Executive Summary

1. Articles 14 and 15 of the North American Agreement on Environmental Cooperation (the “NAAEC,” or the “Agreement”) provide for a process allowing any person residing in or non-governmental organization established in North America to file a submission asserting that a Party to the Agreement is failing to effectively enforce its environmental law. The Secretariat of the Commission for Environmental Cooperation (the “Secretariat” of the “CEC”) initially considers submissions to determine whether they meet the criteria contained in NAAEC Article 14(1) and the Guidelines for Submissions on Enforcement Matters under Articles 14 and 15 of the NAAEC (“Guideline(s)”). When the Secretariat determines that a submission meets the criteria set out in Article 14(1), it then determines, pursuant to the provisions of NAAEC Article 14(2), whether the submission merits a response from the NAAEC Party named in the submission. In light of any response from the concerned Party, and in accordance with NAAEC and the Guidelines, 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, or certain circumstances prevail, it proceeds no further with the submission.

2. On 3 November 2015, the above-listed Submitter filed SEM–15–003 (Municipal Wastewater Drop Shafts) (the “submission”) with the Secretariat, in accordance with NAAEC Article 14. The Submitter asserts that the United States is failing to
effectively enforce its environmental law because it does not issue nor require authorized states to issue permits for municipal wastewater drop shafts under the Safe Drinking Water Act’s (SDWA) underground injection control (UIC) program.4

3. On 21 January 2016, the Secretariat determined that the submission met all the admissibility criteria set out in Article 14(1) of the NAAEC and, in light of the factors contained in Article 14(2), requested a response from the United States.5 The United States responded in accordance with Article 14(3) on 15 April 2016 (the “Response”).6

4. Today, the Secretariat determines that the Response does not leave central open questions raised in the submission regarding effective enforcement of the law cited by the Submitter. In accordance with NAAEC Article 15(1) and Guideline 9.6, the Secretariat hereby informs the Council that the submission, in light of the Party’s Response, does not warrant developing a factual record and provides its reasons below.

II. SUMMARY OF THE SUBMISSION

5. The submission was originally summarized in the Secretariat’s Determination of 21 January 2016.7

III. SUMMARY OF THE RESPONSE

A. Background

6. The Government of the United States’ Response in accordance with NAAEC Article 14(3) was prepared by the United States Environmental Protection Agency (EPA).8 EPA, in addressing matters raised in the Secretariat’s 21 January 2016 Determination, asserts two main points:

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4 Submission, at 1-2.
8 Response, supra, cover page.
• EPA’s interpretation is that conveyance of fluids via drop shafts does not meet the SDWA’s definition of underground injection because drop shafts “are not used for the emplacement of fluids below the surface of the ground” in geological formations or substrata but rather “convey fluid from one sewer to a lower sewer as it travels to a wastewater treatment plant.” Thus, EPA concludes that permitting or enforcement under the SDWA’s UIC program would not be appropriate; and

• EPA also asserts that there are alternative regulatory mechanisms available to provide requirements for ground water protection from the operation of these drop shafts and conveyance systems. These include long term Combined Sewer Overflow (CSO) plans developed under Clean Water Act (CWA). EPA argues that expanding the regulatory coverage of the SDWA to cover drop shafts would not reduce environmental harm but potentially undermines the environmental compliance status of CSO conveyance tunnels nationwide and disrupts a practice of great environmental benefit.

7. In support of these two main points, EPA provides background on the SDWA’s UIC program and also on regulatory controls established under the CWA for CSO management through the National Pollutant Discharge Elimination System (NPDES).

8. Regarding the UIC program, EPA states that the threat to ground water was recognized in the late 1960’s and 1970’s and demonstrated by several incidents of ground water contamination in several states. In 1974, the U.S. Congress enacted the SDWA which, in part, regulates underground injection of fluids through wells. These statutory provisions required EPA to establish a regulatory program to prevent underground injection which endangers drinking water sources, to promulgate regulations containing minimum requirements for state UIC programs, and to direct all states and tribes identified by EPA to submit UIC programs meeting those minimum requirements.

