

Secretariat of the Commission for Environmental Cooperation

Secretariat Determination pursuant to Article 14(1)(2) of the North American Agreement on Environmental Cooperation

Submitter:	Jesús Ríos León
Party:	United Mexican States
Date filed:	22 February 2019
Date of the determination:	May 21 2019
Submission no.:	SEM-19-001 (<i>Radiation Exposure in Los Altares</i>)

I. INTRODUCTION

1. Articles 14 and 15 of the North American Agreement on Environmental Cooperation (“NAAEC” or the “Agreement”) provide for a process allowing any person or non-governmental organization residing in or established in Canada, Mexico or the United States to file a submission asserting that a Party to the NAAEC is failing to effectively enforce its environmental law (this process is referred to as the “SEM” process). As an initial step, the Commission’s Secretariat (“the Secretariat” of the “CEC”)¹ considers such submissions in accordance with the requirements specified in NAAEC Article 14(1). Should the Secretariat deem that a submission satisfies said requirements, it shall then determine whether, under the provisions of NAAEC Article 14(2), the submission merits a response from the concerned Party. In light of said Party’s response—if any—and in accordance with the NAAEC, the Secretariat determines whether the matter warrants the preparation of a factual record. If so, it shall notify the CEC Council and explain the reasons for its recommendation in adherence with Article 15(1); should the Secretariat determine that the preparation of a factual record is not warranted, it shall proceed no further with the submission.²
2. On 22 February 2019, Mr. Jesús Ríos León (the “Submitter”) filed a submission with the Secretariat under the provisions of NAAEC 14(1).³ The Submitter asserts that Mexico is failing to effectively enforce its environmental law in relation to his and his family’s alleged exposure to radiation in their home, located in Los Altares, a subdivision in Hermosillo, Sonora, Mexico.
3. In submission SEM-19-001 (*Radiation Exposure in Los Altares*) the Submitter asserts that the presence of radioactive contaminants and heavy metals has been corroborated in water, soil and housing construction materials in Los Altares, as well as in the members of the Ríos Fimbres family.⁴ According to the Submitter, the

¹ The Commission for Environmental Cooperation was established in 1994 under the North American Agreement on Environmental Cooperation (NAAEC), an instrument signed by Canada, Mexico and the United States (the “Parties”). The constituent bodies of the CEC are its Council, Secretariat and Joint Public Advisory Committee (JPAC).

² For detailed information on the various stages of the SEM process, as well as on the Secretariat’s determinations and factual records, please consult the CEC website regarding submissions on enforcement matters <<http://www.cec.org/sem-submissions/sem>>.

³ SEM-19-001 (*Radiation Exposure in Los Altares*), Article 14(1) Submission (22 February 2019).

⁴ The Submitter asserts that the presence of the following contaminants has been detected on the lot occupied by his house in Los Altares: alkaline metals (Li, K, Cs, Rb); alkaline-earth metals [*sic*] (Be, Mg, Ca, Sr, Ba); heavy metals (Sc, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Y, Zr, Nb, Mo, Ag, Cd,

National Nuclear Safety and Safeguards Commission (*Comisión Nacional de Seguridad Nuclear and Salvaguardas—CNSNS*) detected the presence of radioactive isotopes in October 2009. However, the Submitter was not informed of these results until February 2010. He asserts that in January 2010 he asked the Ministry of Health to intervene, but received no reply whatsoever, and that radioactive elements and isotopes have been detected in himself and five members of his family due to the exposure to said materials in their own home. In the documents attached to the submission, the Submitter raises as possible sources of contamination, the metal rods used in the construction of the house may have been contaminated with cobalt-60 and the probable exposure to pollutants from the “Cytrar” hazardous waste disposal site,⁵ which is located in proximity to his home.

4. The Submitter asserts that Mexico is failing to effectively enforce provisions of: the Political Constitution of the United Mexican States (the “Federal Constitution”); the Federal Penal Code (*Código Penal Federal—CPF*); the General Ecological Balance and Environmental Protection Act (*Ley General del Equilibrio Ecológico y la Protección al Ambiente—LGEEPA*); the General Human Settlements, Land-use Planning and Urban Development Act (*Ley General de Asentamientos Humanos, Ordenamiento Territorial and Desarrollo Urbano*); the General Law for the Prevention and Comprehensive Management of Waste (*Ley General para la Prevención y Gestión Integral de los Residuos—LGPGIR*); the General Health Act (*Ley General de Salud*) and the National Human Rights Commission Act (*Ley de la Comisión Nacional de los Derechos Humanos—LCNDH*); as well as provisions of various instruments governing workers’ housing, the transparency and protection of personal data, radiation safety, hazardous waste disposal, water quality for human consumption, civil protection, public notaries and criminal law. The Submitter cites almost 200 provisions of law. See Table 1 for a list of the laws cited in the submission.
5. Having reviewed the submission in accordance with Article 14 of the Agreement, and basing its determination on the *Guidelines for Submissions on Enforcement Matters under Articles 14 and 15 of the North American Agreement on Environmental Cooperation* (the “Guidelines”), the Secretariat finds that submission SEM-19-001 (*Radiation Exposure in Los Altares*) satisfies all Article 14(1) admissibility requirements and, pursuant to the criteria specified under Article 14(2), merits requesting a response from the Government of Mexico, for the reasons outlined hereafter.

II. ANALYSIS

6. NAAEC Article 14 authorizes the Secretariat to consider submissions from any person or non-governmental organization asserting that a Party to the NAAEC is failing to effectively enforce its environmental law. As the Secretariat has stated in previous Article 14(1) determinations, Article 14 is not intended to be an

Hf, Ta, W, Re, Au, Hg); metals (Al, Ga, In, Sn, Tl, Pb, Bi); metalloids (B, Ge, As, Sb, Te), non-metals (F, P, S, Se, Cl); natural radioactive isotopes (Pb-124, Bi-214, K-40, Pb-212, Tl-208); radioactive elements (U, Th, Bi), and rare earth (La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu).

⁵ The CEC received several submissions with respect to the Cytrar hazardous waste landfill which may be consulted here in the SEM registry at: <<http://cec.org/sem-submissions/registry-of-submissions>>.

“insurmountable screening device” to submitters.⁶ The Secretariat examined the present submission with this perspective in mind.

