

# Floating Degassing on Dutch Rivers: International Rights and Obligations of the Dutch State

Uncontrolled degassing is the process of letting any lingering vapours in the tanks of ships carrying oil or certain liquid chemicals into the open air. Floating degassing happens on a regular basis in an uncontrolled way in Dutch rivers. The official position of successive Dutch governments has been that the international legal framework on inland navigation does not allow individual states to regulate floating degassing unilaterally. According to various Minister for Water and Infrastructure the Netherlands should wait until the 2017 Amendments to the Convention on the Collection, Deposit, and Reception of Waste Generated During Navigation on the Rhine and Other Inland Waterways (CDNI) are ratified by all member states and enter into force for implementing a ban on floating degassing on Dutch inland waterways. This article examines the applicable international legal framework on floating degassing. It finds that the international legal framework does offer governments adequate policy space to take unilateral domestic actions to regulate floating degassing to protect public health and the environment. The international legal agreements referred to by the Dutch government to justify its inability to regulate contain no specific provisions prohibiting states to regulate floating degassing. Even more, existing international legal rules on degassing include specific provisions granting states the right to regulate to protect public health and the environment. The article further shows that there are valid legal arguments under international human rights law for the claim that the Government is actually required to regulate floating degassing to protect the right to life and the respect for private and family life of its residents, as guaranteed by the European Convention on Human Rights.

## 1. Introduction

Floating degassing is a widespread practice, by which vessels in many Dutch rivers release toxic vapours into the air after unloading their cargos. This practice, well-known among

professionals working in the maritime sector in the Netherlands, remains relatively unknown to the general public in the Netherlands, although it has been covered by the media in the past. The main problem with this practice is that the vapours released in the air are carcinogenic and harmful to public health and the environment. The Dutch State has often maintained to be willing to ban floating degassing but being unable to do so because of international law. For this and other reasons, the dossier on floating degassing has been stalling for decades.

In January 2023, we have published a report on the international rights and obligations on floating degassing in which we argued that the Dutch government can regulate floating degassing. The report has been widely discussed in the media and the question on floating degassing has garnered renewed attention.<sup>1</sup> In response to the report, on 24 January 2023, the Minister of Infrastructure and Water Management Harbers maintained that banning floating degassing unilaterally through a national legislation is not possible.<sup>2</sup>

In order to shed light on this discussion, and to constructively stimulate a much-needed dialogue on the international law dimensions of floating degassing, this article reproduces the main insights of the report published on January 2023. Accordingly, the questions addressed in this article are the following: is there a prohibition for the Netherlands to ban floating degassing under international law, and more particularly under the international legal framework on the carriage of goods in European inland waterways? Also, in asserting that The Netherlands cannot regulate degassing, the Ministry has contextually acknowledged that uncontrolled degassing causes harm to public health and the environment. This raises an important human rights question: In light of the harm to public health and the environment caused by floating degassing, is the Dutch State under an obligation to introduce a national ban on degassing pursuant to national and/or international law?

\* Abdurrahman Erol, PhD Researcher at Erasmus School of Law and Alessandra Arcuri, Professor of International Economic Law at Erasmus School of Law. This article draws heavily on the research that was initially solicited by public broadcasting company Omroep Flevoland. It has been conducted thanks to a generous grant of the Erasmus Initiative Dynamics of Inclusive Prosperity. The research has been conducted with the aim of clarifying essential legal questions for the protection of public health and the environment. The authors declare to have no conflict of interests. The authors are thankful to Ellen Hey, Leonie Reins, Seline Trevisanut, Federica Violi, Menelaos Markakis and Vivian van der Kuil for valuable comments on the earlier versions of the report. All remaining errors and omissions are the sole responsibility of the authors. The report can be accessed here: [eur.nl/en/media/2023-01-floating-degassing-netherlands-international-law-perspective0](https://eur.nl/en/media/2023-01-floating-degassing-netherlands-international-law-perspective0).

1. See e.g. 'Kamer jarenlang verkeerd geïnformeerd over varend ontgassen, verbieden kan wél' (*Omroep Flevoland*, 23 January 2023) [omroepflevoland.nl/nieuws/318065/kamer-jarenlang-verkeerd-geinformeerd-over-varend-ontgassen-verbieden-kan-wel](https://omroepflevoland.nl/nieuws/318065/kamer-jarenlang-verkeerd-geinformeerd-over-varend-ontgassen-verbieden-kan-wel), accessed 5 February 2023; 'Verbod op wegblazen van gifstoffen in binnenvaart kan juridisch wél' (*NOS*, 23 January 2023) [nos.nl/artikel/2460886-verbod-op-wegblazen-van-gifstoffen-in-binnenvaart-kan-juridisch-wel](https://nos.nl/artikel/2460886-verbod-op-wegblazen-van-gifstoffen-in-binnenvaart-kan-juridisch-wel), accessed 5 February 2023; Martin Dekker, 'Hoogleraar EUR: Nederland kan en moet varend ontgassen nu al verbieden' (*Binnenvaartkrant*, 23 January 2023) [binnenvaartkrant.nl/hoogleraar-eur-nederland-kan-en-moet-varend-ontgassen-nu-al-verbieden](https://binnenvaartkrant.nl/hoogleraar-eur-nederland-kan-en-moet-varend-ontgassen-nu-al-verbieden), accessed 5 February 2023.

2. 'Kamerbrief over varend ontgassen' (24 January 2023) [rijksoverheid.nl/documenten/kamerstukken/2023/01/24/varend-ontgassen](https://rijksoverheid.nl/documenten/kamerstukken/2023/01/24/varend-ontgassen), accessed February 2023.