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9 Response, at 1-2, 7.
10 Response, at 2.
13 Response, at 2-3. EPA notes that once it approves a state or tribal program as meeting the requirements of the SDWA, the agency administering an approved program has “primary enforcement authority” (e.g., “primacy”) and is responsible for implementing and enforcing it, although EPA continues to maintain the ability to enforce an approved program. For states and tribes without approved programs, EPA administers a federal UIC program. Response, at 3.
9. EPA notes that its UIC program is designed to protect underground sources of drinking water (USDW) from endangerment as a result of “underground injection,” defined in the Act as “the subsurface emplacement of fluids by well injection.” EPA’s response summarizes its implementing regulations which establish six classes of injection wells (Classes I through VI) with requirements based principally on factors related to their potential for endangering underground sources of drinking water. For example:

- Class I wells are for the injection of hazardous, non-hazardous industrial or municipal waste, and radioactive waste below the lowermost formation containing an underground source of drinking water within one quarter mile of the wellbore;
- Class II wells are used to inject fluids brought to the surface in connection with natural gas storage operations or oil or natural gas production, for the enhanced recovery of oil and gas, and for the storage of hydrocarbons that are liquids at standard temperature and pressure; and
- Class V wells, on the other hand, are injection wells that are not included in the other classes of wells, are typically shallow wells used to place a variety of fluids directly below the land surface, and are generally “authorized by rule,” meaning that although the well must comply with all applicable requirements of the UIC program, an individual permit from EPA or an authorized state or tribe is not needed before operation of the well commences.  

10. EPA’s UIC regulation further defines “well injection” as “the subsurface emplacement of fluids through a well.” Well is defined in the regulations as a “bored, drilled, or driven shaft whose depth is greater than the largest surface dimension; or, a dug hole whose depth is greater than the largest surface dimension; or, an improved sinkhole; or, a subsurface fluid distribution system.”

11. In addition to summarizing the regulatory structure of the UIC provisions, EPA references a document it published in 1980, at the time these rules were finalized, Statement of Basis and Purpose for the UIC Program (May 1980). This document, according to EPA, presents the rationale for EPA to propose specific regulatory controls for a variety of underground injection activities. Specifically, EPA states that the document explains “the evolution of the UIC regulations with respect to the ‘various well injection practices, the characteristics of substrata (or

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15 The other three types of wells are listed in EPA’s response at 3-4.
16 Response, at 7; 40 Code of Federal Regulations §144. 3.
17 Id.
18 Available as an attachment here [Statement of Basis].
strata) into which fluids are injected, and the range of methods by which well injection is accomplished.”

12. EPA also provides a brief summary of the history of sewer system construction in the United States. EPA notes that through the first part of the 20th century, most municipalities had combined sewer systems (CSS), which mix domestic, commercial, and industrial wastewaters and stormwater runoff through a single pipe system. EPA states that these systems were designed to handle only some stormwater runoff and “to discharge some of the combined wastewater and stormwater directly to streams, rivers, and other surface water bodies when the volume of flow in the system exceeds the capacity of the CSS or treatment plant (e.g., during heavy rainfall events or snowmelt).” These discharges are known as CSOs and are a priority surface water pollution concern for communities with CSSs and for federal and state regulators.

13. In 1994, EPA issued its CSO Control Policy which, EPA states:

establishes a two-phase process for meeting the requirements of the CWA. First, there are Nine Minimum Controls that every NPDES permit issued to a CSS with CSOs must include. Among these are ‘proper operation and regular maintenance programs for the sewer system and CSOs’ and ‘maximum use of the collection system for storage.’ (59 FR at 18691). Second, ‘permittees with CSOs are responsible for developing and implementing long-term CSO control plans (LTCP) that will ultimately result in compliance with the requirements of the CWA,’ which include attainment of water quality standards.