A. Article 14(1) admissibility requirements

7. Submission SEM-19-001 (*Radiation Exposure in Los Altares*) includes the Submitter’s name and sufficient information to establish contact. The information in the submission indicates that the Submitter is a resident of Mexico. There is no information to suggest that he is part of the government or under its direction.
8. Regarding whether the submission refers to issues that are actually occurring, the Secretariat finds that the submission satisfies this requirement, as the Submitter asserts that both the members of his family and his house show evidence of contamination, and the alleged damage to human health and the environment.

B. Environmental law at issue

9. The Secretariat has maintained on previous occasions that the term “environmental law” defined in NAAEC Article 45(2)(a) should be broadly interpreted, as a restrictive vision of what constitutes a law or regulation whose primary purpose is protection of the environment or human health would be inconsistent with the NAAEC.⁷ Upon examining the provisions and instruments cited in the submission, the Secretariat finds that not all qualify as environmental law, which may be reviewed pursuant to the procedure provided for under Articles 14 and 15 of the Agreement. The Secretariat reasons are provided in the paragraphs below.
10. The Submitter cites a large number of provisions in instruments such as the Federal Constitution, federal laws and state laws, as well as various administrative regulations, as may be seen in Table 1.

⁶ SEM-97-005 (*Biodiversity*), Article 14(1) Determination (26 May 1998); SEM-98-003 (*Great Lakes*), Article 14(1)(2) Determination (8 September 1999).

⁷ SEM-97-005 (*Biodiversity*), Article 14(1) Determination, at 4: “Consistent with Article 14(1), the Secretariat is of the view that the term ‘environmental law’ should be interpreted expansively.”

Table 1. Legal and regulatory instruments cited in the submission

Title	Acronym or abbreviation	Provisions cited
Political Constitution of the United Mexican States	Federal Constitution	Articles 4, 16 and 109
General Laws, federal laws and penal codes		
General Ecological Balance and Environmental Protection Act	LGEEPA	Articles 6, 8, 13, 24, 29, 31, 33, 35, 110, 111, 134, 135, 154, 186, 189 and 193
General Health Act		Articles 1, 6, 13, 17, 32, 33, 36, 37, 51, 77 <i>bis</i> , 96, 112, 116, 117, 118, 119, 125, 129, 182, 184, 189 and 394
General Law for the Prevention and Comprehensive Management of Waste	LGPGIR	Articles 6, 7, 9, 21, 35, 39, 49, 54, 55, 59, 65, 68, 70, 71, 72, 75, 76, 78 and 101
General Law on Human Settlements, Land-use Planning and Urban Development	General Law on Settlements	Articles 9, 10, 11, 45, 53, 58, 59, 64, 66, 67, 68 and 105
Federal Transparency and Access to Public Information Act	LFTAIP	Articles 8, 15, 99, 104, 112 and 186
General Law for the Protection of Personal Data in the Possession of Obligated Entities	Personal data Protection Act	Articles 6, 7, 18, 19, 22, 23, 24, 26, 27, 28, 45, 65, 68 and 69
The National Human Rights Commission Act	CNDH Act	Articles 6, 39, 41, 42, 43, 45, 52, 64, 67, 68, 69, 70, 71, 72 and 73
The National Workers' Housing Fund Institute Act	Infonavit Act	Articles 3, 6, 16, 18 bis 1, 19 bis 1, 41, 51 bis 6 and 52
Federal Penal Code	CPF	Articles 3, 4, 6, 13, 18, 214, 243, 244, 386 and 388
Regulations and general laws		
General Regulation on Radiation Safety		Articles 18, 19, 22, 28, 29, 30, 36, 37, 38, 39, 42, 163, 245 and 247
Regulation to the Irregularities Commission of the National Workers' Housing Institute Fund	RCI-Infonavit	Articles 6 and 10
Regulation to the General Civil Protection Act		Articles 25 and 70
State Laws		
Transparency and Access to Public Information Act, state of Sonora	LTAIP-Sonora	Articles 3, 5, 8, 11, 12, 19, 23, 81, 82, 98, 100, 103, 106, 107, 136, 142, 155, 156 and 168
Notaries Act of Sonora		Article 44
Health Act of the state of Sonora		Articles 4, 8, 16, 18, 23, 28, 29, 77, 78, 86, 87, 90 and 91
Civil Protection Act of the state of Sonora		Articles 6, 7, 9, 11, 14, 48 and 54 <i>bis</i>
Penal Code of the state of Sonora	CPE-Sonora	Articles 4, 11, 15, 180, 189, 201,

Official Mexican Standards

Official Mexican Standard NOM-055-SEMARNAT-2003, Which establishes the mandatory requirements for sites intended for the controlled disposal of previously stabilized hazardous waste.

Official Mexican Standard NOM-147-SEMARNAT/SSA1-2004, Which establishes criteria for determining post-remediation concentrations for soil contaminated by arsenic, barium, beryllium, cadmium, hexavalent chromium, mercury, nickel, silver, lead, selenium, thallium and vanadium.

Official Mexican Standard NOM-127-SSA1-1994 Environmental health, water for human use and consumption - Permissible water quality limits and mandatory drinking water treatment processes.

11. In the following paragraphs, the Secretariat presents its analysis of the provisions cited by the Submitter, in accordance with NAAEC Articles 14(1) and 45(2)(a).⁸

i) Political Constitution of the United Mexican States

12. The Submitter cites Articles 4, 16 and 109 of the Political Constitution of the United Mexican States. **Article 4** of the Constitution enshrines, amongst many other rights, the right of every person to a healthy environment for his or her development and wellbeing. Mexico's Supreme Court has confirmed that "arising from the content of this human right is the obligation of all governmental authorities to guarantee the existence of a healthy and propitious environment for human development and wellbeing."⁹ In this regard, the Secretariat has previously determined that, if cited in a submission, the provision of the Constitution recognizing the right to a healthy environment may be taken into consideration in its analysis.¹⁰ Moreover, the Secretariat has concluded that paragraph five of Article 4¹¹ may be taken into consideration provided that this complements the analysis of the environmental law at issue.¹²
13. Article 16 of the Federal Constitution guarantees due process of law and establishes, inter alia, the obligation of the authorities to proceed on the basis of sound legal grounds and just cause when making arrests and bringing legal proceedings, as well as when detaining a person. The primary purpose of this provision is not environmental protection or the protection of human health. Consequently, it is not considered environmental law.