This article is structured as follows. Section 2 will provide a brief factual overview on the practice of floating degassing in Dutch rivers. Section 3 presents the main positions of the Dutch government vis-à-vis the international legality of regulating floating degassing. In Section 4, the international legal framework relating to floating degassing is explained. It is shown that the current international legal framework on degassing does not establish a prohibition for the Dutch Government to regulate and ban floating degassing of tankers on Dutch inland waterways. In Section 5, the article delves into the second question. Drawing on the well-known case *Urgenda v The Netherlands*, it is shown that international human rights can be directly enforced into Dutch domestic legal system. Then, it is argued that in face of the threats to public health and the environment posed by floating degassing the Dutch Government is most likely obliged to impose a ban on floating degassing. Section 6 concludes.

## 2. A Bird's Eye View on Floating Degassing

After unloading ships carrying liquid volatile hydrocarbon products, part of the cargo remains in the tanks as vapours. These vapours have to be degassed before ships can be loaded again in order to avoid contamination of subsequent cargo.<sup>3</sup> Degassing refers to the operation of removing the vapours remaining in tanks of ships carrying oil and liquid chemicals. The issue of degassing is particularly relevant for the Netherlands since it has the highest concentration of tankers carrying liquid cargo, including oil and liquid chemical substances, in all of Western Europe.<sup>4</sup> Estimates of 2014 indicate that more than 3,000 vessels in the Netherlands carrying petroleum distillates, benzene, ethanol, gasoline and other hydrocarbons and flammable liquids had to degas while sailing unloaded from one location to another.<sup>5</sup>

At this moment, there is one operating degassing station in the Netherlands, in Moerdijk. On average, the duration of degassing is about 8 hours. Additionally, ships should take into account the period of waiting at and circumnavigating to the degassing station which may amount to 10 hours.<sup>6</sup> The average cost of degassing is around 6,400 euros per ship.<sup>7</sup> Since 2006, there is a national ban in the Netherlands on degassing petrol. Degassing benzene is also prohibited in certain regions such as South Holland, North Holland, North Brabant and Utrecht.<sup>8</sup> Other substances can still be degassed under the regime established by the **European Agreement**

**concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN)**<sup>9</sup> which is the primary source concerning the international legal regime on degassing in Europe.

## 3. The Dutch Government's Position

The position of the Dutch Government on the issue of degassing can best be seen in the letters written to the Parliament by the successive ministers of Infrastructure and Water Management, as well as in the ministerial responses to questions of the member of the parliaments (MPs) on this matter.

In her letter to Parliament in 2018,<sup>10</sup> stating that the regime on the national waterways is governed by the Mannheim Act, the Minister repeatedly asserted that treaty parties cannot unilaterally set rules on the so-called 'Act Waters' and cooperation with the other states is required.<sup>11</sup> The Minister claims that the Dutch delegation was eventually able to convince other Rhine-riparian states about the urgency of the matter, and in 2017 the Amendments to the **Convention on the Collection, Deposit and Reception of Waster Generated during Navigation on the Rhine and Other Inlands Waterways (CDNI)** were enacted. The initial expectations of the Dutch Government were that the Amendments would be ratified by all state parties in 2020 and in mid-2020 and they would start progressively entering into force in three phases.

More insights about the Government's position on this issue can be gained from the ministerial responses to the questions of MPs. In one of her responses,<sup>12</sup> then Minister stated that she was aware of the news that large amounts of carcinogenic substances were released 100 to 400 times a year from tankers on the Markermeer and IJsselmeer. She stated that the Netherlands cannot independently introduce a national ban on floating degassing because of the CDNI Convention. Even though she acknowledged that floating degassing is harmful to public health and the environment, she stressed that ratification of the CDNI Amendments by the other parties should be awaited. She expected that the ratifications would be completed in early 2024 and that the progressive implementation of the ban would start in mid-2024. She stated that the provincial environmental agencies are not competent

3. Klaas Koop, 'Effects of Future Restrictions in Degassing of Inland Tanker Barges' (2016) 3.

4. Provincie Flevoland, 'Stop varend ontgassen in Flevoland' (11 May 2022) [lokaaleroepzeewolde.nl/zeewolde-nieuws/regionieuws-uit-flevoland/stop-varend-ontgassen-in-flevoland](https://lokaaleroepzeewolde.nl/zeewolde-nieuws/regionieuws-uit-flevoland/stop-varend-ontgassen-in-flevoland), accessed 20 January 2023.

5. Koop (n 3) 11.

6. Koop (n 3) 21.

7. Ibid. The whistle-blower, Ton Quist, calculates a different, slightly higher amount. In one of his emails to us, he indicated that an average tanker of 110x11.75 meters has a capacity of 3,700 m<sup>3</sup> and degassing at an installation costs 1.25 euros per m<sup>3</sup>. Making the calculation after taking also the time lost into account, the total amount reaches to 7,250 euros.

8. Ministerie van Infrastructuur en Waterstaat, 'Ontgassen binnenvaarttankschepen – Gevaarlijke stoffen binnenvaart – Inspectie Leefomgeving en Transport (ILT)' (Onderwerp, 20 April 2022) [ilent.nl/onderwerpen/gevaarlijke-stoffen-binnenvaart/ontgassen-binnenvaart-tankschepen](https://ilent.nl/onderwerpen/gevaarlijke-stoffen-binnenvaart/ontgassen-binnenvaart-tankschepen), accessed 27 July 2022. See also: L.M.H. Loefen, 'Reducing Benzene Emissions by Degassing to the Atmosphere in a Transport Network of a Petrochemical Company – Eindhoven University of Technology Research Portal' (Master Thesis, Eindhoven University of Technology 2017) 2.

