

Secretariat of the Commission for Environmental Cooperation

Secretariat determination in accordance with Article 15(1) of the North American Agreement on Environmental Cooperation

Submitter:	Jesús Ríos León
Party:	United Mexican States
Date of receipt:	22 February 2019
Date of determination:	24 September 2020
Submission no.:	SEM-19-001 (<i>Radiation Exposure in Los Altares</i>)

Executive summary

On 22 February 2019, the Secretariat of the Commission for Environmental Cooperation received submission SEM-19-001 pursuant to Article 14(1) of the North American Agreement on Environmental Cooperation (NAAEC), asserting that Mexico is failing to effectively enforce its environmental law with respect to the alleged radiation exposure experienced by Jesús Ríos León (the “Submitter”) and his family in Colonia Los Altares, Hermosillo, Sonora, Mexico due to the alleged presence of radioactive contaminants and heavy metals in water, soils, and the construction material in their home.

According to the Submitter, the National Nuclear Safety and Safeguards Commission detected the presence of radioactive isotopes as of October 2009, but he was not informed of the results until October 2015. He adds that he requested the intervention of the Ministry of Health (*Secretaría de Salud*) in January 2010 but did not receive any response, and that radioactive isotopes have been detected in him and five members of his family as a consequence of the exposure to which they are subjected in their own home.

On 2 April 2020, Mexico filed its response to the submission, referring to the governmental measures taken in relation to the Submitter’s assertions and sharing documents issued by the authority responsible for radiological safety monitoring.

Having reviewed submission SEM-19-001 (*Radiation Exposure in Los Altares*) in the light of Mexico’s response, the Secretariat finds that the preparation of a factual record is not warranted. The Secretariat’s reasoning is presented in this determination.

Article 2(4) of the Environmental Cooperation Agreement, in force as of 1 July 2020, stipulates that active submissions filed under the NAAEC shall continue to be processed with adherence to NAAEC Articles 14 and 15. Therefore, this notification is issued in accordance with NAAEC Article 15(1).

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 nongovernmental organization residing or established in the territory of Canada, the United States, or Mexico to file a submission asserting that a Party to the NAAEC is failing to effectively enforce its environmental law (the “SEM process”). The Secretariat

of the Commission for Environmental Cooperation (CEC) (“the Secretariat”)¹ initially considers submissions with reference to the requirements of NAAEC Article 14(1). Where the Secretariat finds that a submission meets these requirements, it then determines, pursuant to NAAEC Article 14(2), whether the submission merits a response from the concerned Party. In light of any response from the concerned Party, and in accordance with the Agreement, the Secretariat may notify the Council that the matter warrants the development of a factual record, providing its reasons for such recommendation in accordance with Article 15(1). Where the Secretariat decides to the contrary, it then proceeds no further with the submission.²

2. On 22 February 2019, Jesús Ríos León (hereinafter, the “Submitter”) filed an NAAEC Article 14(1) submission with the Secretariat, asserting that the Government of Mexico is failing to effectively enforce its environmental law with respect to the alleged radiation exposure experienced by him and his family in their home, located in Colonia Los Altares, Hermosillo, Sonora, Mexico.³
3. According to the Submitter, the presence of radioactive contaminants and heavy metals has been corroborated in water, soils, and construction material in the dwellings of Los Altares, Hermosillo and that radioactive isotopes have been detected in both him and members of his family as a consequence of the exposure to which they are subjected in their own home.⁴ The Submitter asserts that on 29 October 2009, the National Nuclear Safety and Safeguards Commission (*Comisión Nacional de Seguridad Nuclear y Salvaguardias*—CNSNS) detected the presence of five radioactive isotopes in his home.⁵ He adds that, in January 2010, he requested the intervention of the Ministry of Health (*Secretaría de Salud*) without obtaining a response.⁶
4. Submission SEM-19-001 (*Radiation Exposure in Los Altares*) states that there has not been a detailed investigation to identify the exact source of the radioactive contamination that is causing impacts on the members of the Ríos Fimbres family, and that neither has the organic contamination been considered that may exist in the family home, which was allegedly caused by containers that were exposed to the elements at some point in time on the Cytrar hazardous waste confinement site, located in proximity to the Submitter’s residence.⁷ The Submitter asserts that the Sonora state ministries of health and civil protection enforced provisions that were incorrect, lacked scientific basis, and were even obsolete, such as Mexican Official Standards NOM-147-SEMARNAT/SSA1-2004,

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

² For detailed information on the various stages of the submission process, as well as on the Secretariat’s determinations and factual records, visit the submissions on enforcement matters page of the CEC website at <www.cec.org/submissions>.

³ SEM-19-001 (*Radiation Exposure in Los Altares*), Article 14(1) Submission (22 February 2019) [“Submission”]. The submission record is available at <<http://www.cec.org/sem-submissions/radiation-exposure-los-altares>>.

⁴ *Ibid.* at 1-2.

⁵ *Ibid.* at 3.

⁶ *Ibid.* at 4.

⁷ *Ibid.* at 1.

Establishing criteria to determine the concentrations for remediation of soils contaminated with arsenic, barium, beryllium, cadmium, hexavalent chromium, mercury, nickel, silver, lead, selenium, thallium, and/or vanadium, and NOM-127-SSA1-1994, Environmental health–Water for human use and consumption–Permissible quality limits and treatments for making water potable. According to the submitter, there is no Mexican official standard establishing maximum permitted limits for these metals in human urine and blood.⁸

5. The Submitter asserts that the Sonora state ministries of health and civil protection, as well as the CNSNS, hid for over five years the results of the investigations conducted on the Ríos Fimbres family, which detected the presence of five radioactive isotopes as of 29 October 2009, without the affected persons being informed thereof.⁹
6. The Submitter adduces a technical report produced to address the health issues of the Ríos Fimbres family by the Sonora State Ministry of Health in 2010 after various requests and complaints on his part. The submission makes various observations on that report and the alleged inconsistencies identified by the Submitter, including alleged contradictions among the authorities of the three levels of government.¹⁰
7. On 21 May 2019, the Secretariat requested a response from Mexico in relation to the following matters raised in the submission:¹¹

Measures taken by the CNSNS:

- Article 154 of the Mexican Environmental Protection Act (*Ley General del Equilibrio Ecológico y la Protección al Ambiente*—LGEEPA) with respect to those of the Submitter’s assertions over which the CNSNS has jurisdiction.
- Articles 19, 22, 37, 38, 39, 42, 245, and 247 of the Mexican Radiological Safety Regulation (*Reglamento General de Seguridad Radiológica*) with respect to the alleged exposure of the Submitter and his family to radiation in his home; the measures taken by the CNSNS, and the investigation performed by its inspectors.