⁸ For the sake of clarity, the **numbering** of the provisions which do qualify for further analysis appear in bold face.

⁹ "DERECHO A UN MEDIO AMBIENTE SANO: SU CONTENIDO", 1st thesis. CCXLVIII/2017 (10a.), *Gaceta del Semanario Judicial de la Federación*, 10th session, Book 49, Vol. I, December 2017, at 411 <<https://goo.gl/5BxXpH>> (viewed 13 March 2019).

¹⁰ SEM-15-002 (*Management of Analog TV Waste*), Article 14(1) Determination (22 September 2015), § 14.

¹¹ Federal Constitution, Article 4, paragraph five:

Every person has the right to a healthy environment for his or her own development and wellbeing. The State will guarantee respect for this right. Environmental damage and deterioration will result in liability for whoever causes such damage and deterioration in accordance with the provisions of the law.

¹² SEM-06-006 (*Los Remedios National Park*), Article 14(1) Determination (19 January 2007), at 4-5; SEM-15-002 (*Management of Analog TV Waste*), Article 14(1) Determination (22 September 2015), § 14.

14. Regarding Article 109 of the Constitution, which establishes an accountability framework for public servants and citizens in relation to the State, the Secretariat finds that its primary purpose per se is not environmental protection or the prevention of risk to human health. Consequently, it is not considered environmental law.

ii) General Ecological Balance and Environmental Protection Act

15. The Submitter cites a number of LGEEPA provisions: Article 6, which identifies Semarnat as the organ authorized to exercise the powers granted under this law; Article 8, which describes the jurisdiction and powers of the municipal governments in relation to the environment; Article 13 on the power of state and municipal governments to enter into intergovernmental administrative coordination agreements in response to environmental problems; Articles 29, 31, 33 and 35, which concern environmental impact assessment; Article 110, which describes the pertinent criteria for protection of the atmosphere; Article 111 on Semarnat's powers to control, reduce or avert air pollution; Articles 134 and 135 on soil contamination prevention and control; **Article 154**, which establishes the jurisdiction of Semarnat and the CNSNS, with the participation of the Ministry of Health, over the enforcement of provisions on nuclear and radiation safety, and on the physical security of nuclear installations and radioactive materials; Article 189 on the procedure for filing a public complaint with the Office of the Federal Attorney for Environmental Protection (*Procuraduría Federal de Protección al Ambiente—Profepa*); and Article 193, which concerns the collaboration that a complainant may offer Profepa by contributing pertinent information. In addition, the Submitter cites abrogated LGEEPA Articles 24 and 186.
16. Although a number of the LGEEPA provisions cited do qualify as environmental law, the Secretariat finds that only **Article 154** is the applicable to the submission's assertions, inasmuch as it confers on the CNSNS and other entities, jurisdiction over the issue radiation raised by the Submitter.

iii) General Health Act

17. The provisions of the General Health Act cited in the submission establish: the purpose of the act and the right to health protection in the terms of Article 4 of the Constitution (Article 1); the objectives of the national health care system (Article 6); the respective jurisdictions of the federal government and the state governments in the area of general health (Article 13); the area of responsibility of the General Health Council (*Consejo de Salubridad General*) (Article 17); the definition of health care and health care activities (Articles 32 and 33); the cost recovery fees for the provision of health care services and for services provided to beneficiaries of public social security institutions (Articles 36 and 37); the right of health care users to timely provision of health care (Article 51); the areas for health research (Article 96); the purpose of health education (Article 112); the power vested in the health authorities to establish standards, adopt measures and carry out activities aimed at protecting human health in relation to risks and damages arising from environmental conditions (**Article 116**); the obligation to formulate and implement environmental sanitation policy—which is the responsibility of Semarnat—in coordination with the Ministry of Health (Article 117); the Ministry of Health's jurisdiction in relation to environmental impacts on health (**Article 118**), in particular paragraph VII, which concerns activities which cause or may cause risks or damages to human health; the respective jurisdictions of the Ministry of Health and the state governments (Article 119), specifically in relation to monitoring the radiation safety of medical use

sources of radiation— (paragraph III); health authorization for medical use sources of radiation (Article 125); the Ministry of Health’s jurisdiction in the area of occupational health (Article 129); the special prevention and control measures to be adopted in the event of emergencies caused by a sudden deterioration of the environment, which places the population in imminent danger (**Article 182**); the obligation of the Ministry of Health to form special brigades, which are to be permanently trained and updated, for carrying out emergency actions in the area of general health (Article 184); and the role of other public agencies, as distinct from the Ministry of Health and the state governments, in terms of assisting in the monitoring of compliance with health standards (Article 394). The Submitter also cited a nonexistent article (Article 77 *bis*) and an abrogated provision (Article 189).

18. Although it is the Secretariat’s view that several of the General Health Act provisions cited do qualify as environmental law, the Secretariat finds that only **Articles 116, 118 and 182**, are applicable to the alleged exposure to radiation and contamination of the Submitter and his family.

iv) General Law for the Prevention and Comprehensive Management of Waste (LGPGIR)

19. The Submitter cites provisions of the LGPGIR, which establish: that the federal, state and municipal governments shall exercise their responsibilities in accordance with the allocation of their respective jurisdictions and powers (Articles 6, 7 and 9); the factors contributing to why hazardous wastes constitute a risk (Article 21); the authority vested in the federal, state and municipal governments to promote civic participation from all sectors of society (Article 35); the elaboration of inventories of hazardous waste generation sources (Article 39); the authority vested in Semarnat to establish provisions for hazardous waste management and disposal (Article 49); provisions for the comprehensive management of hazardous waste, which includes avoiding mixing the latter with uncontaminated materials (Article 54); procedures for managing hazardous waste packaging materials (Article 55); obligations of parties in charge of hazardous waste treatment processes (Article 59); requirements governing hazardous waste disposal (**Article 65**); the liability arising from contaminating a site, as well as from the resulting damages to health (**Article 68**); the joint and several liability of private property owners in relation to carrying out the actions necessary to remediate contaminated sites (**Article 70**); the restrictions applicable to ownership transfer of contaminated sites (**Article 71**); the imposition of emergency measures in the event a site is contaminated with hazardous materials or waste (**Article 72**); the responsibility of the authorities to identify, inventory, register and categorize contaminated sites (**Article 75**); the recording of contaminated sites in the Official Property Registry (*Registro Público de la Propiedad*) (**Article 76**); the publication of Official Mexican Standards on the characterization of contaminated sites (Article 78); and the carrying out of monitoring and inspection visits to enforce compliance with the LGPGIR’s provisions (Article 101).
20. The Secretariat notes that pursuant to Article 4, the enforcement of the LGPGIR does not apply to radioactive waste, as the latter is subject to separate and specific ordinances. Consequently, the Secretariat will not analyze the LGPGIR provisions cited by the Submitter which bear on the assertions of alleged exposure to radiation. However, —only with respect to the assertion regarding the Cytrar final disposal site—LGPGIR **Articles 65, 68, 70, 71, 72, 75 and 76** do qualify as these provisions concern environmental protection through hazardous waste control and bear on the assertion regarding the alleged contamination to which the Submitter and his family were exposed as a result of mismanagement at the Cytrar waste disposal site, which