9. 'The European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN)' (2000).

10. 31409-202 Brief regering d.d. 5 december 2018 – C. van Nieuwenhuizen Wijbenga, Minister van Infrastructuur en Waterstaat, Toelichting op het varend ontgassen van tankschepen [tweedekamer.nl/downloads/document?id=2018D58180](https://tweedekamer.nl/downloads/document?id=2018D58180), accessed 29 August 2022.

11. See also Martin Dekker, 'Minister Kan Varend Ontgassen in Nederland Wél Verbieden' (*Binnenvaartkrant*, 8 June 2022) [binnenvaartkrant.nl/minister-kan-varend-ontgassen-in-nederland-wel-verbieden](https://binnenvaartkrant.nl/minister-kan-varend-ontgassen-in-nederland-wel-verbieden), accessed 28 July 2022.

12. 'Kamervraag – Varend Ontgassen in Flevoland' (23 November 2021) [openkamer.org/kamervraag/2021Z18636/](https://openkamer.org/kamervraag/2021Z18636/), accessed 29 August 2022.

to enforce provincial bans on degassing since they are not valid on national waters.<sup>13</sup>

In another response to similar questions,<sup>14</sup> in addition to her above response, the Minister stated that the Netherlands is bound by treaty law and CDNI Amendments provide that the ban on degassing will enter into force only after six months from the last contracting state has ratified the Amendments.<sup>15</sup> Therefore, the Netherlands cannot independently introduce a national ban. Such a unilateral ban would be, according to the Minister, legally invalid and cannot be enforced. The Minister also noted that ADN provides no basis for a total ban on degassing. Lastly, she asserted that an investigation on the presence of concentrations of substances of very high concern has no added value because it is already factually clear that floating degassing is harmful to public health and the environment.

#### 4. International Legal Framework

The international legal framework on the degassing of harmful vapours by vessels on inland waterways consists of four different legal sources. These are the Mannheim Convention (1868), ADN (2000), CDNI (1996) along with its 2017 Amendments as well as EU Directive 94/63/EC of 20 December 1994. The Mannheim Convention has a more general focus and concerns navigation on the Rhine river and its estuaries from Basel to the open sea. ADN establishes a technical legal framework relating to the safety of international carriage of dangerous goods by inland waterways. In its Annexed Regulations, there is a section specifically on the degassing of empty vessel tanks.<sup>16</sup> The CDNI, signed and ratified by six Rhine-riparian states,<sup>17</sup> covers the collection, deposit and reception of waste generated during navigation on the Rhine and other connected inland waterways and the 2017 Amendments<sup>18</sup> specifically deal with the treatment of gaseous residues generated during navigation. Finally, the EU Directive is applicable in all the EU Member States but has a rather limited scope, dealing only with emissions of VOCs resulting from the storage of petrol and its distribution from terminals to service stations. It is to be noted that all parties of the Mannheim Convention are also parties to ADN and CDNI. General rules on interpretation of international law help to clarify the relation and, if necessary, the way to apply conflicting provisions. As codified by Article 30 of the Vienna Convention on the Law of Treaties (VCLT), under

public international law, when more treaties relate to the same subject matter, in case of conflicts, the provisions of later treaty apply. Also, when specific provisions exist on a specific subject matter, otherwise generally regulated, they apply. This is the maxim of *lex specialis derogate lex generali*, which is generally accepted as general principle of law. ADN and CDNI can be considered as *lex posterior* and, in relation to the question of regulating degassing, as *lex specialis vis-à-vis* the Mannheim Convention.

##### 4.1. Framework under ADN

Currently, ADN establishes the general legal framework on floating degassing. It is aimed at increasing safety, contributing to the environmental protection, facilitating maritime transport and promoting trade.<sup>19</sup> In terms of scope, ADN and its Annexed Regulations<sup>20</sup> primarily cover loading, carriage, unloading and handling of dangerous goods. There are also provisions regarding the use of packaging, tanks and bulk cargo transport units, consignment procedures, vessel crews, equipment, operation and documentation, construction and operation of vessels carrying these dangerous substances, classification societies and procedures for inspections, training and examination of experts.<sup>21</sup>

Article 6 recognises the sovereign right of states ‘to regulate or prohibit the entry of dangerous goods into its territory *for reasons other than safety during carriage*.’<sup>22</sup> As further discussed below, the protection of public health and the environment can plausibly be considered as ‘reasons other than safety.’ Article 9 further stipulates that ‘the transport operations to which this Agreement applies *shall remain subject to local, regional or international regulations* applicable in general to the carriage of goods by inland waterways.’<sup>23</sup>

Specific provisions in the ADN concerning degassing can be found in the Annexed Regulations, in Chapter 2 ‘Tank Vessels’ of Part 7 ‘Requirements Concerning Loading, Carriage, Unloading and Handling of Cargo’. Accordingly, the primary rule is the following:

‘7.2.3.7.0 Gas-freeing of empty or unloaded cargo tanks is permitted under the conditions below *but only if it is not*

13. Recently, in its judgement, the Hague District Court concluded that provincial bans on floating degassing adopted by provincial governments are applicable also on national waters: ‘Nu het provinciaal ontgassingsverbod tevens ziet op vaarwegen in beheer bij het Rijk en dus ook op de [rivier] is verweerder tevens bevoegd om bij overtreding daarvan door schepen tijdens de vaart op de [rivier] handhavend op te treden.’ See: Rb. Den Haag 11 oktober 2022, ECLI:NL:RBDHA:2022:10721 uitspraken.rechtspraak.nl/#!/details?id=ECLI:NL:RBDHA:2022:10721, accessed 20 January 2023.