Effective enforcement of public health and civil protection provisions:

- Articles 116, 118, and 182 of the Mexican Health Act (*Ley General de Salud*) with respect to measures for the protection of human health, particularly as regards the effects of the environment on health and the emergencies caused by environmental deterioration that endangers the population.
- Articles 90 and 91 paragraphs I, II, and III of the Sonora State Health Act (*Ley de Salud para el Estado de Sonora*) with respect to the protection of human health from environmental risks and harms and, specifically, the measures taken within the purview of the Sonora State Ministry of Public Health (*Secretaría de Salud Pública*)

⁸ *Ibid.* at 3.

⁹ *Ibid.*

¹⁰ *Ibid.* at 4–9.

¹¹ SEM-19-001 (*Radiation Exposure in Los Altares*), Article 14(1) and (2) Determination (21 May 2019) [“Determination”], at 18–19.

del Estado de Sonora), given the alleged radiation-caused health risk in the Submitter's home.

- Article 70 paragraph X of the General Regulation to the Civil Protection Act (*Reglamento General de la Ley de Protección Civil*) in relation to measures to be taken in cases of incidents caused by the release of radioactive material into the environment.

Human settlements:

- Articles 66 and 67 paragraph III of the Mexican Human Settlements, Land Use Planning, and Urban Development Act (*Ley General de Asentamientos Humanos, Ordenamiento Territorial y Desarrollo Urbano*) with respect to the risk posed by the alleged radiation in the Los Altares subdivision in Hermosillo, Sonora, and the studies performed in connection with the alleged risks arising from the Cytrar hazardous waste confinement facility in Hermosillo.

Control of waste at the “Cytrar” site:

- Articles 65, 68, 70, 71, 72, 75, and 76 of the Mexican Hazardous Waste Prevention and Management Act (*Ley General para la Prevención y Gestión Integral de los Residuos—LGPGIR*), as they relate to the assertion that the alleged contamination to which the Submitter and his family have been exposed originates from the lack of control of the Cytrar waste confinement site, situated in proximity to his home.
- Mexican Official Standard NOM-055-SEMARNAT-2003, *Establishing the requirements for sites intended for controlled confinement of previously stabilized hazardous waste*, with respect to the final confinement of hazardous waste and the alleged disposal of radioactive material.

8. On 2 April 2020, the Secretariat received a response from the government of Mexico¹² in which the Party contends that the submission does not meet the eligibility requirements or criteria of NAAEC Articles 14(1)(c) and 14(2)(a) and (b), and so the Secretariat should not have allowed the submission for review. In addition, the response contends that the Submitter did not provide evidence in support of his assertions, since according to the information provided by the Party, “no radiological anomalies” nor any “concentration of radioactivity” were detected.¹³ Furthermore, Mexico provided information pursuant to Article 14(3)(b) in regard to governmental measures taken in connection with matter raised by the Submitter; the inspections of the Submitter's home by the CNSNS; various tests performed to detect the presence of radioactive materials in the building; the clinical testing performed by the Sonora State Ministry of Public Health and the University of Arizona Medical Center,¹⁴ and the alleged temporary storage of radioactive waste in Sonora.

¹²SEM-19-001 (*Radiation Exposure in Los Altares*), Article 14(3) Response (2 April 2020) [“Response”].

¹³*Ibid.* at 5.

¹⁴ Then known as the University of Arizona Medical Center, the institution is now called the *Banner – University Medical Center Tucson*.

9. Having reviewed the submission in the light of the response, with adherence to Article 15(1) of the Agreement and based 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*) does not warrant the preparation of a factual record. The Secretariat’s reasoning follows.

II. ANALYSIS

A) Preliminary issues

7. Mexico’s view is that the submission does not contain a succinct account of the facts nor sufficient information to allow the Secretariat to review it, including any documentary evidence on which it may be based, and that the Submitter’s assertions are confused and contradictory, lacking documentary justification.¹⁵ According to the Party, the submission does not meet the eligibility requirements of NAAEC Article 14(1)(c) nor the criteria of NAAEC Article 14(2)(a) and (b), and should therefore not have been considered by the Secretariat.
8. The Secretariat finds that while some of the assertions made by the Submitter may have confused some aspects of the facts, they nonetheless authentically express the Submitter’s concern in relation to the alleged health harms experienced by him and his family, allegedly caused by radiation in his home. During the analysis of the submission, legal provisions that do not qualify as environmental law¹⁶ were excluded, and assertions of a personal nature or consisting of remarks about the work of institutions were not taken into consideration.¹⁷ In any case, the information contained in the response of the government of Mexico and its opinion on the matter raised by the Submitter are considered in this

¹⁵Response at 5.

¹⁶Determination at 3–14. Table 1 lists all the standards and legal provisions to which the submission refers. The Secretariat found that the following do not qualify as environmental law or will not be retained for further review: the Mexican Constitution (*Constitución Política de los Estados Unidos Mexicanos*), the Federal Transparency and Access to Information Act (*Ley Federal de Transparencia y Acceso a la Información Pública—LFTAIP*), the Mexican Personal Data Protection Act (*Ley General de Protección de Datos Personales en Posesión de Sujetos Obligados*), the National Human Rights Commission Act (*Ley de la Comisión Nacional de los Derechos Humanos*), the Workers’ Housing National Fund Institute Act (*Ley del Instituto del Fondo Nacional de la Vivienda para los Trabajadores*), the Federal Penal Code (*Código Penal Federal*), the Infonavit Appeals Commission Regulation (*Reglamento de la Comisión de Inconformidades del Infonavit*), the Sonora State Transparency and Access to Information Act (*Ley de Transparencia y Acceso a la Información Pública del Estado de Sonora—LTAIP-Sonora*), the Sonora State Notarial Services Act (*Ley del Notariado de Sonora*), the Sonora State Health Act, the Sonora State Civil Protection Act (*Ley de Protección Civil para el Estado de Sonora*), the Sonora State Penal Code (*Código Penal del Estado de Sonora*), and the Aguascalientes State Penal Code (*Código Penal para el Estado de Aguascalientes*), as well as Mexican Official Standards NOM-147-SEMARNAT/SSA1-2004, *Establishing criteria to determine the concentrations for remediation of soils contaminated with arsenic, barium, beryllium, cadmium, hexavalent chromium, mercury, nickel, silver, lead, selenium, thallium, and/or vanadium*, and NOM-127-SSA1-1994, *Environmental health—water for human use and consumption—permissible quality limits and treatments for making water potable*.