14. EPA includes information about one way an operator of a treatment plant can reduce CSOs—the construction of storage tunnels to prove additional capacity for wet weather flows in the sewer system. EPA describes such a system:

During wet weather, a portion of the flows is diverted from the conveyance system to those tunnels by gravity drainage or by pumping. The stored sewage/stormwater is temporarily detained in the tunnel and returned to the conveyance system for transport to the

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20 Response, at 4-5.
21 Response, at 5. Essentially, CSOs are discharges from a treatment plant prior to the permitted discharge point, such as an outfall.
22 59 Federal Register 18688 (April 19, 1994).
23 Response, at 5.
treatment plant once downstream conveyance and treatment capacity become available.\textsuperscript{24}

Drop shafts, EPA acknowledges, “are one way in which separate or CSS flows can be transferred from the collection system to the storage tunnel.”\textsuperscript{25}

15. EPA further maintains that the process used to consider alternatives in implementing CSO control measures can include consideration of measures, often from public input, to address ground water impacts from tunnels. For example, EPA cites a tunnel system in Washington, DC where the District used concrete lining and surface grouting to reduce the permeability of the tunnel.\textsuperscript{26} EPA also cited to the City of Indianapolis’ Ground Water Management Plan (GWMP) to control CSOs, which required monitoring of ground water and possible implementation of mitigation measures during the operation of tunnels.\textsuperscript{27}

\section*{B. United States’ Response to the Submission’s Assertions}

1. Submitter’s assertion that the United States is effectively failing to enforce the SDWA’s UIC Program with respect to the construction and operation of municipal wastewater drop shafts.

16. EPA acknowledges that it has previously asserted its position to the Submitter in letters from EPA officials.\textsuperscript{28} The record also shows that the United States has addressed the issues raised by the Submitter in federal district court proceedings, where EPA was requesting the court to enter a consent decree under the CWA to conclude its enforcement case regarding noncompliance of a municipal wastewater treatment system.\textsuperscript{29} These responses indicated that it is EPA’s position that drop shafts are not underground injection wells “intended to emplace fluids below the surface of the ground through a well” but are rather “conveyance systems intended to transport sewage to a POTW [publicly owned treatment works].”\textsuperscript{30}

\begin{itemize}
\item \textsuperscript{24} Id.
\item \textsuperscript{25} Id.
\item \textsuperscript{26} Response, at 6.
\item \textsuperscript{27} Id. The Secretariat notes that the Submitter included additional information about Indianapolis’s CSO plan and the GWMP in its Submission, at 13-15.
\item \textsuperscript{28} EPA responded to the Submitter in letters signed by officials from its Atlanta regional office in 2007 and its Assistant Administrator for Enforcement and Compliance Assurance in 2010. Response, at 8.
\item \textsuperscript{29} See Submission, at Annex B7; See also, response at 11.
\item \textsuperscript{30} Response, at 7-8.
\end{itemize}
17. In its response to the Secretariat, EPA provides additional information and analysis to support this same assertion. Specifically, EPA elaborates on the SDWA’s statutory definition of “injection well” and what the statutory phrase “subsurface emplacement of fluids” means in the context of that definition. EPA acknowledges that:

[w]hile there is no explicit definition in [the] SDWA or EPA regulations of the phrase “subsurface emplacement” it has been the EPA’s interpretation, based on regulations, previous EPA statements and past practice, that the term refers to the purposeful emplacement of fluids into a geologic formation [emphasis added]. In contrast, the use of a drop shaft to convey fluids from one sewer to a lower sewer as they travel through a sewage system to a wastewater treatment plant does not involve the ‘emplacement’ of fluids into a subsurface geologic formation.31

As support for this position, EPA points to its Statement of Basis which states that the UIC regulatory scheme is based on “the characteristics of substrata (or strata) into which fluids are injected.”32

18. Thus, EPA asserts that the emplacement of fluids, even if by a well, into a constructed unit like a tunnel, which is designed to retain fluids, is not the type of injection that the SDWA and its implementing regulations are concerned about.33 EPA also cites to other constructed conveyance systems, such as natural gas distribution systems, as notably absent from the type of UIC wells regulated under Class V.34

19. EPA also responds to the Submitter’s assertion that a decision of the 11th Circuit Court of Appeals in 1997, Legal Environmental Assistance Foundation, Inc. v. EPA 118 F. 3d 1467 (11th Cir. 1997) (“LEAF”), mandates that all forms of injection by well be regulated under the SDWA.35 EPA asserts that the court’s decision, which dealt with whether hydraulic fracturing should be regulated under the UIC program, is not analogous to whether drop shafts, as part of a wastewater treatment conveyance system, should also be regulated. In fact, EPA argues that the LEAF decision actually supports its interpretation of the drop shaft issue because fracturing (the Court defines it as “forcing liquid into a crack in the

31 Response, at 8.
32 Response, at 8; Statement of Basis, at 2.
33 Response, at 8.
34 Id.
ground”) is consistent with the view that the UIC program concerns the subsurface emplacement of fluids [in strata].