14. ‘Kamervraag – Het Varend Ontgassen van Kankerverwekkend Gif’ (23 November 2021) [openkamer.org/kamervraag/2021Z18639/](https://openkamer.org/kamervraag/2021Z18639/), accessed 29 August 2022.

15. Ibid. ‘[H]et Scheepsafvalstoffenverdrag, waarin het verbod is geregeld, bepaalt dat het verbod van kracht wordt zes maanden nadat de laatste verdragsstaat het verbod heeft opgenomen in de eigen nationale wetgeving. Nederland is gebonden aan de in dit verdrag opgenomen verplichtingen en kan daarom niet eigenstandig een nationaal verbod invoeren.’

16. ‘The European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN)’ (2000) Annexed Regulations 7.2.3.7.

17. These are the Netherlands, Belgium, Luxembourg, Germany, France and Switzerland.

18. The Amendments have not been ratified by France and Switzerland. For further explanations, see Section 4.2.

19. ‘The European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN)’ (n 9) Preamble.

20. According to ADN, the Annexed Regulations form an integral part of the Convention and any reference to ADN implies a reference to the Annexed Regulations. Ibid. Article 2.

21. ‘About the ADN | UNECE’ [unece.org/about-adn](https://unece.org/about-adn), accessed 25 July 2022.

22. ‘The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN)’ (n 9) Article 6.

23. Ibid. Article 9.

prohibited on the basis of international or domestic legal requirements' (emphasis added).<sup>24</sup>

This is a key rule, which unambiguously provides that states can establish domestic legal requirements prohibiting gas-freeing of empty/unloaded cargoes, as further discussed below. Concerning the degassing of certain harmful compounds, according to ADN, the rule is that they should be degassed at certified installations.<sup>25</sup> Yet, in cases where degassing of these compounds is not practical at the certified locations, ships are allowed to degas into the atmosphere while sailing on certain conditions.<sup>26</sup> Regarding the degassing of certain other less harmful compounds, it is stipulated that it may be carried out while the vessel is underway or at degassing installations.<sup>27</sup>

As can be seen, the ADN framework does not prohibit states from enacting regulations on degassing and allow them to impose degassing bans on vessels on their inland waterways. First of all, as for the specific provisions of the Annexed Regulations on degassing, the picture is clear. Article 7.2.3.7.0 of the Annexed Regulations leaves no doubt concerning the right of states to regulate degassing by expressing that degassing into the atmosphere is permitted only if it is not prohibited by international or domestic law. In other words, this provision establishes that if degassing is prohibited on the basis of domestic legal requirements, ADN cannot be invoked as an overriding rule that would allow for degassing. In short, this rule unequivocally permits Member States to prohibit degassing through domestic law. Subsidiarily, it should be noted as for the substances covered by Article 7.2.3.7.2, the wording does not imply an obligation on the part of states to allow degassing since vessels *may* degas while they are underway.

Finally, it is worth recalling Article 6. While Article 6 is silent on the states' right to regulate degassing for reasons of safety, it explicitly recognises the sovereign right of states to regulate the entry of dangerous compounds into its territory for reasons other than safety during carriage. Throughout ADN, 'safety' is often used in relation to navigation and carriage of goods, but not in relation to public health and the environment. These could well be considered as 'reasons other than safety' within the meaning of Article 6. Degassed substances can be, and indeed often are, toxic, inflammable, corrosive and harmful for human, animal and plant life and it has been admitted also by the Minister. Thus, regulation of degassing through domestic rules for the purpose of protecting public health and the environment is the right of the states, generally provided under Article 6.

Moreover, the relevant provisions in the Annexed Regulations enable states to enact additional provisions not found

in ADN as long as they are based on domestic laws and applied in a non-discriminatory fashion. Article 9 of the ADN further recognises the right of states to regulate the carriage of goods by inland waterways through regional and local regulations. This means that states can regulate or impose bans on floating degassing insofar as it is not regulated by ADN or not conflicting with its provisions. This analysis shows that ADN does not prohibit states from regulating and/or imposing a ban on floating degassing; in fact, it provides ADN members with the right to regulate floating degassing.

#### 4.2. Framework under CDNI

Another international legal source on degassing in the Netherlands is CDNI. It is aimed at protecting the environment, improving inland navigation safety, improving water and air quality and the well-being of navigation personnel through the prevention, collection, deposit and reception of ship waste.<sup>28</sup> The obligations upon states concern prohibition of dumping, discharging and release of waste, establishing and financing waste reception stations and designation of a national institution responsible for organising a uniform system for financing the reception and disposal of waste.

The preamble considers 'the prevention and the collection, deposit and reception of waste with a view to its recycling and disposal in order to protect the environment' as a requirement for inland navigation.<sup>29</sup> The **2017 Amendments to the Convention** and its annexes further solidify this aim and deal specifically with the issue of degassing and allocation of related costs. Previously, the Convention had no mention of residual vapours and how they should be disposed of. However, in the Amendments, this obligation concerning the prohibition of waste dumping and discharging is extended to cover also the release of vapours into the atmosphere.<sup>30</sup> The Amendments are aimed at introducing a progressive ban on the release of certain harmful vapours emanating from liquids such as benzene, ethanol, crude oil, and hydrocarbons into the atmosphere and stipulates that degassing of certain substances must be carried out at a certified reception station in accordance with national provisions.<sup>31</sup>

Vapours from all other goods that are not found in the tables in the Amendments can be ventilated while the ship is underway except when the ship is close to locks, including their forebays, under bridges or in densely populated areas or where national laws prescribe equivalent protection. The Amendments are set to enter into force six months after the last ratification. So far, Luxembourg, Germany, the Netherlands and Belgium have ratified the Amendments and France and Switzerland did not. Therefore, they did not come into force yet. It is estimated that once the 2017 Amendments to

24. Ibid. Annexed Regulations 7.2.3.7.0.

25. Ibid. Annexed Regulations 7.2.3.7.1.

26. Ibid. Annexed Regulations 7.2.3.7.3.

27. Ibid. Annexed Regulations 7.2.3.7.2.

28. 'Presentations and Missions', [cdni-iwt.org/presentations-and-missions/?lang=en](http://cdni-iwt.org/presentations-and-missions/?lang=en), accessed 25 July 2022.