¹⁷For example, the assertions of *fraud* perpetrated against the Submitter and the alleged absence of, or deficiencies in, the Mexican Official Standards.

phase of the process, in order to determine whether the preparation of a factual record is warranted.

9. For these reasons, the Secretariat found that it should continue with its review of the submission and the Party's observations on it, as well as of all the information provided in Mexico's response, since it sheds light on the considerations for recommending or not recommending a factual record pursuant to NAAEC Article 15(1).

B) Measures taken by the National Nuclear Safety and Safeguards Commission

10. The Submitter asserts that on 29 October 2009, the CNSNS detected the presence of radioactive isotopes of lead (Pb-210, Pb-214), bismuth (Bi-214), thallium (TI-208), and potassium (K-40), among other elements, in the soil of the Ríos Fimbres family home but that the results of the investigation conducted by the CNSNS were kept from him for over five years and that these acts were carried out in coordination with the Sonora State Ministry of Health.¹⁸
11. The Submitter maintains that this represents a failure to effectively enforce LGEEPA Article 154 as well as Articles 19, 22, 37, 38, 39, 42, 245, and 247 of the Mexican Radiological Safety Regulation as regards the alleged exposure of the Submitter and his family to radiation in his home, the measures taken by the CNSNS, and the activities of its inspectors. In addition, he contends that there are failures to effectively enforce Article 70 paragraph X of the General Regulation to the Civil Protection Act in relation to measures taken in cases of incidents caused by the release of radioactive material into the environment, and Articles 66 and 67 paragraph III of the Mexican Human Settlements, Land Use, and Urban Development Act as regards the risk posed by the alleged radiation in the Los Altares subdivision of Hermosillo, Sonora.
12. Mexico contends in its response that the CNSNS is the competent oversight authority for nuclear, radiological, and physical safety standards and safeguards, and that Mexico therefore asked it for information on any use and/or storage of radioactive materials that may have been authorized in Colonia Los Altares, Sonora.
13. In file no. AOO.400/140/2019 of 23 July 2019, issued by the General Radiological Monitoring, Physical Safety, and Safeguards Unit (*Dirección General Adjunta de Vigilancia Radiológica Ambiental, Seguridad Física y Salvaguardias*) of the CNSNS, the Legal Affairs Coordinating Unit (*Unidad Coordinadora de Asuntos Jurídicos*) of the Ministry of the Environment and Natural Resources (*Secretaría de Medio Ambiente y Recursos Naturales*—Semarnat) was informed that there is no record of temporary storage of radioactive waste in the state of Sonora, nor of any such authorization having been issued; thus, the CNSNS has no information concerning the management of radioactive waste in the area in question.¹⁹
14. The same document refers to the response by the CNSNS to the request for information filed by the Submitter with the National Transparency, Access to Information, and Privacy Institute (*Instituto Nacional de Transparencia, Acceso a la Información y Protección de Datos Personales*—INAI) on 2 March 2016 and registered under file no. 1810000002516.

¹⁸ Submission at 2–3.

¹⁹ Comisión Nacional de Seguridad Nuclear y Salvaguardias, Dirección General Adjunta de Vigilancia Radiológica Ambiental, Seguridad Física y Salvaguardias, file no. AOO.400/140/2019 (23 July 2019), at 2.

This response describes the measures taken by the Radiological Monitoring Division (*Dirección de Vigilancia Radiológica*) of the CNSNS in relation to the complaint filed by Mr. Ríos León.

15. According to the contents of the file in question, the response from the CNSNS included the results of radiological measurements taken in connection with the matter raised by Mr. Ríos León, in particular, as well as the measurements routinely taken as part of the CNSNS's environmental radiology monitoring programs. These measurements include:

- Environmental equivalent dose measurements using thermoluminescent dosimetry (TL) as part of the National Environmental Radiology Dosimetry Program (*Programa Nacional de Dosimetría Radiológica Ambiental—PNDR*A), which includes measurement points in Sonora for the years 2002 and 2003.
- Activity measurements by gamma spectrometry performed on two soil samples and two water samples taken from the home of Jesús Ríos León in October 2009.
- Environmental equivalent dose measurements using TL dosimetry in the home [of the Submitter] from October 2009 to March 2010.
- Measurements of environmental equivalent dose rate using the National Environmental Radiology Monitoring Network (*Red Nacional de Monitoreo Radiológico Ambiental—Renamora*) for the years 2012, 2013, and 2014. This network includes two detection stations in Nogales and Ciudad Obregón in the state of Sonora.²⁰

16. The environmental equivalent dose measurements and the measurements taken by the gamma spectrometry method from water and soil samples taken in the Submitter's home "gave results similar to the natural background levels in the region," so it may be concluded that no radiological anomalies were recorded. That is, only radionuclides of natural origin were identified and "the presence of radioactive material produced by human activities was not detected."²¹

17. In addition to this document, Mexico's response contains other attachments that reflect the measures taken in relation to the matter raised by the submission. Among these documents is inspection record no. 7325 of the CNSNS, which describes the processing of the request for support from the Civil Protection Coordinating Unit (*Coordinación General de Protección Civil*) of the Ministry of Government (*Secretaría de Gobernación*) and the State Civil Protection Unit (*Unidad Estatal de Protección Civil*) of the Sonora state government in response to a complaint filed with the Sonora State Civil Protection Unit.²² This document states that CNSNS inspectors visited the Submitter's home in the Los Altares subdivision of Hermosillo on 12 October 2009 to take radiation level measurements in the dwelling and collect water and soil samples for subsequent analysis, to determine the possible existence of a health risk to the occupants.

