



DATE DOWNLOADED: Wed Apr 12 03:00:42 2023

SOURCE: Content Downloaded from [HeinOnline](#)

Citations:

Please note: citations are provided as a general guideline. Users should consult their preferred citation format's style manual for proper citation formatting.

Bluebook 21st ed.

Stephen Gorove, Contamination and the Outer Space Treaty, 14 Proc. on L. Outer Space 63 (1971).

ALWD 7th ed.

Stephen Gorove, Contamination and the Outer Space Treaty, 14 Proc. on L. Outer Space 63 (1971).

APA 7th ed.

Gorove, S. (1971). Contamination and the Outer Space Treaty. Proceedings on the Law of Outer Space, 14, 63-66.

Chicago 17th ed.

Stephen Gorove, "Contamination and the Outer Space Treaty," Proceedings on the Law of Outer Space 14 (1971): 63-66

McGill Guide 9th ed.

Stephen Gorove, "Contamination and the Outer Space Treaty" (1971) 14 Proc on L Outer Space 63.

AGLC 4th ed.

Stephen Gorove, 'Contamination and the Outer Space Treaty' (1971) 14 Proceedings on the Law of Outer Space 63

MLA 9th ed.

Gorove, Stephen. "Contamination and the Outer Space Treaty." Proceedings on the Law of Outer Space, 14, 1971, pp. 63-66. HeinOnline.

OSCOLA 4th ed.

Stephen Gorove, 'Contamination and the Outer Space Treaty' (1971) 14 Proc on L Outer Space 63

Please note: citations are provided as a general guideline. Users should consult their preferred citation format's style manual for proper citation formatting.

-- Your use of this HeinOnline PDF indicates your acceptance of HeinOnline's Terms and Conditions of the license agreement available at

<https://heinonline.org/HOL/License>

-- The search text of this PDF is generated from uncorrected OCR text.

-- To obtain permission to use this article beyond the scope of your license, please use:

[Copyright Information](#)

CONTAMINATION AND THE OUTER SPACE TREATY

By

Stephen Gorove*

The now well-known Outer Space Treaty of 1967 created, for the first time, certain specific international obligations pertaining to the prevention of contamination of outer space from Earth and avoidance of adverse changes in the environment of the Earth resulting from the introduction of extraterrestrial matter.

The relevant provisions have been incorporated in Article IX of the Outer Space Treaty. This article was actually developed from an earlier United Nations' resolution (Res. 1962) which was unanimously passed in December 1963. The article, in a sense, was an attempt to resolve the problem of reconciling the freedom of exploration and use of outer space with the need to ensure that no adverse effects will take place as a result of such exploration, and there will not be any harmful interference with activities in space.

The article contains four sentences and, strictly speaking, only the second sentence seems to deal with contamination problems. However, because of their interrelated nature, it appears essential to give an account of all four sentences.

The first sentence deals with cooperation and mutual assistance and due regard for corresponding interests of all parties. The second sentence deals with pursuance of studies and avoidance of harmful contamination of outer space and adverse changes in the environment of the earth, and the third and fourth sentences deal with what could be regarded as prevention of nuisance, that is, potentially harmful interference with activities in outer space and stipulate international consultation.

As a preliminary remark I would like to observe that Article IX, despite the great importance of the subject matter, is unfortunately limited to the parties to the treaty and nowhere in the article do we find a declaration of some general purpose or intent of a broader scope which we find in some other provisions of the Outer Space Treaty.

Turning specifically to the first sentence, it is stated that in the exploration and use of outer space, including the moon and other celestial bodies, the parties shall be guided by the principle of cooperation and mutual assistance and shall conduct all their activities with due regard to the corresponding interests of all parties.

Of course, just what does a state have to do to live up to this obligation is not specified. Furthermore, what kind of cooperation, what type of assistance, and in what manner, are we talking about? Whether this refers possibly to matters involving pollution or other matters is not stated. Whether the word "guided" means that the state must follow these principles or whether it may consider them is not entirely clear.

What is meant by "due regard," and who determines it? Most likely, it will be determined and left up to each individual state. What is the meaning of "corresponding interests," does this involve the state's own interest? "Corresponding" usually means something alike or similar in purpose or function, so in that sense it may involve the state's own interest.

*U.S.A. Chairman of the Graduate Program of the School of Law and Professor of Law, University of Mississippi School of Law.

The reference to "all parties," of course, raises the question of those who are not parties to the treaty. Do their interests not have to be taken into account?

The second sentence is not derived from the earlier mentioned United Nations resolution. This is a new addition to the Outer Space Treaty which came about as a compromise between Soviet and United States proposals. Perhaps this is the reason for the lack of clarity in this sentence.

The sentence states that the parties to the treaty shall pursue studies of outer space including the moon and celestial bodies and conduct exploration of them so as to avoid their harmful contamination and adverse changes in the environment of the earth resulting from the introduction of extraterrestrial matter and, where necessary, shall adopt appropriate measures for this purpose.

It is interesting to note that this requirement that they shall "pursue studies," is irrespective of whether they engage in any activities in outer space, so apparently all parties must pursue studies.

Presumably, these studies will be pursued by the parties proportionate to their ability, to the costs, values and risks involved, and perhaps the studies will be conducted with the idea to avoid duplication. Just what kind of studies will the parties have to pursue is also not clear. Possibly, the studies could be required to relate to contamination since the rest of the sentence deals with contamination but this is left unclear.

It is interesting to note also that the reference to the word "them" leaves the reader uncertain whether it refers to both outer space as well as celestial bodies. This is something that could have been made clearer.