is located in proximity to the Submitter's home.¹³ In this regard, a study published by Semarnat (and enclosed with the submission) indicates that "there was an utter and complete failure in terms of policy and the enforcement of standards to ensure proper operating procedures" at the Cytrar disposal site.¹⁴

v) **The General Law on Human Settlements, Land-use Planning and Urban Development**

21. The provisions of the General Law on Human Settlements, Land-use Planning and Urban Development cited by the Submitter refer to: the power vested in the Ministry of Agricultural, Territorial and Urban Development (*Secretaría de Desarrollo Agrario, Territorial and Urbano*—Sedatu) to issue Official Mexican Standards (NOMs) to establish guidelines, criteria, technical specifications and procedures regarding land-use planning (Article 9); the jurisdiction of state and municipal governments in relation to human settlements, urban development and land-use planning (Articles 10 and 11); the obligation of urban development plans and programs to take into consideration environmental ordinances and the general criteria of environmental regulation (Article 45); the legal provisions which may be included in state legislation on regulating population centers (Article 53); the inclusion of public information and transparency processes in local legislation (Article 58); the formulation, approval and administration of zoning in population centers by municipal governments (Article 59); the inclusion of comprehensive risk management strategies in local legislation (Article 64); the completion of risk prevention studies in the high risk zones identified in urban development plans and programs (**Article 66**) and in relation to certain infrastructure projects, such as installations for the treatment, confinement, elimination or disposal of hazardous waste (**Article 67 paragraph III**); the obligation of the federal, state and municipal authorities to ensure compliance with provisions pertaining to human settlements prior to issuing permits and authorizations (Article 68); and the right of any person to file a citizen complaint on land-use planning issues (Article 105).
 22. Although several of the provisions of the General Law on Settlements cited by the Submitter may qualify as environmental law, they are unrelated to the submission's core assertions. The Secretariat restricts its analysis to **Articles 66 and 67 paragraph III**, as these provisions bear on the concern raised by the Submitter in the sense that his home is allegedly contaminated by radiation and that this has provoked severe health problems for him and his family.
- vi) **Federal Transparency and Access to Public Information Act (LFTAIP), General Law for the Protection of Personal Data in the Possession of Obligated Entities ("Personal Data Protection Act") and the Transparency and Access to Public Information of the state of Sonora (LTAIP-Sonora)**
23. The Submitter cites various provisions of the federal law on access to information (LFTAIP), which: prohibit classifying as "reserved information" information concerning serious human rights violations or crimes against humanity (Article 8);

¹³ Submission, at 1: "[...] the organic contamination that may exist in our house which leaked out of Cytrar", and at 2: "[...] because we live very close to Cytrar".

¹⁴ Semarnat, *Informe histórico-técnico de la gestión del caso exitoso de la remediación en el sitio del exconfinamiento de residuos peligrosos del Cytrar en Hermosillo, Sonora*, Ministry of the Environment and Natural Resources, Mexico, 2011, at 104.

guarantee access to reliable, verifiable, accurate and timely information (Article 15); establish the declassifying of documents in certain circumstances (Article 99); specify the information which must be included in documents that are partially or totally classified (Article 104); specify the cases where it is inadmissible to invoke official secrecy (Article 112); and stipulate the penalties for violations of the LFTAIP (Article 186).

24. The Submitter also cites provisions of the Personal Data Protection Act in relation to: privacy guarantees for individuals and the right to the protection of personal data (Article 6); the prohibition of personal data processing¹⁵ activities (Article 7); justified collection and processing of personal data (Articles 18 and 19); exceptional cases where consent is not required to process personal data (Article 22); the adoption of measures to ensure truthfulness on the part of the parties responsible for managing personal data (Article 23); the procedures for the conserving, blocking and suspension of personal data (Article 24); the characteristics of personal data privacy notices and the information to be provided therein (Articles 26, 27 and 28); personal data correction requests (Article 45); and the transfer of personal data, including the requirements to which this operation is subject (Articles 65, 68 and 69).
25. Regarding the state of Sonora's Transparency and Access to Public Information Act (LTAIP-Sonora), the Submitter cites provisions concerning: definitions of terms employed in the Act (Article 3); classification of information on serious human rights violations (Article 5); the principles guiding the law's enforcement (Article 8); the requirement that obligated entities disclose the information in their possession (Article 11); guarantees regarding the accessibility, reliability, verifiability, accuracy and timeliness of information generated, published or provided (Article 12); reasons obligated entities may legally invoke to refuse to provide information or to declare it nonexistent (Article 19); the statutory obligations—including transparency requirements—incumbent on obligated entities (Articles 23, 81 and 82); exceptions in relation to the classification of information (Article 98); the formal requirements which must be satisfied before information may be classified (Articles 100 and 103); the grounds for disclosing reserved information (Article 106); the classifying of information as confidential (Article 107); administrative rulings confirming the non-existence of information requested (Article 136); guidelines for rulings on petitions for review (Article 142); the power vested in the National Institute for Transparency, Access to Information and the Protection of Personal Data to assert its jurisdiction to become seized of pending petitions for review (Article 155); legal challenges (Article 156); and the sanctions for non-compliance with the obligations provided for under this law (Article 168).
26. The Secretariat considers that the cited provisions of the LFTAIP, the Protection of Personal Data Act and the LTAIP-Sonora cited by the Submitter do not have as their principal purpose environmental protection or the prevention of a risk to human health and are not considered environmental law..

vii) The National Human Rights Commission Act

27. The Submitter cites provisions of the CNDH Act concerning: the powers vested in the Commission (Article 6); the powers conferred on CNDH chief investigators (Article 39); evidence assessment (Article 41); substantiation of conclusions (Article

¹⁵ The concept of the "processing" of personal data is defined in Article 3 paragraph XXXIII of the General Law for the Protection of Personal Data in the Possession of Obligated Entities.