18. The document in question reproduces the results of the measurements taken in the Ríos Fimbres family home (centre of the living room, bathroom, main indoor hallway, bedrooms, back patio, street access). The report states that Mr. Ríos León made no

²⁰ *Ibid.*

²¹ *Ibid.*

²² Comisión Nacional de Seguridad Nuclear y Salvaguardias, inspection record no. 7325 (12 October 2009).

statements during the visit and that he was informed of his right to make observations and offer evidence in relation to the facts set down in the report within a period of 10 working days, and that he was given a signed copy of the report.²³

19. Another of the documents attached to Mexico's response is file no. AOO.230/0199/2009 of 2 February 2010, also issued by the CNSNS. It is an inspection report arising from the procedure of 12 October 2009, which concludes that the measurements taken to identify radionuclides of non-natural origin in the rebar support structures (*castillos*) of the building demonstrated that there was no indication of the presence of cobalt-60 or other radionuclides of non-natural origin in the structural material.²⁴
20. Similarly, gamma spectrometry analysis of the water and soil samples showed no indication of the presence of radioactive material of non-natural origin, while analysis of the dose attributable to the structural materials found that a person who stayed in the most critical location for an entire year would not receive a dose in excess of any of the limits set forth in the official standards.²⁵
21. After issuing the above-mentioned inspection report, the CNSNS submitted a copy to the Public Health Department (*Dirección General de Protección contra Riesgos Sanitarios*) of Hermosillo, Sonora,²⁶ and a copy of the results obtained with the dosimeters placed in the home of the Ríos Fimbres family during the months of October 2009 to March 2010 to the Radiological Monitoring Division (*Dirección de Vigilancia Radiológica*).²⁷ In addition, the CNSNS sent certified copies of file no. 1040, attesting to the various procedures carried out by the authority, along with a copy of the National Residential Radon Gas Monitoring Program (*Programa Nacional de Monitoreo de Gas Radón en Casas Habitaciones*) to the Sonora office of the Federal Attorney for Environmental Protection (*Procuraduría Federal de Protección Ambiental—Profepa*).²⁸
22. The CNSNS states that the Submitter's request was addressed promptly and that no justification was found for conducting an additional investigation, since the values recorded represented neither a health concern nor an indication of alterations to ecological equilibrium in the vicinity that had to be addressed.²⁹
23. Further to its review of the documentation included in both the submission and Mexico's response, the Secretariat found nothing to support the assertions that the CNSNS did not address the Submitter's requests, or that it had engaged in unlawful or untruthful acts. The available documents indicate that the CNSNS carried out the procedures necessary to address the concerns raised by the Submitter and respond to the assertion of possible

²³ *Ibid.* at 4.

²⁴ Comisión Nacional de Seguridad Nuclear y Salvaguardias, file no. AOO.230/0199/2009 (2 February 2010), at 4 [emphasis added].

²⁵ *Ibid.* at 5 [emphasis added].

²⁶ Comisión Nacional de Seguridad Nuclear y Salvaguardias, file no. AOO.000.0008/2010 (16 February 2010).

²⁷ Comisión Nacional de Seguridad Nuclear y Salvaguardias, Subdirección de Electrónica y Dosimetría, file no. AOO.224.830.2010 (07 October 2010), at 1.

²⁸ Comisión Nacional de Seguridad Nuclear y Salvaguardias, file no. AOO.210/2950/2015 (5 October 2015).

²⁹ Comisión Nacional de Seguridad Nuclear y Salvaguardias, Dirección General Adjunta de Vigilancia Radiológica Ambiental, Seguridad Física y Salvaguardias, file no. AOO.400/140/2019 (23 July 2019), at 3.

radiation and heavy metal contamination and their corresponding effects on the health of the Ríos Fimbres family.

24. The applicability of the provisions cited in the submission is premised on verification of radioactivity posing a risk to human health. However, it appears from the documentation provided by the government of Mexico in its response, as well as the information contained in submission SEM-19-001, that no evidence was found in the Submitter's home of the presence of radioactive materials of non-natural origin at higher-than-background levels. Therefore, the Secretariat concludes that there is no basis for the assertion of failure to effectively enforce LGEEPA Articles 154; Articles 19, 22, 37, 38, 39, 42, 245, and 247 of the Mexican Radiological Safety Regulation; Article 70 paragraph X of the General Regulation to the Mexican Civil Protection Act, and Articles 66 and 67 paragraph III of the Mexican Human Settlements, Land Use Planning, and Urban Development Act.
25. Therefore, the Secretariat does not recommend the preparation of a factual record in this regard.

C) Effective enforcement of public health and civil protection provisions

26. The Submitter contends that Mexico is failing to effectively enforce Articles 116, 118, and 182 of the Mexican Health Act with respect to human health protection measures, particularly in connection with environmental effects on health as well as emergencies caused by environmental deterioration that endangers the population, and also Articles 90 and 91 paragraphs I, II, and III of the Sonora State Health Act as regards the protection of human health from environmental risks and harms and, specifically, the measures taken within the purview of the Sonora State Ministry of Public Health in regard to the alleged radiation-related health risk in the Submitter's home.
27. In this regard, the Submitter notes the alleged presence of radioactive contamination in his home and the existence of harm to his and his family's health due to alleged exposure to this contamination. He asserts that the various symptoms and diseases exhibited by him and the members of his family are associated with radiation exposure. According to the *Informe técnico para la atención de la problemática de salud de la familia Ríos Fimbres*, produced by the Sonora State Ministry of Health in 2010, Mr. Ríos León's daughter had health complications during the period from 2007 to 2009: she was diagnosed with papillary thyroid cancer with capsule invasion and metastasis to the mediastinal and paratracheal lymph nodes.³⁰ During that same period, Mr. Ríos León's daughter exhibited motor demyelinating polyneuropathy, an effect also related, according to the Submitter, to the alleged radiation in the family home. In addition, according to the Submitter's statements, other members of the Ríos Fimbres family exhibited various ailments.
28. Mexico's response states that there is no causal relationship between the health complaints of the Submitter and his family and the alleged exposure to radiation contamination. This is because the CNSNS investigation yielded no data from which the existence of radiation contamination in the Submitter's home could be concluded, nor any data to conclude that

³⁰ Servicios de Salud de Sonora, Dirección General de Promoción a la Salud y Prevención de Enfermedades, *Informe técnico para la atención de la problemática de salud de la familia Ríos Fimbres*, at 6 ["Technical Report"].

natural radiation exceeded the exposure limits set out in the Mexican Radiological Safety Regulation (*Reglamento General de Seguridad Radiológica*). The Party's view is that arguments concerning alleged enforcement failures by the authorities and the medical institutions "cannot be considered sufficient ... to assume and impute responsibilities to the authorities" for the alleged harms suffered by the Submitter and his family.³¹

29. The Secretariat reviewed the documents attached to the submission and the response, and its review in relation to the point covered by this section of the determination yielded the findings summarized below.