20. EPA further asserts that even if the UIC regulations were to be applied to CSS drop shafts, “it would not result in the resolution sought by the submitter. If the drop shafts were to be regulated under the UIC program, they would be categorized as Class V wells. In most cases, Class V wells are authorized by rule. This means that they do not need a permit to operate and there are no specified requirements for monitoring or other construction or operational practices.” Although EPA recognizes that a primacy agency could issue an individual permit if there is potential for endangerment, EPA asserts that “given the low likelihood of environmental harm coupled with the ubiquitous nature of sewage conveyance systems it is unlikely that primacy agencies would expend limited resources on developing individual permits and site specific monitoring requirements.”

21. EPA cites to the legal doctrine adopted by the U.S. Supreme Court in its decision in *Chevron USA Inc. v. National Resources Defense Council*, 467 U.S. 837 (1984). That decision established the concept that in the case of an interpretation of a statute administered by a federal agency, the agency interpretation “is entitled to deference if it is a reasonable interpretation of the statute – not necessarily the only possible interpretation, nor even the interpretation deemed most reasonable by the courts.”

22. Finally, EPA responds to the three additional issues identified by the Secretariat in its 21 January 2016 determination:

The Party, in any response, may also choose to provide other information related to the submission, for example:

(i) whether the United States is aware of any particular situation of potential or actual harm to underground sources of drinking water from the construction and/or operation of municipal wastewater drop shafts;

(ii) whether the United States has ever exercised its enforcement authority under Section 1431 of the Safe Drinking Water Act with respect to a contaminant from any municipal wastewater drop shafts; and

(iii) whether the U.S. EPA or any of the States has ever required monitoring of potential or actual exfiltration from municipal wastewater drop shafts,

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36 Response, at 8-9.
37 Response, at 9.
38 Id.
39 Response, at 9, citing *Chevron*, 467 U.S. at 843-844. EPA also notes that U.S. courts will typically refer to an agency’s interpretation of its own regulations if ‘the interpretation is not plainly erroneous or inconsistent with the regulation,’ citing the U.S. Supreme Court’s decision in *Auer v. Robbins*, 519 U.S. 452, 460 (1997).
similar to that which was discussed in the EPA memorandum dated July 3, 2001;40

23. Regarding the first issue, EPA states that it “is aware of no situation of actual harm to USDWs from the operation of municipal wastewater drop shafts and no case of potential or actual harm to public health resulting from impacts from the operation of such shafts to a public water system.”41 EPA also discusses the situation in Milwaukee which the Submitter references in its submission. The Submitter cites to a State of Wisconsin audit which found that 17.2% of samples collected from ground water monitoring wells associated with Milwaukee’s use of a deep tunnel system were positive for total and fecal coliform.42 EPA points out that in its response to the audit, the Wisconsin Department of Natural Resources (the NPDES permitting agency under the law) and the City of Milwaukee Metropolitan Sewage District (the operator of the treatment system and the holder of the NPDES permit) agreed that filling the deep tunnel to a level greater than the NPDES permit authorizes increases the chances of wastewater contaminating the ground water. The operator agreed that it would abide by this permit condition and continue to conduct ground water monitoring around the tunnel.43

24. Regarding the second issue, EPA responds that it has never used its emergency enforcement authority under Section 1431 of the SDWA with respect to contamination from any drop shafts. EPA notes that this authority can be exercised for an activity even if it is not regulated under the SDWA and summarizes the types of activities which could result in the Agency’s use of this enforcement authority.44

25. With respect to the third issue raised by the Secretariat, EPA responds that because it is not directly responsible for this type of monitoring requirements, which it notes are allowed under regulatory mechanisms such as the CWA,45 it does not have any information “about if and when these requirements may have been applied [with respect to potential or actual infiltration from drop shafts] or other situations.”46