42); the issuing of procedural rulings by CNDH officials (Article 43); the issuing of a non-liability finding in cases where no human rights violations are proven (Article 45); the CNDH annual report (Article 52); complainants or plaintiffs with legal standing in terms of filing legal challenges (Article 64); the obligation of public servants to collaborate with the CNDH (Articles 67, 68 and 69); and the liability of the authorities and public servants during the processing of complaints filed with the CNDH (Articles 70, 71, 72 and 73).

28. The Secretariat notes that part of the Submitter's complaint concerns the role played by the CNDH and that, in sum, it concerns matters that go beyond the mandate conferred on the CEC Secretariat under NAAEC Articles 14 and 15. Moreover, the CNDH Act provisions cited do not qualify as environmental law, as defined in NAAEC Article 45(2)(a). As a result, they will not be considered for further analysis.

viii) The National Workers' Housing Fund Institute Act and Regulation to the Infonavit Irregularities Commission (RCI-Infonavit)

29. The Submitter cites provisions of the Infonavit Act which establish: the Institute's mission (Article 3) and constituent bodies (Article 6), as well as the functions of its board of directors (Article 16); the powers vested in the audit committee (Article 18 *bis* 1); the functions of the external auditor (Article 19 *bis* 1); the worker's right to choose his/her housing (Article 41); the liability of contractors in Infonavit funded construction projects (Article 51 *bis* 6); and cases of non-conformance on the part of companies, workers or beneficiaries (Article 52).
30. The RCI-Infonavit provisions cited in the submission establish the grounds for filing a non-conformance complaint (Article 6) and specify the required supporting information and documentation (Article 10).
31. The Secretariat finds that none of the provisions cited qualify as environmental law in the terms of NAAEC Article 45(2)(a). As a consequence, there is no need for further analysis.

ix) Federal Penal Code

32. The Submitter cites provisions of the Federal Penal Code in relation to: ongoing offenses committed abroad, which are continued in Mexico (Article 3); offenses committed abroad against Mexicans (Article 4); offenses under special laws or international treaties (Article 6); perpetrators and participants in the commission of an offense (Article 13); concurrent offenses (Article 18); unlawful exercise of the functions of a public servant (Article 214); document falsification, including examples thereof (Articles 243 and 244); and fraud (Articles 386 and 388).
33. The Secretariat deems the CPF provisions cited to be of a procedural nature, which, although they might be pertinent in cases of crimes against the environment, will not be considered for further analysis. In effect, the Submitter neither mentions them in connection with substantive provisions bearing on environmental matters nor does he present documented assertions in this regard. In certain circumstances, procedural provisions may be considered for analysis provided a submission cites them in connection with substantive provisions, which is not the case in submission SEM-19-001 (*Radiation Exposure in Los Altares*). Consequently, the CPF provisions cited will not be considered in the Secretariat's analysis.

x) General Regulation on Radiation Safety

34. Regarding the General Regulation on Radiation Safety, the Submitter cites provisions in relation to: equivalent dose limits (Article 18); the cases where such

limits do not apply (**Article 19**); a guideline on measuring radiation doses received by any type of organ or tissue (**Article 22**); permissible radiation limits for women who are occupationally exposed (Articles 28 and 29); limits applicable to students who, due to their studies, are exposed to sources of ionizing radiation (Article 30); limits applicable to persons working in restricted areas who are non-occupationally exposed or who occasionally enter a restricted area (Article 36); the equivalent dose limits for members of the public and who they apply to in particular (**Article 37**); the adoption of measures to reduce the effective equivalent dose when a member of the public is exposed during prolonged periods (**Article 38**); guidelines on equivalent dose calculation for members of the public (**Article 39**); measures to be adopted in cases where members of the public receive doses in excess of equivalent dose limits (**Article 42**); the administration of radioactive materials for therapeutic purposes (Article 163); the factual nature of the monitoring, inspection and auditing activities conducted by inspectors (**Article 245**); and the requirement that the Commission's expert opinion be forwarded to interested parties within 20 working days (**Article 247**).

35. The Secretariat finds that some of the provisions of the General Regulation to Radiation Safety qualify as environmental law, as their primary purpose is to protect human health by controlling pollutant emissions into the environment, in accordance with NAAEC Article 45(2)(a) subparagraph i). In this regard, it shall be excluded from further analysis the provisions bearing on the exposure limits applicable to persons exposed in the workplace or as a result of their professional functions (Articles 28, 29, 30 and 36), as well as the provisions concerned with the handling of radioactive materials for medical purposes (Article 163).
36. The Secretariat determines that Articles **19, 22, 37, 38, 39, 42, 245 and 247** qualify as environmental law and has decided to analyze them in relation to: the alleged exposure to radiation to which the Submitter and his family are subject in their home; the actions undertaken by the CNSNS; and the steps and actions carried out by the inspectors of said agency.

xi) Regulation to the General Civil Protection Act

37. The Submitter cites provisions on certification of the qualifications of officials affiliated with the National Civil Protection System (Article 25), as well as the establishment of special civil protection programs, in particular in the event of incidents where radioactive materials are released into the environment (**Article 70 paragraph X**).
38. Regarding the provisions cited in the Regulation to the General Civil Protection Act, the Secretariat will only consider **Article 70 paragraph X**. In effect, in accordance with the definition of environmental law set forth in NAAEC Article 45(2)(a) subparagraph iii, its main purpose is the protection of the environment and human health in relation to releases of pollutants into the environment.

xii) The Notaries Act of the state of Sonora

39. The Submitter cites Article 44 of the Notaries Act of the state of Sonora, which establishes that notaries shall write the deeds forming a notarial protocol in the Spanish language (Article 44). The provision cited is not environmental law and does not qualify for analysis pursuant to NAAEC Article 14.