Coordination and participation of various authorities

30. The review of the available documentation shows the participation of various authorities in addressing the matter raised by the Submitter, through multiple procedures and measures, most notably the following, in chronological order:

- i) 28 January 2010 – Technical meeting to collect and analyze information in the possession of various bodies and agencies that worked on the case of the Ríos Fimbres family: the State Civil Protection Unit, the Municipal Civil Protection Unit, and the Public Health Department.³²
- ii) 2 February 2010 – Inspection report issued by the CNSNS and submitted to the Sonora state health services.³³
- iii) 12 February 2010 – Request for review of dwellings and health conditions in Colonia Los Altares by the Sonora State Ministry of Public Health.³⁴
- iv) 19 February 2010 – Meeting of staff of the Sonora State Ministry of Health with the Submitter, Dulce María Fimbres Barceló, and her representative to address the alleged radiation exposure and its possible effects.³⁵
- v) 4 March 2010 – Creation of a group of medical specialists at the Sonora State General Hospital and Children's Hospital to attend members of the Ríos Fimbres family and to conduct a comprehensive study of the problems relating to the alleged radiation or heavy metal contamination.³⁶
- vi) 22 March 2010 – Monitoring of water supply sources in Colonia Los Altares by the Hermosillo Water and Sewer Agency (*Organismo Operador de Agua Potable y Alcantarillado*) in the Ríos Fimbres family home and in two more residential water intake pipes in the same neighborhood.³⁷

³¹ Response at 17.

³² Technical Report at 4.

³³ *Ibid.* at 19.

³⁴ *Ibid.* at 4.

³⁵ *Ibid.*

³⁶ *Ibid.* at 10–11.

³⁷ *Ibid.* at 18–19. It should be noted that the monitoring results indicate that the levels recorded for the parameters analyzed are within the limits established by Mexican Official Standard NOM-127-SSA1-1994; that is, no radioactive material exceeding the limits established by this standard was found.

- vii) August 2010 – Actions by the Sonora state public health authority to gain coverage under the Social Health Protection System for members of the Ríos Fimbres family.³⁸
- viii) 22 November 2010 – Meeting of members of the Ríos Fimbres family with the Sonora State minister of public health and the executive coordinator of the state executive office, at which it was agreed to conduct heavy metal tests at a laboratory in Arizona, United States, and for these to be reviewed by Dr. Francisco Alfonso Palacios Saguchi, a private physician proposed by the Ríos Fimbres family.³⁹
- ix) 15 December 2010 – Request by Dr. Francisco Alfonso Palacios Saguchi to conduct new blood and urine studies with a view to detecting the presence of heavy metals in members of the Ríos Fimbres family.⁴⁰
- x) 17 February 2016 – Memo from Sonora Health Services to the National Public Health Institute (*Instituto Nacional de Salud Pública*) for referral of a toxicology and radiation specialist.⁴¹
- xi) 8 June 2016 – Letter from Sonora Health Services to the Submitter in re the radiation specialist designated by the National Public Health Institute, containing detailed information on the case of the Ríos Fimbres family.⁴²
- xii) 1 September 2017 – Memo from the Sonora State Ministry of Government to the deputy minister for health services in regard to the various requests made by Mr. Ríos León, including the one relating to the assignment of a clinical toxicologist to the Ríos Fimbres family's case.⁴³
- xiii) 14 December 2017 – Hand-to-hand delivery to the Ríos Fimbres family by representatives of the Sonora Transparency Institute (*Instituto Sonorense de Transparencia*—ISTAI) of information relating to the studies conducted and reported in file no. SSS-SSS-DGPROSPE-DIAE-2017-1531 of 20 October 2017, which contains the following:⁴⁴
 - report by Dr. John B. Sullivan Jr., medical toxicologist with the University of Arizona;
 - report results of the radiation survey conducted in Colonia Los Altares, produced by Dr. Rodrigo Meléndez Amavizca, and
 - inspection report issued by the CNSNS concerning the Ríos Fimbres family home.

³⁸ *Ibid.* at 16.

³⁹ *Ibid.*

⁴⁰ *Ibid.*

⁴¹ *Ibid.*

⁴² *Ibid.*

⁴³ *Ibid.*

⁴⁴ *Ibid.*

- xiv) 28 February 2018 – Letter from the Sonora State Ministry of Government to the Submitter on the steps taken to assign a contamination and radiation specialist to the case of the Ríos Fimbres family.⁴⁵
- xv) 5 April 2018 – Response from the Sonora State Health Promotion and Disease Prevention Branch (*Dirección General de Promoción a la Salud y Prevención de Enfermedades*) to the request for information by the Ríos Fimbres family dated 6 March 2018; file no. SSS-SSS-DGPROSPE-DIAE-2018-515 contains a copy of the inspection report issued by the CNSNS (originally submitted at a meeting of 14 December 2017) and clarifies inconsistencies in the laboratory test results.⁴⁶

Alleged presence of radiation contamination in the Submitter's home

- 31. On 24 June 2009, the Municipal Civil Protection Unit sent a letter to the Universidad de Sonora to request that radiation measurements be taken in the Submitter's home.⁴⁷ On 6 July 2009, Dr. Rodrigo Meléndez Amavizca, director of radiological safety at the Universidad de Sonora, took the measurements requested by the Municipal Civil Protection Unit in the home of the Ríos Fimbres family. These reflect a difference between the natural background radiation and certain specific points in the Ríos Fimbres family home. For example, a measurement of 35µR/h was obtained in one rebar structure, contrasting with a natural background value of 25µR/h.⁴⁸ Dr. Meléndez Amavizca recommended that additional studies be performed in order to ascertain the causes of these differences.⁴⁹
- 32. On 22 July 2009, the State Civil Protection Unit requested the support of the General Civil Protection Coordinating Unit of the Ministry of Government in reviewing the dwellings in the Los Altares subdivision of Hermosillo, Sonora.⁵⁰
- 33. On 12 October 2009, during the procedure undertaken by the CNSNS, its inspectors placed thermoluminescent dosimeters in the Submitter's dwelling.⁵¹ Concerning the differences between the natural background radiation and the measurements obtained by

⁴⁵ *Ibid.*

⁴⁶ In this regard, of the four lab studies conducted on 18 January 2010, deficiencies were detected in the records of types of samples processed and the sampling date; in addition, the permits necessary to perform the analytical work, as established by the Federal Commission for Protection against Public Health Risks (*Comisión Federal para la Protección contra Riesgos Sanitarios*—Cofepris), were lacking. Servicios de Salud de Sonora, Dirección General de Promoción a la Salud y Prevención de Enfermedades, file no. SSS-SSS-DDGPROSPE-DIAE-2018-515 (5 April 2018), at 3.