29. 'Convention on the Collection, Deposit and Reception of Waste Generated during Navigation on the Rhine and Other Inland Waterways' (1996) Preamble.

30. 'Revision of the Convention on the Collection, Deposit and Reception of Waste Generated during Navigation on the Rhine and Other Inland Waterways (CDNI) and Its Implementing Regulation-Resolution CDNI 2017-I-4' (2017) Article 3(1).

31. Ibid. Appendix IIIa.

CDNI becomes applicable, 95% of harmful degassing from vessels into the atmosphere can be avoided.<sup>32</sup>

The Minister claimed that because all state parties did not ratify the CDNI Amendments and they did not enter into force, the Netherlands cannot apply them unilaterally.<sup>33</sup> This argumentation is flawed. The CDNI and its Amendments contain no provisions preventing states from imposing legislative or regulatory conditions on degassing. No rules have been agreed upon, for instance, about states regulating on top of what is already established in the CDNI. In fact, the Convention is silent on its relationship with domestic legislation. In other words, there is no obligation 'not to regulate' under the CDNI. This means that while the Amendments establish obligations on the state parties to prohibit floating degassing of certain compounds on inland waterways, nothing shall prevent the parties to act earlier. Moreover, signatory states who have not yet ratified the Convention, by virtue of Article 18 of the VCLT, are under the obligations to 'to refrain from acts which would defeat the object and purpose of a treaty.' Accordingly, signatory states not having ratified the CDNI yet should not act to delay regulation by the Dutch government.

In light of the above, it is plausible to conclude that there is nothing in CDNI and its Amendments that prevents the Dutch Government from regulating and introducing a ban on floating degassing on the Dutch inland waterways.

#### **4.3. Framework under Mannheim Convention**

Another international legal source that needs to be mentioned and was referred to by the Dutch Government is the Mannheim Convention. Even though it is not directly linked to degassing and deals more with the freedom of navigation on the Rhine, it may still be relevant today and in the context of degassing.

The first fundamental principle of the Convention is free and equal passage on the Rhine as stated in Article 1.<sup>34</sup> Yet, there is an exception in the Convention to the freedom of navigation. Namely, Article 7 states that 'the transit of any merchandise is free on the Rhine from Basel to the open sea unless health measures require exceptions.'<sup>35</sup>

In addition to the exception on the grounds of public health, in recent years increased attention has been devoted to environmental protection within CCNR.<sup>36</sup>

Freedom of navigation is the most fundamental pillar of the Mannheim Convention. Accordingly, the primary rule of the Convention is that states are not allowed to introduce restrictions on this freedom. As noted in the previous section,

this is also what one of the previous ministers relied on when she claimed that the Netherlands cannot adopt a unilateral ban on floating degassing on the Rhine. However, Article 7 provides for an exception. Namely, if health measures require, states can depart from the Convention. Considering that the vapours such as petroleum, benzene, MTBE, methanol and numerous others released by inland vessels into the atmosphere can be extremely harmful to public health, this exception can very well cover regulations or a ban on floating degassing of such harmful compounds. Hence, if the Government is willing to do so on grounds of health, the Mannheim Convention provides enough room to impose a ban on vessels on degassing while they are sailing. Moreover, as mentioned in the introductory part of this section, ADN is to be considered *lex posterior* and *lex specialis* to the Mannheim Convention, meaning that in case of conflict ADN norms would prevail.

##### *4.3.1. Interim Conclusions*

To conclude, the existing treaties mentioned by the successive ministers, do not pose an obstacle for the Government to unilaterally impose a ban on floating degassing of dangerous vapours by vessels on inland waterways. Neither ADN, nor CDNI or the Mannheim Convention prevent the Government from enacting such regulations. Instead, they either recognise the sovereign rights of states and allow them to enact national legislations concerning degassing or do not prescribe any rule preventing states from doing so. Also, there are exceptions that the Government can use to regulate and impose national bans on floating degassing. Additionally, the Minister argued in his letter<sup>37</sup> that the duty to set up the infrastructure for degassing, as per CDNI Amendments, implies that a national ban without the establishment of such installation would be against the Amendments and thereby Article 18 VCLT.<sup>38</sup> However, the obligation to establish the infrastructure for degassing is a positive one, meaning that the state is obliged to do something. Nothing in the treaty bars the Dutch state to start establishing these infrastructures already. In fact, if Article 18 VCLT is to be invoked at all, it may be to argue the opposite since one of the objectives of the Amendments is to protect the environment and prevent floating degassing. In this respect, we should note that one of the main goals of the treaty is the protection of the environment. The 2017 CDNI Amendments were negotiated to reach this goal. The negotiations were successful and consensus between the Contracting parties on content amendments was achieved. In 2017, the CDNI Amendments were adopted by the Conference of the Contracting Parties. This bears witness that an internationally coordinated solution to floating degassing exists. It is then difficult to understand how the 2017 Amendments' object and purpose, which is to protect the environment by enacting a prohibition on floating

32. Ibid. Preamble.

33. 'Kamervraag – Het varend ontgassen van kankerverwekkend gif' (n 14).