xiii) Health Act of the state of Sonora

40. The Submitter cites various provisions of the Health Act of the state of Sonora, alluding to: the activities and services to be delivered at the local level (Article 4); the objectives of the state health system (Article 8); the respective jurisdictions of the Ministry of Public Health (Article 16) and the municipalities (Article 18) in relation to local health; the health care services defined as basic, including —inter alia— improving environmental sanitation (Article 23); the activities encompassed under the rubric of health care (Articles 28 and 29); health research (Articles 77 and 78) and health promotion (Article 86); the objectives pursued by health education (Article 87); the obligation of the Ministry of Public Health to take the necessary health measures and implement activities aimed at protecting human health in relation to risks and damages arising from the environment (**Article 90**); and the Ministry of Public Health’s jurisdiction regarding the monitoring and control of risks and damages to health arising from environmental pollution, water quality for human consumption and radiation safety (**Article 91 paragraphs I, II and III**).
41. The Secretariat finds that some of the provisions cited in relation to the Health Act of the state of Sonora do qualify as environmental law, namely: **Articles 90 and 91 paragraphs I, II and III** because they relate to issues related in the submission: improving sanitary conditions in the environment; activities aimed at protecting human health in relation to risks and damages of an environmental character; and the jurisdiction of the state of Sonora’s Ministry of Public Health in the areas of risks and damages to health caused by environmental pollution, water quality for human consumption and radiation safety.

xiv) Civil Protection Act of the state of Sonora

42. The Submitter cites provisions which establish: the powers of the state executive branch in the area of health (Article 6); the powers of the Secretary of the Interior (Article 7); the responsibilities of the agencies and entities under municipal public administration (Article 9); a definition of the state Civil Protection System (Article 11); the responsibility to carry out civil protection projects, studies and investments (Article 14); and the provision of fire-fighting services (Article 48). The submission cites Article 54 *bis*, which, however, does not appear in the Civil Protection Act currently in force.
43. None of the provisions cited in relation to the state of Sonora’s Civil Protection Act qualify as environmental law as their main purpose is not environmental protection or the prevention of risks to human health.

xv) Penal Code of the state of Sonora

44. The Submitter cites various provisions of the state of Sonora’s Penal Code which allude to: the law’s supplementary character (Article 4); forms of participation in the commission of an offense (Article 11); concurrent offenses (Article 15); the crime of abuse of authority or breach of a statutory obligation by a public servant (Article 180); the crime of intimidation by public servants (Article 189); document falsification and the sanctions thereto (Articles 201, 203 and 204); making false legal statements and reports to a public notary (Article 205); forced entry and assault (Article 240); slander (Article 284); and fraud (Article 319).
45. The provisions of the Penal Code of the state of Sonora cited in the submission do not qualify as environmental law as they do not have as their principal purpose environmental protection or the prevention of risks to human health.

xvi) Penal Code of the state of Aguascalientes

46. The Submitter cites Article 48 of the Penal Code of the state of Aguascalientes, which concerns prison sentences and the alternatives thereto. The Secretariat finds that said provision does not qualify as environmental law. It will not be considered in its analysis.

xvii) Official Mexican Standards NOM-055-Semarnat-2003 and NOM-147-SEMARNAT/SSA1-2004

47. The Submitter cites **NOM-055**, which establishes the mandatory requirements for sites intended for the controlled disposal of previously stabilized hazardous waste, and asserts that his home was contaminated due to its proximity to the Cytrar hazardous waste final disposal site. In this regard, the Submitter enclosed a study published by Semarnat that contains the following statement concerning the Cytrar disposal site: “there was an utter and complete failure in terms of policy and the enforcement of standards to ensure proper operating procedures.”¹⁶

48. The primary purpose of **NOM-055** is to ensure environmental protection through its provisions on the proper final disposal of hazardous waste. As such, it qualifies as environmental law, in accordance with NAAEC Article 45(2)(a), and shall therefore be considered in the Secretariat’s analysis.

49. NOM-147 establishes the criteria for determining the post-remediation concentrations of soils contaminated by arsenic, barium, beryllium, cadmium, hexavalent chromium, mercury, nickel, silver, lead, selenium, thallium and vanadium. The Submitter asserts that although the authorities in Mexico did enforce this standard, it is, in fact, deficient.¹⁷

50. NOM-127 establishes the permissible water quality limits for human use and consumption and identifies the mandatory drinking water treatment processes for water supply systems, whether public or private. The Submitter asserts that this standard is without a scientific basis and that it lacks provisions establishing the maximum permissible limits in urine and blood for the majority of metals.¹⁸

51. The Secretariat has found in the past that an assertion regarding the inadequacy of a standard is not a matter that may be addressed under the submissions on enforcement matters process.¹⁹ Consequently, although the standards cited, NOM-147 and NOM-127 qualify as environmental law, they will not be considered for further analysis as the Submitter’s assertion concerns the adequacy of the standard rather than its effective enforcement.

¹⁶ Semarnat, *Informe histórico-técnico de la gestión del caso exitoso de la remediación en el sitio del exconfinamiento de residuos peligrosos del Cytrar en Hermosillo, Sonora*, Ministry of the Environment and Natural Resources, Mexico, 2011, at 104.

¹⁷ Submission, at 4: “[...] which is lacking in the scientific underpinnings required to provide a solution to a problem of this nature.”

¹⁸ Submission, at 4: “[...] that concerns metal contamination in water [*sic*] which is also without a basis in science.”

¹⁹ SEM-04-005 (*Coal-fired Power Plants*), Article 14 Determination (16 December 2004).