⁴⁷ Technical Report at 6.

⁴⁸ *Ibid.*

⁴⁹ *Ibid.*

⁵⁰ Comisión Nacional de Seguridad Nuclear y Salvaguardias, file no. AOO.201.078.09 (29 July 2009), at 1, in re file no. 1332/07/2009 of 22 July 2009, issued by the Unidad Estatal de Protección Civil. See also Technical Report at 7.

⁵¹ Comisión Nacional de Seguridad Nuclear y Salvaguardias, inspection report no. 7325 (12 October 2009), p. 3.

the Universidad de Sonora for some specific points inside the Ríos Fimbres family home, the CNSNS issued the following opinion:⁵²

- The differences between the radiation measurements taken in the home and the natural background levels do not exceed twice the background radiation level; these are considered typical variations of all background radiation and do not pose any health risk.
- The variations can be attributed to the fact that the measurements were taken inside a residential dwelling, where construction materials and the buildup of naturally occurring radon gas can increase recorded radiation levels.
- The background radiation is typical of the region and accords with the natural background records for the state of Sonora; moreover, there exist other regions with similar values; e.g., in the states of Durango and Jalisco and in Mexico City.

34. In addition, from 10 April to 4 May 2010, the Radiological Safety Department of the Universidad de Sonora surveyed radiation levels in Colonia Los Altares, Hermosillo, and for this purpose measured radiation levels in 25 dwellings.⁵³ The measurements taken yielded the same statistical results for background radiation in the living room and kitchen of all dwellings. For walls, rebar structures, and floors, the levels obtained were slightly higher, which, according to the reports available to the Secretariat, did not pose any risk.⁵⁴ In no case was the presence of radioactive material of non-natural origin, such as cobalt-60, detected. Nor did the water and soil samples collected reflect the presence of radioactive material of non-natural origin.⁵⁵
35. For its part, the Department of Geology of the Universidad de Sonora took soil samples in Colonia Los Altares on 8 April 2010, with a view to detecting metals in soils for residential use in accordance with Mexican standard NMX-AA-132-SCFI-2006, *Establishing soil sampling for identification and quantification of metals and metalloids, and management of samples*. Thirty samples were taken and analyzed using ALS-CHEMEX method ME-MS41.⁵⁶ The analyses yielded a result lower than the maximum set out in the reference standard.⁵⁷
36. Finally, it is worth mentioning that a document of 5 April 2018, issued by Sonora State Health Services, noted that Dr. Rodrigo Meléndez Amavizca had stated on 18 March 2011 that based on the radiation study performed on the Ríos Fimbres family home, no evidence had been found to assert that the dwelling in question was contaminated with radioactive material.⁵⁸

⁵² Comisión Nacional de Seguridad Nuclear y Salvaguardias, file no.. AOO.201.078.09 (29 July 2009), at 1. See also Technical Report at 7–8.

⁵³ Technical Report at 20.

⁵⁴ *Ibid.*

⁵⁵ *Ibid.* at 20–1 [emphasis added].

⁵⁶ *Ibid.* at 18.

⁵⁷ *Ibid.* [emphasis added].

⁵⁸ Servicios de Salud de Sonora, Dirección General de Promoción a la Salud y Prevención de Enfermedades, file no.. SSS-SSS-DDGPROSPE-DIAE-2018-515 (5 April 2018), at 5 [emphasis added].

Health status of Ríos Fimbres family members

37. On 7 September 2009, a researcher from the Department of Geology of the Universidad de Sonora presented to the Municipal Civil Protection Unit the results of measurements taken on three urine samples from the Submitter's children, in which the presence of metals was detected.⁵⁹ The researcher in question recommended that quantification studies be done for the metals detected and that these could be carried out in the state public health laboratory, which is certified for such tests.⁶⁰
38. Further to the recommendation of the Department of Geology of the Universidad de Sonora, on 7 January 2010, the Municipal Civil Protection Unit asked the Sonora State Secretary of Public Health to quantify, in the state public health laboratory, the elements found in members of the Ríos Fimbres family using ICM-MS or atomic absorption spectrometry.⁶¹
39. Meanwhile, on its own initiative, the Ríos Fimbres family commissioned test from a local laboratory in Hermosillo, Sonora, on 18 January 2010 to identify the presence of arsenic, chromium, cadmium, manganese, and/or molybdenum in urine.⁶² The results of these tests were made known on 14 July 2010 to toxicology specialists in the Faculty of Medicine of the Universidad Autónoma de San Luis Potosí, one of whom formulated his own technical comments on the matter.⁶³
40. On 2 February 2011, the Ríos Fimbres family attended a consultation with Dr. John B. Sullivan Jr., a toxicology and environmental health specialist with the University of Arizona Medical Center. During this meeting, the quantification of blood levels of chromium, molybdenum, manganese, arsenic, cadmium, and cobalt was requested; in addition, for the case of Dulce María Fimbres Barceló, the quantification of lead was also requested. The studies in question were performed at the Adult Health Services at Kino clinic in Tucson, Arizona and the results were presented on 8 March 2011, with normal values having been recorded for all the elements analyzed.⁶⁴
41. On 4 May 2011, Dr. John B. Sullivan Jr. conducted whole-body radiation studies on three of the five members of the Ríos Fimbres family at the Carlsbad Environmental Monitoring & Research Center in New Mexico, United States.⁶⁵

⁵⁹ Technical Report at 8. The metals detected were cadmium (Cd), arsenic (As), zinc (Zn), copper (Cu), chromium (Cr), lithium (Li), molybdenum (Mo), sulfur (S), magnesium (Mn), and boron (B), in addition to ultratraces of indium (In) and germanium (Ge). However, given the characteristics and limitations of the equipment used, the values recorded for each of these metals were not specified, only their presence.

⁶⁰ *Ibid.* at 8–9.

⁶¹ *Ibid.* at 3.

⁶² *Ibid.* at 9.

⁶³ *Ibid.* at 15–16. Dr. Fernando Díaz Barriga Martínez, a toxicology specialist at the Faculty of Medicine of the Universidad Autónoma de San Luis Potosí, indicated the analyses are not adjusted for urinary density or creatine, and that other sources of arsenic contamination (e.g., water) and chromium contamination (e.g., a vitamin supplement rich in that element), or the existence of some environmental source (such as an automotive chrome application facility).

