives of the CEC from 2010 through 2015, the three NAAEC Member States have committed themselves to “Greening the Economy in North America,” to promote and protect “Healthy Communities and Ecosystems,” and to working together in a common effort to achieve these shared goals.⁶² All three states “recognize that our wellbeing in North America—both environmental and economic—is grounded in healthy communities and ecosystems”, and that these are only achievable through “integrated and comprehensive approaches and partnerships.”⁶³

Improving regulation of secondary lead smelters in Mexico, bolstering Mexico’s environmental regulatory enforcement capacity, and more effectively monitoring and controlling transboundary movements of hazardous waste, will reduce risks of toxic lead exposure throughout the region, and promote the core strategic goals identified by the CEC for the 2010-2015 period. It is therefore important for the U.S. and Canada to emphasize their role as Mexico’s partner in achieving these fundamental common objectives. A successful result requires an expansion of U.S. and Canadian investment to strengthen and expand Mexico’s ability to successfully carry out domestic regulatory reform and strengthen enforcement. Capacity building assistance can take a variety of forms, from direct bilateral aid to the facilitation of investments by multilateral financial institutions such as the North American Development Bank.

Creative thinking about U.S. and Canadian investments in Mexico should include bilateral and/or regional technology transfer programs, and a range of specific joint environmental protection and public health initiatives. The key is the willingness of the U.S. and Canada to assist and collaborate with Mexico as full CEC partners to secure concrete achievements to reduce toxic exposure of lead from SLAB transport and recycling across the continent, and to build from success in this important test case to more comprehensive CEC green initiatives across a broad range of industrial sectors.

⁶² “Canada, Mexico and the United States intend to focus cooperative work through the CEC on positive steps towards building a North American economy that minimizes the potential negative environmental impacts of economic growth, while enhancing the competitiveness of key industrial sectors in North America.” CEC website, <http://www.cec.org/Page.asp?PageID=1180&SiteNodeID=1011>

⁶³ “[...] the Parties commit to build upon and renew collaborative efforts within the CEC to protect, sustain and restore the health of people, communities and ecosystems using integrated and comprehensive approaches and partnerships.” CEC website, <http://www.cec.org/Page.asp?PageID=751&SiteNodeID=1009>