40 Determination, at 9.
41 Response, at 9.
42 Submission, at 11-12.
43 Response, at 10. EPA also responds to the Submitter’s reference to ground water contamination found near the Milwaukee Red Star Yeast Plant in 1999 and a corresponding state court decision from 2003 regarding the claim that the plant had contaminated a well owned by a nearby company. EPA asserts that the court decision did not make any finding with respect to what caused the contamination but directed the trial court to make findings of fact. Because the case was dropped, EPA notes, no court findings were ever made.
44 Response, at 10-11.
45 See discussion, supra, at para. 15.
46 Response, at 11.
26. Based on all of the information provided in its response, EPA concludes:

Therefore, the United States believes that the Secretariat should not request authorization from the Council to develop a factual record on the Submitter’s allegations of failure by the United States to effectively enforce its environmental law because preparation of a factual record on those allegations would not significantly advance the goals of the North American Agreement on Environmental Cooperation. The assertion that the United States is failing to effectively enforce the UIC program with respect to the construction and operation of municipal wastewater drop shafts is based on an interpretation of SDWA that has never been adopted by the EPA. If the EPA were to adopt an interpretation where all operators of sewage conveyance systems would be subject to the UIC requirements, it could significantly increase the number of reports that are submitted to primacy agencies, yet it would be unlikely to yield meaningful public health and environmental benefits, and potentially undermine the current public health and environmental benefits from CSO management.47

IV. SECRETARIAT’S ANALYSIS

27. Article 15(1) of NAAEC now requires the Secretariat to consider whether the submission, in light of the United States’ response, warrants developing a factual record. Article 15(1) also requires that if the Secretariat determines that a factual record is warranted, it must so inform the Council and provide reasons for its determination. As the Secretariat has noted in a previous determination, “[u]nder NAAEC 15(1), the Secretariat has broad discretion to determine whether or not a submission warrants the development of a factual record.”48 One factor motivating the Secretariat to recommend a factual record in previous NAAEC Article 15(1) determinations is whether, after considering the response in light of the submission, any “central open questions” remain on which a factual record could shed light.49 The Guidelines further provide that if a Party informs the Secretariat that its inaction does not constitute a failure to effectively enforce its environmental law, the Secretariat “is to consider whether the Party has included sufficient information.”50

47 Response, at 12.
48 See SEM 01-001 (Cytrar II), Secretariat Determination Pursuant to Article 14(3) (13 June 2001) at 5, <http://www.cec.org/Storage/70/6436_01-1-DET14_3-E.pdf>
50 Guidelines, para 9.5.
28. The Submitter’s main assertion—that municipal wastewater drop shafts should be regulated under the SDWA’s UIC program—is essentially directed to the legal interpretation of a statute by the enforcement authority. Although EPA includes a number of reasons why the submission does not warrant the development of a factual record, EPA’s primary argument is that the SDWA’s UIC program cannot be enforced in the way that the Submitter maintains. In other words, EPA disagrees with the Submitter’s legal interpretation and asserts that there is nothing to enforce because the SDWA’s UIC provisions do not apply to the facts of this submission.

29. The Secretariat first notes that EPA’s response to the submission is much more comprehensive than any prior response EPA has provided on this issue. The Secretariat finds that the EPA response includes sufficient information, under the NAAEC, to show that the SDWA’s UIC program was never intended to apply to the injection of fluids by a well into a contained system, such as a wastewater treatment tunnel system. EPA has persuasively shown that the UIC program was intended to regulate the injection of fluids into a subsurface geological formation (or substrata of the earth). EPA points to its Statement of Basis, published in 1980 and implemented by EPA and primacy States since then, which clearly references this assumption. In addition to the language cited in the EPA response and discussed above, the Secretariat also points to the following language in the Statement of Basis:

In formulating these classifications, EPA gave substantial weight to a number of considerations. First the Agency concluded that wells which inject into strata nearest the land surface should, as a general matter, be classified separately from those which inject into strata at greater depth. The method of injection which wells use is frequently dependent upon the injection horizon into which they deposit fluids. Wells which inject into strata near the land surface often inject by use of simple gravity. Often crudely constructed, they can simply be holes dug or bored into the ground, the sides of which may be stabilized by brick, stone, timber, or other materials in the well. They can function as convenient dumping sites for wastes, or, in other instances, can serve beneficial purposes, such as recharging groundwater supplies or creating a subsurface barrier to saltwater intrusion.