⁶⁴ *Ibid.* at 17.

⁶⁵ *Ibid.*

42. A letter of 17 August 2011 from Dr. John B. Sullivan Jr. to Dr. José Jesús Bernardo Campillo García, Sonora State Minister of Public Health, reported that there was no evidence that radiation levels in the Ríos Fimbres family home exceeded the natural background levels found. The results of radiation measurements on two members of the Ríos Fimbres family coincided with the natural background levels.⁶⁶ Likewise, studies were performed to determine the presence—and, if any, the concentration—of toxic metals in all members of the Ríos Fimbres family, with normal results obtained in all cases. Dr. John B. Sullivan Jr. concluded that there was no evidence of excess radiation exposure, incorporation of radionuclides, or exposure to toxic metals in any family member.⁶⁷
43. On 31 August 2011, in file no. SSS-SSS-DGSSC-2010-00732 to the Ríos Fimbres family, the family members were invited to the state public health laboratory to obtain blood and urine samples for determination of arsenic, chromium, cadmium, manganese, molybdenum, and lead levels with a view to establishing a comprehensive diagnosis. This invitation was extended again on 21 October 2011. It must be noted that no response to the invitation was received from the Ríos Fimbres family and that its members did not attend either of the appointments.⁶⁸
44. On 9 September 2011, Dr. Francisco Alfonso Palacios Saguchi indicated that three members of the Ríos Fimbres family exhibited symptoms compatible with peripheral neuropathy and alterations in two nerve conduction studies. He further stated that radiation counts had been done on the bodies of those three patients, along with two heavy metal detection studies. In all cases, the results were negative.⁶⁹
45. The technical report produced to address the health issues of the Ríos Fimbres family by the Sonora state health authorities indicates the following:⁷⁰
- The Sonora State Ministry of Public Health followed up on each of the studies conducted by the various federal, state, and international institutions in relation to the health of the Ríos Fimbres family.
 - Based on the urine and blood analyses performed on the Ríos Fimbres family at various times, in no case were found high values that would indicate a health risk to the family members.
 - The body scans performed in the United States found no evidence of excess radiation exposure, incorporation of radionuclides, or exposure to heavy metals in members of the Ríos Fimbres family.
 - The study and review of the health status of the Ríos Fimbres family members by private physicians indicates that no evidence was found to establish a correlation between the symptoms mentioned by the patients and radiation exposure or heavy-metal intoxication.

⁶⁶ *Ibid.*

⁶⁷ *Ibid.*

⁶⁸ *Ibid.* at 16.

⁶⁹ *Ibid.* at 17.

⁷⁰ Technical Report at 24.

- None of the neighbors of the Ríos Fimbres family has contacted the health authorities with any health problem.

46. In sum, the Secretariat read various documents for the purposes of its review, including:

- a technical report produced by a multidisciplinary team, which concluded that no indications or evidence have been documented upon which to establish a relationship between the symptoms exhibited by the Ríos Fimbres family and radiation exposure or heavy metal intoxication, and that excessive radiation or radiation in excess of the established normal limits has not been recorded in the family home;⁷¹
- a medical report that found no evidence of radiation exposure, incorporation of radionuclides, or exposure to toxic metals in the Submitter or members of his family;⁷²
- a document issued by the Deputy Minister of Health Services of the State of Sonora (*Subsecretario de Servicios de Salud del Estado de Sonora*) stating that studies performed over a period of nearly seven years offer no evidence of any relationship whatsoever between the health of the Submitter's family and contamination;⁷³
- results of laboratory studies conducted on members of the Submitter's family indicating, among other things, that "the thyroid gland is normal in shape, size, contour, axes, and relationships,"⁷⁴ and that "the axillary lymph nodes, internal mammary chains, and supraclavicular lymph nodes exhibit no growth, and that no inflammatory changes are observed ... [and that] both lungs have normal function."⁷⁵

47. The Secretariat's analysis of the Submitter's assertions in the light of Mexico's response, taking into consideration the provisions cited in the submission, leads to the conclusion that the assertion of failure to enforce Articles 116, 118, and 182 of the Mexican Health Act and Articles 90 and 91 paragraphs I, II, and III of the Sonora State Health Act in relation to the alleged emergency caused by environmental deterioration that might have endangered the population, the Submitter, or the members of his household has not been substantiated.

48. Therefore, the Secretariat does not recommend the preparation of a factual record in this regard.

⁷¹ Servicios de Salud de Sonora, Dirección General de Promoción a la Salud y Prevención de Enfermedades, *Informe técnico para la atención de la problemática de salud de la familia Ríos Fimbres*.

⁷² Dr. John B. Sullivan Jr., Health Effects Group Inc., report submitted to the Sonora State Minister of Public Health (17 August 2011).

⁷³ Subsecretaría de Servicios de Salud del estado de Sonora, file no. SSS-SSS-DGSPSPE-DE-2016-0204 (17 February 2016).

⁷⁴ Diagnosis by Imágenes Hermosillo, report of patient results (6 November 2018).

⁷⁵ Diagnosis by Imágenes Hermosillo, report of patient results (18 October 2018).

D) Control of waste at the “Cytrar” site and alleged exposure to radiation in Los Altares

49. The Submitter asserts that the rods used in the construction of his home are contaminated with cobalt-60 due to exposure to contaminants from the Cytrar hazardous waste confinement site situated in proximity to his home. He contends that a study published by the federal Ministry of the Environment and Natural Resources (*Secretaría de Medio Ambiente y Recursos Naturales*—Semarnat) (attached to the submission) found that “there was an utter and total failure in the policy and the enforcement of the standards designed to ensure that adequate operational procedures were met” with regard to the Cytrar confinement facility.⁷⁶ The Submitter asserts that it is probable that the deficient management of waste at the Cytrar site has given rise to the alleged contamination of materials in his home, and thus the health problems with which he and his family have been diagnosed.⁷⁷
50. The Submitter asserts that Mexico is failing to effectively enforce LGPGIR Articles 65, 68, 70, 71, 72, 75, and 76 as well as Mexican Official Standard NOM-055-SEMARNAT-2003, *Establishing the requirements for sites intended for controlled confinement of previously stabilized hazardous waste*, in relation to the assertion that the alleged contamination to which the Submitter and his family have been exposed originates from the lack of control of the Cytrar waste confinement site.
51. Mexico reports that in December 1998, the Ministry of Urban Development and Ecology (*Secretaría de Desarrollo Urbano y Ecología*—Sedue), as the body was then known, issued the first operating permit to the operator of the “Las Víboras” hazardous waste controlled confinement facility located at Km 244 + 800 Carretera Internacional 15, Las Víboras subdivision, Hermosillo, Sonora (“Cytrar”).⁷⁸
52. Due to the pressure brought to bear by various non-profit groups and organizations, the National Institute of Ecology (*Instituto Nacional de Ecología*) of Semarnat rejected the renewal of the facility’s operating license on 25 November 1998. The operator of the facility then sued the government of Mexico before the International Centre for Settlement of Investment Disputes (ICSID), arguing that the refusal to renew the operating permit was an act of expropriation of its investment. The panel ruled that the government of Mexico was liable for payment of damages.⁷⁹
53. Further to these events, Semarnat was tasked with remediation of the site during 2004. In 2005, 2,300 tons of waste found exposed to the elements in the upper part of cell 2 were

⁷⁶ 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*, Semarnat, Mexico, 2011, at 104.