C. The six Article 14(1) requirements

52. The Secretariat finds that submission SEM-19-001 (*Radiation Exposure in Los Altares*) satisfies the six admissibility requirements detailed in NAAEC Article 14(1). Its reasoning is detailed hereafter.
- a. is in writing in a language designated by [the Parties]*
53. The submission is written in Spanish, one of the languages designated by the Parties for submissions, in accordance with paragraph 3.2 of the Guidelines.²⁰ The Secretariat therefore finds it in compliance with the requirement stipulated in Article 14(1)(a).
- b. clearly identifies the person or organization making the submission*
54. The submission specifies the name, address and other contact information required to identify and communicate with the Submitter, thereby meeting the requirement stipulated in Article 14(1)(b).²¹
- c. provides sufficient information to allow the Secretariat to review the submission, including any documentary evidence on which the submission may be based*
55. The submission presents documentation which serves to support the Submitter's assertions. In effect, the Submitter encloses documents which he presented to various authorities, including, inter alia: the Ríos Fimbres family's medical record from University Physicians Healthcare at the University of Arizona;²² a medical opinion given by Dr. John B. Sullivan on the results of the examinations performed on the family Ríos Fimbres;²³ lab tests;²⁴ the results obtained from the dosimeters installed outside of the Submitter's home,²⁵ and the results of the clinical studies performed on the Submitter's family members.²⁶ The Submitter argues that the data gathered through sampling and the values obtained on radiation contamination of his home, located in Los Altares, Hermosillo, allegedly do not correspond to the symptoms and illnesses that he and his family have experienced associated with radiation exposure.

²⁰ Guidelines, paragraph 3.2: "Submissions may be made in English, French or Spanish, which are the languages currently designated by the Parties for submissions."

²¹ Submission, at 14.

²² University Physicians Healthcare, medical record prepared by Dr. John Sullivan (2 February 2011).

²³ Health Effects Group, Inc., results of the medical examination performed for members of the Ríos Fimbres family (17 August 2011).

²⁴ University Physicians Healthcare, lab test performed on patient Jesús Ríos León (2 April 2011), as well as various lab test order forms and test results from the Faculty of Medicine of the University of Arizona, in relation to members of the Ríos Fimbres family.

²⁵ National Nuclear Safety and Safeguards Commission, file no. AOO.224.830.2010 of the Electronics and Dosimetry Subdirectorate (7 October 2010); National Nuclear Safety and Safeguards Commission, results of gamma spectrometry analysis of the samples taken in a house in Hermosillo, Sonora (29 October 2009).

²⁶ Diagnóstico por imágenes Hermosillo (Hermosillo Diagnostic Imaging Services), magnetic resonance imaging of the cervical spine performed on patient Dulce María Fimbres Barceló (23 August 2018); Hermosillo Diagnostic Imaging Services, examination of the neck and thorax of patient Dulce María Fimbres (18 October 2018); Pathology Laboratory of the State General Hospital, histopathological study of the lymph node of patient Dulce María Fimbres Barceló (8 August 2018); Hermosillo Diagnostic Imaging Services, ultrasound examination of the neck performed on patient Dulce María Ríos Fimbres (6 November 2018).

56. The Submitter encloses a report entitled *Informe histórico-técnico de la gestión del caso exitoso de la remediación en el sitio del exconfinamiento de residuos peligrosos del Cytrar, en Hermosillo, Sonora* (“Narrative and technical report of the management of the successful remediation of the former Cytrar hazardous waste disposal site in Hermosillo, Sonora”) in which the following statement was made: “there was an utter and complete failure in terms of policy and the enforcement of standards to ensure proper operating procedures.”²⁷ The Submitter asserts that the deficient management of waste at Cytrar was probably at the origin of the alleged contamination of materials in his house and, thereby, the health problems detected in himself and his family.
57. The Secretariat determines that the submission contains sufficient information and documentary evidence which does underpin the Submitter’s assertions. Consequently, the submission satisfies the requirement stipulated in NAAEC Article 14(1)(c).
- d. appears to be aimed at promoting enforcement rather than at harassing industry*
58. The submission satisfies Article 14(1)(d) as its apparent aim is to promote enforcement rather than harass industry. In making this determination, the Secretariat was guided by paragraph 5.4 of the Guidelines. In effect, the submission clearly focuses on the alleged exposure to radiation, which the Submitter and his family have suffered.
- e. indicates that the matter has been communicated in writing to the relevant authorities of the Party and indicates the Party's response, if any*
59. The submission includes information which demonstrates that the matter was communicated to the relevant authorities in Mexico. In this regard, the Submitter enclosed copies of the letters sent to the Minister of Public Health of the state of Sonora,²⁸ the National Human Rights Commission²⁹ and the director of the National Nuclear Safety and Safeguards Commission.³⁰ In all of these communications, the Submitter mentioned that the metal rods used in the construction of the Ríos Fimbres family’s home were contaminated with cobalt-60. The submission also encloses documentation on the referral of CNSNS files to the Profepa delegation in Sonora,³¹ as well as an information request sent to Semarnat³² and the latter’s response.³³
60. Based on the information presented, the Secretariat determines that the matter raised in the submission was communicated in writing to several different authorities, which were made aware of the matter. The submission therefore satisfies the requirement stipulated in NAAEC Article 14(1)(e).

²⁷ Semarnat, *Informe histórico-técnico de la gestión del caso exitoso de remediación en el sitio del exconfinamiento de residuos peligrosos Cytrar, en Hermosillo, Sonora*, Ministry of the Environment and Natural Resources, Mexico, 2011, at 104.

²⁸ Submitter, letter to the Minister of Health (28 June 2018).

²⁹ Submitter, letter to the National Human Rights Commission (27 March 2013).

³⁰ Submitter, letter to the National Nuclear Safety and Safeguards Commission (19 September 2018).

³¹ CNSNS, file no. A00.201/2950/2015 (5 October 2015).

³² Semarnat, file no. PFPA-32.7-2C.28.1-0018-19 (25 January 2019).

³³ Semarnat, no file number (6 March 2019).

D. NAAEC Article 14(2) requirements

a) the submission alleges harm to the person or organization making the submission

61. The Submitter asserts that, notwithstanding the studies completed, it has not been possible to adequately diagnose the alleged radiation contamination in his home. In addition, he asserts that the 2009 findings of the CNSNS were subsequently ignored.³⁴ He likewise argues that the alleged radiation from the materials used in the construction of his house have caused a variety of diagnosed health problems in his family and himself.³⁵

62. The Secretariat finds that the submission concerns damage to the Submitter's health and that of his family. The submission therefore satisfies the criteria in Article 14(2)(a).

b) the submission, alone or in combination with other submissions, raises matters whose further study in this process would advance the goals of this Agreement

63. The submission addresses the effective enforcement of provisions concerning radiation safety, the evaluation of damages to health, the prevention and control of water pollution, protection of aquatic ecosystems, hazardous waste management and the establishment of safety measures and sanctions.³⁶

64. The Secretariat finds that further study of this submission would advance the goals of the NAAEC and determines that it satisfies the criteria in Article 14(2)(b).

c) private remedies available under the Party's law have been pursued

65. The Submitter affirms that he filed various complaints and turned to the competent federal and state bodies to express his concerns without, however, ever receiving a satisfactory response. Amongst the remedies pursued were the lodging of complaints with both the National Human Rights Commission³⁷ and Profepa regarding the illnesses caused by the alleged contamination of the Ríos Fimbres family's home.