34. 'Revised Convention on the Navigation of the Rhine Signed at Mannheim on 17 October 1868' (1963) Article 1.

35. Ibid. Article 7(1).

36. 'OSCE Economic & Environmental Forum Part I / Vienna, 28-29 January 2008 – Session III – Statement by Switzerland' (30 January 2008) and 'Mannheim Declaration: '150 Years of the Mannheim Act – the Driving Force behind Dynamic Rhine and Inland Navigation' (17 October 2018) [ccr-zkr.org/files/documents/dmannheim/Mannheimer\\_Erklaerung\\_en.pdf](https://ccr-zkr.org/files/documents/dmannheim/Mannheimer_Erklaerung_en.pdf), accessed 31 August 2022.

37. 'Kamerbrief over varend ontgassen' (24 January 2023) [rijksoverheid.nl/documenten/kamerstukken/2023/01/24/varend-ontgassen](https://rijksoverheid.nl/documenten/kamerstukken/2023/01/24/varend-ontgassen), accessed 5 February 2023.

38. This Article provides that once a State has signed an agreement or, as in the case of the Netherlands, it has ratified it but the Treaty has not yet entered into force, the signatory or ratifying state 'is obliged to refrain from acts which would defeat the object and purpose of a treaty.'

degassing, can be breached by a domestic regulation aimed at that.

#### 4.4. Framework under EU Legislation

While the general international legal framework on this subject consists of ADN, CDNI and the Mannheim Convention, there is another specific European legal source. At the European level, 'European Parliament and Council Directive 94/63/EC of 20 December 1994 on the control of volatile organic compound (VOC) emissions resulting from the storage of petrol and its distribution from terminals to service stations', as currently in force, concerns the storage and distribution of fuels across the EU. It applies 'to the operations, installations, vehicles and vessels used for storage, loading and transport of petrol from one terminal to another or from a terminal to a service station.'<sup>39</sup> One of its objectives is to reduce the evaporative losses in the petrol distribution system and vapour emissions during refuelling operations.<sup>40</sup>

Article 5 stipulates that:

'(a) mobile containers shall be designed and operated so that residual vapours are retained in the container after unloading of petrol; (...)

(c) except for release through the pressure relief valves, the vapours mentioned in subparagraphs (a) and (b) shall be retained in the mobile container until reloading takes place at a terminal.

If after the unloading of petrol the mobile container is subsequently used for products other than petrol, in so far as vapour recovery or intermediate storage of vapours is not possible, ventilation *may be* permitted in a geographical area where emissions are unlikely to contribute significantly to environmental or health problems [...]' (emphasis added).<sup>41</sup>

EU legislation specifically on degassing of dangerous compounds is extremely limited. This may be because there are already two very detailed conventions establishing the legal framework on this subject, that is, ADN and CDNI. Nevertheless, according to the last sentence of the above provision, degassing of petrol into the atmosphere may be allowed only when it is unlikely that these emissions will contribute to significant environmental and health problems. *A contrario*, this norm establishes that ventilation *shall not be* 'permitted in a geographical area where emissions are likely 'to contribute significantly to environmental or health problems.' A

two-fold reasoning follows. EU law establishes an obligation for member states to prohibit degassing of vapours related to the unloading of petrol when it may contribute significantly to environmental or health problems. In fact, based on the Directive 94/63/EC, degassing of vapours from certain petroleum derivatives is banned on Dutch inland waterways.

#### 5. Human Rights Obligations of the State

In this section, we answer the question of whether the Dutch State is under an obligation to prohibit floating degassing of dangerous vapours. We will show that, in certain circumstances, under both domestic and international law, the Dutch State may be obliged to further regulate or ban the floating degassing of harmful substances entirely.

To this end, human rights law, especially certain articles of the European Convention on Human Rights (ECHR) and the relevant case law can provide some answers. While there is not a separate right to a clean environment in the Convention, the European Court of Human Rights (ECtHR) has interpreted environmental protection particularly into Article 2 (the right to life)<sup>42</sup> and Article 8 (the right to privacy, family life and a home)<sup>43</sup> in its case law and established positive obligations for states to protect its people from environmental harms.<sup>44</sup> In addition to obliging states to refrain from interfering with the right to life, Article 2 requires states to take action to safeguard this right of people within its jurisdiction.<sup>45</sup> This obligation is general, meaning that states should be aware of real and imminent risks to life in cases of pollution, industrial risks and activities harmful to the environment and that they should enact preventive measures to deal with the said risk.<sup>46</sup> The ECtHR has also clarified that the obligation in Article 2 is 'to afford general protection to society.'<sup>47</sup> The Court has also clarified the importance of the public right to information.<sup>48</sup> Similar to Article 2, Article 8 also requires states to take reasonable and appropriate measures to safeguard the right to private and family life which, according to the Court, can be affected by environmental pollution.<sup>49</sup> In interpreting the obligation under Article 8, the Court has also placed emphasis on preventive measures, whereby states are required to safeguard the enjoyment of this right against potential risks that may be caused by environmental pollution.<sup>50</sup> The Court has a rich body of case law confirming that these two articles overlap and can be applied in environmental cases concerning 'dangerous activities.'<sup>51</sup>

39. European Parliament and Council Directive 94/63/EC of 20 December 1994, eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A01994L0063-20190726&qid=1674123872443, accessed 25 July 2022 Article 1.

40. Ibid. Preamble.

41. Ibid. Article 5.

42. 'Convention for the Protection of Human Rights and Fundamental Freedoms' (1950) Article 2(1): 'Everyone's right to life shall be protected by law (...).'

43. Ibid. Article 8(1): 'Everyone has the right to respect for his private and family life, his home and his correspondence.'