⁷⁷ In relation to the alleged radioactive contamination of the Ríos Fimbres family home, the Secretariat notes that the neighbors in Colonia Los Altares requested an inspection of their dwellings in a document submitted 12 February 2010 to the Municipal Civil Protection Unit of Hermosillo Sonora, in view of the “possible radiation located at Calle Manuel Rivera Zamudio no. 3, in the Franciscanos II subdivision of Colonia Los Altares.” See Servicios de Salud de Sonora, Dirección General de Promoción a la Salud y Prevención de Enfermedades, *Informe técnico para la atención de la problemática de salud de la familia Ríos Fimbres*, Appendix 1.

⁷⁸ Response at 19.

⁷⁹ *Ibid.* at 19–20.

- removed and sent for controlled confinement at Mina, Nuevo León.⁸⁰ In addition, according to Mexico, the Federal Attorney for Environmental Protection (*Procuraduría Federal de Protección al Ambiente*—Profepa) took hazardous waste-related inspection measures through its office in the state of Sonora, which “has records of the proceedings relating to the Cytrar confinement center.”⁸¹
54. Profepa noted that, according to the records of inspections performed in 2003, the monitoring wells recorded low levels of leachates; furthermore, “documentary evidence was found that these had been extracted and sent to the settling pond.”⁸² The year 2005 saw the beginning of removal of 2,312.63 tons of waste exposed to the elements from cell no. 2. Mexico contends that “the collection, loading, and transportation of waste took place with personnel, equipment, and materials that were suited to these management activities, obeying industrial safety and environmental protection measures.”⁸³ These activities concluded on 24 September 2005.⁸⁴
55. Removal of waste from the former Cytrar confinement facility began on 15 December 2005 with the removal of 5,510 tons of capacitors and 207,560 tons of contaminated earth. After the waste was moved, the Universidad de Sonora conducted an environmental risk study, concluding that in order to dispose of the contaminants, it was necessary to seal cells 1 and 2 by applying an upper covering to the multibar system and auxiliary systems. In 2019, the confinement facility was sealed.⁸⁵ Mexico further specifies that the Cytrar confinement site was built in 1988, prior to the entry into force of the LGPGIR.
56. The provisions cited by the Submitter establish that secure hazardous waste facilities must be equipped with measures to prevent and reduce the possible migration of waste out of the cells. Further, they establish the responsibility of those who operate hazardous waste confinement facilities, as well as the owners or occupants of lots with contaminated soils; place restrictions on the transfer of ownership of contaminated sites; provide for the implementation of emergency measures in situations of contamination due to unforeseeable circumstances or Act of God, and the taking of inventories and records at contaminated sites,⁸⁶ and establish the requirements applicable to sites intended for controlled confinement of hazardous waste.⁸⁷
57. In the light of Mexico’s response, the Secretariat finds that the conditions under which the provisions cited by the Submitter in relation to the control of waste at the Cytrar site and the alleged exposure to radiation in Los Altares did not obtain, and therefore finds that the failure to effectively enforce LGPGIR Articles 65, 68, 70, 71, 72, 75, and 76 as well as NOM-055-SEMARNAT-2003 with respect to the alleged exposure of the Submitter and his

⁸⁰ *Ibid.* at 20.

⁸¹ Response, Appendix 4: Profepa, document no. PFPA/5.3/2C.18 in file no. PFPA/5.3/2C.18/00037-19 (14 February 2020).

⁸² *Ibid.*

⁸³ Response at 21.

⁸⁴ *Ibid.*

⁸⁵ *Ibid.*

⁸⁶ LGPGIR Articles 65, 68, 70, 71, 72, 75, and 76.

⁸⁷ NOM-055-SEMARNAT-2003.

family to contaminants as a result of the operation and closing of the Cytrar site has not been substantiated.

58. Based on all the foregoing considerations, the Secretariat does not recommend the preparation of a factual record in this regard.

III. DETERMINATION

52. The Secretariat has reviewed submission SEM-19-001 (*Radiation Exposure in Los Altares*) in the light of the response of the United Mexican States.
53. Having considered the submission in the light of Mexico's response, the Secretariat finds that there are no central issues left unresolved that would warrant the preparation of a factual record in relation to the enforcement of LGEEPA Article 154; Articles 19, 22, 37, 38, 39, 42, 245, and 247 of the Mexican Radiological Safety Regulation; Articles 116, 118, and 182 of the Mexican Health Act; Articles 90 and 91 paragraphs I, II, and III of the Sonora State Health Act; Article 70 paragraph X of the General Regulation to the Mexican Civil Protection Act; Articles 66 and 67 paragraph III of the Mexican Human Settlements, Land Use Planning, and Urban Development Act, LGPGIR Articles 65, 68, 70, 71, 72, 75 and 76, or NOM-055-SEMARNAT-2003
54. For the reasons set out herein and pursuant to NAAEC Article 15(1), the Secretariat hereby notifies the Council of its determination not to recommend the preparation of a factual record in regard to submission SEM-19-001 (*Radiation Exposure in Los Altares*). Pursuant to paragraph 9.8 of the Guidelines, the Secretariat hereby concludes its review of the submission.

Secretariat of the Commission for Environmental Cooperation

(Original signed)

Per: Richard A. Morgan
Executive Director, Commission for Environmental Cooperation

Prepared by: Paolo Solano, Interim Director, SEM and Legal Affairs Unit

cc: Rodolfo Godínez Rosales, Alternate Representative, Mexico
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Catherine Stewart, Alternate Representative, Canada
Submitter