³⁴ Submission, at 2: "[...] Pb-201 [and] TI-208 were found in the soil at our house by the CNSNS [in] 2009."

³⁵ Submission, at 1: "[...] inasmuch as this radioactive and metals contamination, found and detected in the soil, as well as in water and construction materials, has led to serious impacts on the 5 members of the Ríos Fimbres family and many neighbors in the los Altares neighborhood [...]"

³⁶ "The objectives of this Agreement are to:

- a) foster the protection and improvement of the environment in the territories of the Parties for the well-being of present and future generations;
- b) promote sustainable development based on cooperation and mutually supportive environmental and economic policies;
- c) increase cooperation between the Parties to better conserve, protect, and enhance the environment, including wild flora and fauna;

[...]

- f) strengthen cooperation on the development and improvement of environmental laws, regulations, procedures, policies and practices;
- g) enhance compliance with, and enforcement of, environmental laws and regulations;
- h) promote transparency and public participation in the development of environmental laws, regulations and policies;
- i) promote economically efficient and effective environmental measures [...]"

³⁷ Submitter, complaint filed with the National Human Rights Commission (3 October 2012).

The Submitter also wrote various communications requesting Profepa's support.³⁸ In addition, the Submitter filed a non-conformance complaint with Infonavit in relation to the alleged contamination of his home. This complaint was flatly dismissed.³⁹

66. Although the actions undertaken by the Submitter have not had their desired effect, the latter did request the intervention of various federal and state agencies to address his grievance concerning exposure to radiation. Mindful of subparagraph a) of paragraph 7.5 of the Guidelines, the Secretariat finds that in this case there may exist obstacles to recourse to judicial remedies, which could enable the Submitter to obtain compensation for damages. The Secretariat therefore concludes that reasonable actions were taken to pursue the available remedies in Mexico, in accordance with the criteria of Article 14(2)(c).

d) the submission is drawn exclusively from mass media reports

67. The Secretariat finds that the submission is not based exclusively on mass media reports. On the contrary, it is based on facts presented by the Submitter, as is evident upon consulting the information presented in the submission's attached documents.

III. DETERMINATION

68. For the reasons detailed herein, the Secretariat finds that submission SEM-19-001 (*Radiation Exposure in Los Altares*) satisfies the admissibility requirements set forth in NAAEC Article 14(1) and that, in accordance with Article 14(2), it merits a response from the Government of Mexico in relation to certain of the Submitter's assertions.

69. In its response, the Party may provide information on effective enforcement of the following provisions:

Regarding the actions conducted by the National Nuclear Safety and Safeguards Commission

- LGEEPA Article **154** with respect to the actions under CNSNS jurisdiction, in terms of the Submitter's assertions.
- Articles **19, 22, 37, 38, 39, 42, 245 and 247** of the General Regulation on Radiation Safety in relation to the Submitter's and his family's alleged exposure to radiation in their home, the actions undertaken by the CNSNS and the activities carried out by its inspectors.

Regarding effective enforcement of provisions on general health and civil protection

- Articles **116, 118 and 182** of the General Health Act in relation to actions aimed at protecting human health, in particular from environmental impacts on the latter and emergencies caused by a sudden deterioration of the environment which endangers the population.
- Articles **90 and 91 paragraphs I, II and III** of the state of Sonora's Health Act regarding the protection of human health from risks and damages arising from the

³⁸ Profepa, file no. PFPA-32.7-2C.28.4.1-0293-15 (29 June 2015).

³⁹ Infonavit, Irregularities Commission (*Comisión de Inconformidades*), administrative ruling on file no. R.I.SON.80/2017 (20 March 2018).

environment and, specifically, the actions within its jurisdiction taken by the state of Sonora's Ministry of Public Health, in relation to the alleged health risk arising from radiation in the Submitter's house.

- Article **70 paragraph X** of the General Regulation to the Civil Protection Act in relation to the actions to be taken in the event of a release of radioactive materials into the environment.

Regarding human settlements

- Articles **66 and 67 paragraph III** of the General Law on Human Settlements, Land-use Planning and Urban Development in relation to the risk represented by the alleged radiation in the Los Altares subdivision in Hermosillo, Sonora, and the studies completed on the alleged risks arising from the disposal of hazardous waste at the Cytrar site, in Hermosillo.

Regarding waste management at the "Cytrar" site

- LGPGIR Articles **65, 68, 70, 71, 72, 75 and 76** in relation to the assertion that the alleged contamination, to which the Submitter and his family were exposed, were caused by mismanagement at the Cytrar waste disposal site, located near the Submitter's home.⁴⁰
- Official Mexican Standard **NOM-055-Semarnat-2003** in relation to the final disposal of hazardous waste and the alleged presence of radioactive materials.

70. Pursuant to NAAEC Article 14(3), the Party may provide a response to the submission within 30 (thirty) days of receiving this determination, i.e., by **July 2 2019**, at the latest. In exceptional circumstances, the Party may notify the Secretariat in writing that it is extending the deadline to 60 (sixty) days, i.e., until **August 13 2019**.

Secretariat of the Commission for Environmental Cooperation

(signed in the original by)

Robert Moyer

Director, Submissions on Enforcement Matters Unit

(signed in the original by)

Paolo Solano

Legal Officer, Submissions on Enforcement Matters Unit

cc: Norma Munguía Aldaraca, Alternate Representative of Mexico
Isabelle Bérard, Alternate Representative of Canada
Chad McIntosh, Alternate Representative of United States
Jane Nishida, USEPA
César Rafael Chávez, CEC Executive Director
Submitter

⁴⁰ Submission, at 1: "[...] the organic contamination that may exist in our house which leaked out of Cytrar," and at 2: "[...] because we live very close to Cytrar".