44. Norwegian National Human Rights Institution, 'The European Convention on Human Rights' (2020) nhri.no/en/report/climate-and-human-rights/5-the-european-convention-on-human-rights/, accessed 23 November 2022.

45. European Court of Human Rights, 'Guide on Article 2 of the European Convention on Human Rights' (2022) para. 10.

46. Ibid. para. 20 and Norwegian National Human Rights Institution (n 44).

47. See European Court of Human Rights (n 45) and the case law cited therein, echr.coe.int/Documents/Guide\_Art\_2\_ENG.pdf, accessed 20 January 2023.

48. Ibid.

49. Ibid. See also European Court of Human Rights, 'Guide on Article 8 of the European Convention on Human Rights' (2022) para. 167, echr.coe.int/Documents/Guide\_Art\_8\_ENG.pdf, accessed 20 January 2023.

50. Norwegian National Human Rights Institution (n 44).

51. *Budayeva and Others v Russia* App no 15339/02 (ECtHR, 29 September 2008) para. 133; *Öneryıldız v Turkey* App no 48939/99 (ECtHR, 30 November 2004) paras 90, 160.

Additionally, when an entire region is exposed to risks of environmental threats, these articles protect the region's residents and if a state allows pollution of a region, not just the appellants' rights but the rights of people living in the entire region will be violated.<sup>52</sup>

Against this background, *De Staat Der Nederlanden v Stichting Urgenda* (hereinafter *Urgenda* case) is here briefly discussed as a landmark case concerning the application of Article 2 and Article 8 before Dutch domestic courts in the context of threats to the environment.<sup>53</sup> The case was first brought before the District Court of The Hague and made its way to the Court of Appeal and eventually, the Dutch Supreme Court. In brief, the Dutch NGO Urgenda claimed that the Government should do more to prevent global climate change. More specifically, Urgenda argued that Dutch greenhouse gas emissions are unlawful because they violate the duty of care of the state to its people, as well as Article 2 of the ECHR on the right to life and Article 8 on the right to respect for private and family life.<sup>54</sup> As part of its obligations, Urgenda claimed that the Netherlands must reduce its emissions by a minimum of 25% compared to the emissions levels in 1990. The Court found that 'the State may act unlawfully by violating its duty of care to prevent dangerous climate change.'<sup>55</sup> This verdict was challenged by the Government on different grounds, including that Urgenda cannot directly invoke Article 2 and 8 in these proceedings. The Court of Appeal sided with Urgenda and concluded that the Dutch State 'was failing to fulfil its duty of care pursuant to Articles 2 and 8 ECHR by not wanting to reduce emissions by at least 25% by the end of 2020.'<sup>56</sup> The Court of Appeal's decision was taken to the Supreme Court by the Government. The Supreme Court reiterated the Court of Appeal's conclusions. Namely, it stated that:

'In the case of environmental hazards that endanger an entire region, Articles 2 and 8 ECHR offer protection to the residents of that region. The obligation to take appropriate steps pursuant to Articles 2 and 8 ECHR also encompasses the duty of the state to take preventive measures to counter the danger, even if the materialisation of that danger is uncertain.'<sup>57</sup>

It further stressed that:

'The fact that this risk will only be able to materialise a few decades from now and that it will not impact specific persons or a specific group of persons but large parts of the population does not mean – contrary to the State's assertions – that

Articles 2 and 8 ECHR offer no protection from this threat (see above in para. 5.3.1 and the conclusion of paras 5.2.2 and 5.2.3). This is consistent with the precautionary principle (see para. 5.3.2, above). The mere existence of a sufficiently genuine possibility that this risk will materialise means that suitable measures must be taken.'<sup>58</sup>

The reasoning of the Dutch Courts is highly relevant to the question of degassing. As mentioned earlier, degassing refers to the removal of residual VOCs from ships, which are otherwise harmful to public health. What is most important for the purpose of degassing, is that in *Urgenda*, the Appeal and Supreme Courts clarified that the provisions of the ECHR have direct effects in the Dutch legal system. The Court came to this conclusion on the basis of Article 93 of the Dutch Constitution.

It is then meaningful to ask whether in not acting to regulate and prohibit floating degassing, the Dutch government could be breaching its duty to protect under Articles 2 and 8 ECHR. There are at least three sets of considerations indicating that a positive answer to this question is plausible. The first question to ask is whether a Dutch Court could have jurisdiction. Reasoning by analogy with *Urgenda*, we can fairly conclude that breaches of the human rights of residents of the Netherlands would give rise to the jurisdiction of the Dutch Court.<sup>59</sup> As the harm is clearly imposed on Dutch residents, the question of jurisdiction should be positively resolved. Another question is whether Articles 2 and 8 ECHR could be applied to the present case. The released substances from floating degassing pose both mortality and morbidity risks and seem then to be squarely covered by those two articles. The fact that the UN General Assembly adopted a Resolution on 28 July 2022 on the human right to a clean, healthy and sustainable environment<sup>60</sup> may strengthen the line of interpretation that Articles 2 and 8 should be applied in cases where the environment is at risk. The fact the Netherlands has voted in favour of the resolution is evidence of the fact that the Dutch state considers the right to a clean, healthy and sustainable environment as important for the contemporary human rights regime. A third question to assess would be whether the risk is sufficiently specific. If the risks from climate change have been considered to pass this test, a fortiori the risks posed by the floating degassing on human population should be considered passing such a test, as certain substances released in the environment are established to be highly carcinogenic.<sup>61</sup> In light of the *Urgenda* case, authoritative scholars maintain that 'under the rules of the Dutch Code of Civil Procedure, courts could take for

52. Norwegian National Human Rights Institution (n 44).

53. Timeline of the case and relevant court documents can be found here: 'Climate Case' (*Urgenda*, 2020) [urgenda.nl/en/themas/climate-case/](https://urgenda.nl/en/themas/climate-case/), accessed 8 September 2022.