Furthermore, it should be pointed out that the only obligation is to avoid "harmful" contamination. Therefore other contamination which is not harmful is apparently permissible. Also, there is nothing said about harmful contamination of the earth. The reference is only to harmful contamination of outer space and possibly of celestial bodies.

Also, it is not clear to whom must the contamination be harmful. In a sense, almost anything may be harmful to some people and beneficial to others. People have different value schemes.

What is the meaning of contamination? Does this mean pollution really, or are we dealing here with the spread of impurity as well as infection, in other words, biological types of contamination? It seems unclear.

The parties are not only required to avoid harmful contamination but also to avoid "adverse changes in the environment of the earth resulting from the introduction of extraterrestrial matter." To whom do the changes have to be adverse? All changes benefit some. Does the sentence refer to climatic changes or all the other types of changes? Furthermore, the reference is to the environment of the earth, but apparently the creation of adverse changes in the environment of celestial bodies is permissible unless the changes would also amount to harmful contamination. Also, it is not quite clear whether or not the "introduction of extraterrestrial matter," has to be intentional.

What about the example of the space mirror? Does this include introduction of extraterrestrial matter? The moon rocket is apparently all right so long as there are no adverse changes in the environment of the earth.

To fulfill their obligation with respect to the avoidance of harmful contamination and adverse changes, the parties are required, "where necessary," to "adopt appropriate measures." But who determines what is "necessary" or "appropriate" and by what standard? How many and what kind of measures are we talking about? Should international consultation be used here? The sentence does not state it, even though the next sentence deals with problems of international consultation. The third sentence states, in fact, that if the party "has reason to believe" that an activity or experiment planned by it or its nationals would cause "potentially harmful interference" with activities of other parties in the peaceful exploration and use of outer space, it shall undertake appropriate international consultations before proceeding with such activity or experiment.

Here again, I believe, the stipulation provides a relatively easy way to get around it for anyone. The phrase "reason to believe" seems to give an opportunity for any party to be lax in censuring itself. What is "potentially harmful interference?" Does this refer to pollution? Perhaps it could include pollution. It may have a much wider scope, and activities similar to the West Ford project could fall under it; perhaps not.

Reference to other "parties" in the third sentence seems to indicate that if only one party is affected no international consultations are required because the word is used in the plural. Actually, instead of international consultations, Japan proposed consultations with the Secretary General of the United Nations. This, however, was not adopted. The reference to "international consultations" does not indicate with whom you have to consult. You may consult with your friends or your enemies. Perhaps COSPAR could have been included as a possible forum of consultation.

Also, there is no indication of how many states a party has to consult. There is no procedure outlined and no authority set up to determine the procedure. There is no provision in case the consultations end in a deadlock. There is no indication anywhere that a party must follow another party's recommendation. So as long as there is consultation, the requirement is satisfied.

The next and last sentence deals with the party which has reason to believe that an activity or experiment planned by another party in outer space would cause potentially harmful interference with activities in the exploration and use of outer space. Such a party may request consultation concerning the activity or experiment.

Again this is a somewhat vague provision, just like the previous one. It does not indicate to whom the party has to turn for consultation. The party may consult with anyone although it would seem very likely that the consultation would include the party whose experiment is interfering with some other experiments or activities in space.

The fourth sentence incorporates a more general provision than the previous one because interference with the activities of any state, not just the activities of a state party to the treaty would be included.

Unfortunately, nothing is said as to what happens if after the request of consultation, the request is turned down. There is no definite obligation involved. One party may request consultation and the other party may turn it down. This also makes it apparent that the other party does not have to follow any recommendation.

The foregoing provisions of the Outer Space Treaty constitute an important initial step toward preventing adverse changes in the environment of the earth from outer space as

well as in reducing the chances of harmful contamination of outer space, including celestial bodies. At the same time, our brief scrutiny seems to indicate that further steps will have to be taken by the international community as man's exploration of outer space assumes more significant proportions.

I believe that the formulation of an international code of conduct regarding pollution and contamination from outer space is essential. Also, there seems to be a vital need for the establishment of an international environmental control authority regarding space, to determine and verify and possibly to have powers to adjudicate and halt undesirable interference with the environment.

NOTES

This paper is an elaboration of the author's remarks presented on December 28, 1971, in a panel discussion on "Pollution and Outer Space" before the annual meeting of the Association of American Law Schools in Chicago, Illinois.

1. Cf. Gorove, "Legal Aspects of Pollution and Outer Space," infra.
2. Article IX reads as follows:

In the exploration and use of outer space, including the moon and other celestial bodies, States Parties to the Treaty shall be guided by the principle of co-operation and mutual assistance and shall conduct all their activities in outer space, including the moon and other celestial bodies, with due regard to the corresponding interests of all other States Parties to the Treaty. States Parties to the Treaty shall pursue studies of outer space, including the moon and other celestial bodies, and conduct exploration of them so as to avoid their harmful contamination and also adverse changes in the environment of the earth resulting from the introduction of extraterrestrial matter and, where necessary, shall adopt appropriate measures for this purpose. If a State Party to the Treaty has reason to believe that an activity or experiment planned by it or its nationals in outer space, including the moon and other celestial bodies, would cause potentially harmful interference with activities of other States Parties in the peaceful exploration and use of outer space, including the moon and other celestial bodies, it shall undertake appropriate international consultations before proceeding with any such activity or experiment. A State Party to the Treaty which has reason to believe that an activity or experiment planned by another State Party in outer space, including the moon and other celestial bodies, would cause potentially harmful interference with activities in the peaceful exploration and use of outer space, including the moon and other celestial bodies, may request consultation concerning the activity or experiment.