Wells which inject into lower strata are usually constructed and operated differently from wells which inject into strata near the land surface. Such wells are drilled rather than dug or bored, and emplace fluids into the subsurface by use of more sophisticated technology, materials, and

51 In the interest of transparency and the fact that the Submitter’s assertion met all of the admissibility requirements of the NAAEC, the Secretariat determined that a response from the United States was necessary. But see discussion, infra, at para. 32.

52 See, para. 17-18, supra.
equipment. Wells of this sort require the use of casing and cementing. Escape of injected fluids into sources of drinking water is prevented by such casing, and by tubing and packer or other methods. Injection is accomplished by either the force of gravity or the application of additional mechanical pressure to overcome the natural friction and hydrostatic, resistance of the receiving formation.53 [emphasis added].

30. Thus, although drop shafts may fit the regulatory definitions of “injection well,” “well,” and “fluid,”54 they do not fall within the scope of the statutory definition in the SDWA of “underground injection.” That term is defined as “the subsurface emplacement of fluids by well injection [emphasis added].” Although neither the Act nor EPA’s implementing regulations define “subsurface emplacement,” the two words cannot be ignored when examining the scope of the law. It is clear from the information presented by EPA in its response that they mean “putting into a geological formation of the earth [emphasis added].”55 The Secretariat is convinced that EPA’s legal interpretation is reasonable, namely that the UIC program does not apply to drop shafts as defined in this Submission because these systems, even if they are wells, do not put fluids into the earth’s subsurface.

31. In addition, the Secretariat recognizes that EPA and delegated states and tribes have authority to regulate drop shafts under the CWA and the NPDES permitting process. This is evident from EPA’s long-standing CSO enforcement policy, as well as various enforcement actions the Agency and its state partners have brought, some of which the Submitter has participated.

32. Further, the Secretariat notes that this submission does not involve the type of issue which a Factual Record was designed to address. Where a legal question such as this has been raised previously, the Secretariat has refused to request the authority from the Council to develop a factual record because the submissions process is not a review how the Party’s legal interpretation of the law.56 In that determination, the Secretariat stated:

Development of a Factual Record does not entail a legal restatement or interpretation, application, or revision of how domestic courts and/or a branch of government interpret domestic environmental laws. The latter are the activities of [Party] branches including the judiciary. The Submitter is in asking the Secretariat for a legal restatement, interpretation, and application

53 Statement of Basis, at 3-4.
54 Determination, at 4.
55 The common defition of “subsurface” is “the stratum or strata below the earth's surface”, and for “emplacement” it is “the act of putting something into position.” See, http://www.merriam-webster.com/dictionary/subsurface and http://www.merriam-webster.com/dictionary/emplacement.
56 See, submission SEM 07-001 (Minera San Xavier), Secretariat Determination Pursuant to Artile 15(1) (15 July 2009) at 18-19.
of [the law in question], which is something the Secretariat has no authority to do.\textsuperscript{57}

The Secretariat makes the same finding with respect to the issue raised in this submission. Further study of the matter raised in the submission through a Factual Record would likely interfere with EPA’s legal interpretation of the inapplicability of the SDWA UIC’s provisions to the activity described in this submission.

33. Finally, the Secretariat finds that EPA’s response to the three other issues identified in the Secretariat’s determination of 21 January 2016 are sufficient.

V. DETERMINATION

34. The Secretariat finds that, having considered both the submission and response, no central questions remain open and that a Factual Record is not warranted with respect to the assertions in submission SEM-15-003 concerning the United States’ alleged failures to effectively enforce the UIC provisions of the SDWA.

35. In accordance with NAAEC Article 15(1), and pursuant to Guideline 9.8, the Secretariat hereby notifies the Submitter and the Council that the process is terminated with respect to submission SEM-15-003.

Respectfully submitted on this 15\textsuperscript{th} day of June, 2016.

\textit{Secretariat of the Commission for Environmental Cooperation}

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per: César Rafael Chávez
Executive Director

cc: Jane Nishida, US Alternate Representative (Acting)
Louise Métivier, Canada Alternate Representative
Enrique Lendo, Mexico Alternate Representative
Submitter

\textsuperscript{57} Id.