54. '*De Staat Der Nederlanden v Stichting Urgenda*', Supreme Court of the Netherlands, Judgement, 20 December 2019, ECLI:NL:HR:2019:2007, para. 2.2.2 (unofficial translation).

55. *Ibid.* para. 2.3.1.

56. *Ibid.* para. 2.3.2.

57. *Ibid.* para. 5.3.2.

58. *Ibid.* para. 5.6.2.

59. *Ibid.* para. 5.9.2

60. 'Resolution Adopted by the General Assembly on 28 July 2022 – The Human Right to a Clean, Healthy and Sustainable Environment' (1 August 2022) A/RES/76/300.

61. Koop (n 3) 6-7.

granted those facts on which the parties agree.<sup>62</sup> In her 2021 letter, the Dutch Minister stated that ‘an investigation on the presence of concentrations of substances of very high concern’ is not necessary because it is already factually clear that floating degassing is harmful to public health and the environment.<sup>63</sup> If residents would initiate a dispute against the Dutch State, then it could be argued that the fact that floating degassing is harming public health can be taken for granted.

Prima facie, this suggests that the Dutch government in allowing floating degassing is potentially breaching the right to life and private life as enshrined in Articles 2 and 8 ECHR, given the highly likely negative effects on public health and the environment. The strength of a legal case initiated by private persons (and/or a public interest NGO) is to be further investigated by a more detailed study.

In this context, it should also be added that by virtue of Article 31.3(c) of the VCLT ‘any relevant rules of international law applicable in the relations between the parties’ should be taken into account in the interpretation of the treaties. This means that when interpreting the Mannheim Convention, ADN and CDNI account should be taken of human rights treaties – to which all the parties of the said conventions are also members.

Yet, in *Urgenda*, specific measures that the Government may take to achieve its 25% reduction objective are not mentioned as those were not requested by *Urgenda* and the courts are not permitted to order the Government to enact legislation with a particular content.<sup>64</sup> Nevertheless, as the Supreme Court states, courts can issue decisions declaring omissions of the Government unlawful.<sup>65</sup> Hence, it is plausible to assume a similar reasoning to that of the Court in *Urgenda*, should a lawsuit claiming that the Government is acting unlawfully by its omission to prevent uncontrolled degassing of harmful substances by vessels on Dutch inland waterways. If the Court was asked to assess the inaction of the Government concerning imposing of a ban on uncontrolled degassing of harmful substances, looking at the Court’s reasoning concerning the duty of care of the state and Articles 2 and 8 of the ECHR, it could find that the non-implementation of a ban on floating degassing of VOCs is unlawful. Non-implementation of such a ban by the Government could be interpreted as a failure to comply with the duty of care under Articles 2 and 8 of the ECHR.

Should a lawsuit be brought before Dutch courts, a successful case arguing that the Government is obliged to implement a ban on floating degassing of harmful substances could be built based on some of the arguments described above. The reasoning in *Urgenda* and the possibility that the Government can be found accountable for its failure to protect the environment and the life of its residents can be considered to open a way to refer to international legal sources and to

claim that the non-implementation of a nationwide degassing ban of harmful compounds is unlawful.

## 6. Conclusion

In recent years floating degassing attracted public scrutiny due to its impacts on public health and the environment. As the Dutch legal system tolerates and allows this practice in various places in the Netherlands, vessels continue to release gases out into the air.

The Dutch government has maintained that the current international legal framework on uncontrolled degassing on inland waterways does not allow it to regulate degassing unilaterally, even though floating degassing is harmful to public health and the environment. In this study, we found that the international legal framework does offer the Dutch government adequate policy space to take unilateral domestic actions to regulate floating degassing to protect public health and the environment. The international legal agreements referred to by the Dutch contain no specific provisions prohibiting states to regulate floating degassing. Even more, existing international legal rules on degassing include specific provisions granting states the right to regulate to protect public health and the environment.

This article also discussed the obligations that the Dutch government may have vis-à-vis regulating degassing, under human rights law. The article shows that there are valid legal arguments under international human rights law for the claim that the Government is actually required to regulate floating degassing to protect the right to life and the respect for private and family life of its residents, as guaranteed by the ECHR. The reasoning of the Dutch Supreme Court in *Urgenda* case suggests that a dispute against the Dutch government for its inaction in regulating degassing could be initiated before domestic courts.

In short, the international legal framework on floating degassing entrusts the Government the right to regulate floating degassing and may even require the Government to regulate it through unilateral domestic measures to mitigate the harms posed by floating degassing to public health and the environment.

62. André Nollkaemper and Laura Burgers, ‘A New Classic in Climate Change Litigation: The Dutch Supreme Court Decision in the *Urgenda* Case’ (*EJIL: Talk!*, 6 January 2020) [ejiltalk.org/a-new-classic-in-climate-change-litigation-the-dutch-supreme-court-decision-in-the-urgenda-case/](http://ejiltalk.org/a-new-classic-in-climate-change-litigation-the-dutch-supreme-court-decision-in-the-urgenda-case/), accessed 23 November 2022.

63. ‘Kamervraag – Het varend ontgassen van kankerverwekkend gif’ (n 14) ‘(...) dat het bekend is dat varend ontgassen belastend is voor mens en milieu.’

64. ‘*De Staat Der Nederlanden v Stichting Urgenda*’ para. 8.2.6.

65. *Ibid.*