KEBIJAKAN PEMERINTAH JEPANG MEMBUANG LIMBAH RADIOAKTIF PADA 2023 KE LAUT DI TENGAH KECAMAN INTERNASIONAL

SKRIPSI

Diajukan kepada Universitas Islam Negeri Sunan Ampel Surabaya untuk memenuhi salah satu persyaratan memperoleh Gelar Sarjana Ilmu Sosial (S.Sos) dalam bidang Hubungan Internasional

Rafi Naufal Atmanuaji

NIM 10020221061

Program Studi Hubungan Internasional

Fakultas Ilmu Sosial dan Ilmu Politik

Universitas Islam Negeri Sunan Ampel Surabaya

Juni, 2025

PERTANGGUNGJAWABAN PENULISAN SKRIPSI

Bissmillahirrahmanirrahim, yang bertanda tangan dibawah ini saya:

Nama: Rafi Naufal Atmanuaji

NIM: 10020221061

Program Studi: Hubungan Internasional

Judul Skripsi: Kebijakan Pemerintah Jepang Membuang Limbah Radioaktif pada 2023 ke Laut di Tengah Kecaman Internasional

Menyatakan dengan sesungguhnya, bahwa:

1. Skripsi ini tidak pernah dikumpulkan pada lembaga pendidikan manapun untuk mendapatkan gelar akademik apapun,
2. Skripsi ini benar-benar hasil karya secara mandiri dan bukan merupakan plagiasi atau karya orang lain,
3. Apabila skripsi ini dikemudian hari terbukti sebagai karya plagiat, maka saya bersedia menanggung segala konsekuensi hukum yang berlaku

Surabaya, 28 Mei 2025

Yang menyertakan

Rafi Naufal Atmanuaji

10020221061

PERSETUJUAN PEMBIMBING

Setelah melakukan bimbingan terhadap Skripsi yang disusun oleh:

Nama	: Rafi Naufal Atmanuaji
NIM	: 10020221061
Program Studi	: Hubungan Internasional

Berjudul: ***Kebijakan Pemerintah Jepang Membuang Limbah Radioaktif pada 2023 ke Laut di Tengah Kecaman Internasional***, Saya berasumsi bahwasanya skripsi tersebut dapat diujikan sebagai salah satu persyaratan bagi yang bersangkutan untuk memperoleh Gelar Sarjana Sosial (S.Sos) dalam bidang Hubungan Internasional.

Surabaya, 28 Mei 2025

Dosen Pembimbing

Moh. Fathoni Hakim, M.Si

NIP 198401052011011008

PENGESAHAN

Skripsi oleh Rafi Naufal Atmanuaji dengan judul ***Kebijakan Pemerintah Jepang Membuang Limbah Radioaktif pada 2023 ke Laut di Tengah Kecaman Internasional*** telah dipertahankan dan dinyatakan lulus oleh Tim Penguji Skripsi pada tanggal 20 Juni 2025.

Tim Penguji Skripsi

Penguji I

Moh. Fathoni Hakim, M. Si
NIP 198401052011011008

Penguji II

Nur Luthfi Hidayatullah, S.IP., M.Hub. Int.
NIP 199104092020121012

Penguji III

Zaky Ismail, M.S.I.
NIP 198212302011011007

Penguji IV

Dr. Zudan Rosyidi, SS. MA
NIP 198103232009121004

Surabaya 20 Juni 2025

Mengesahkan,

Universitas Islam Negeri Sunan Ampel Surbaya

Fakultas Ilmu Sosial dan Ilmu Politik

Dekan

Prof. Dr. H. Abd. Chalik, M.Ag.
NIP 197306272000031002

2025/10/27 20:58

UIN SUNAN AMPEL
S U R A B A Y A

KEMENTERIAN AGAMA
UNIVERSITAS ISLAM NEGERI SUNAN AMPEL SURABAYA
PERPUSTAKAAN
Jl. Jend. A. Yani 117 Surabaya 60237 Telp. 031-8431972 Fax.031-8413300
E-Mail: perpus@uinsby.ac.id

LEMBAR PERNYATAAN PERSETUJUAN PUBLIKASI
KARYA ILMIAH UNTUK KEPENTINGAN AKADEMIS

Sebagai sivitas akademika UIN Sunan Ampel Surabaya, yang bertanda tangan di bawah ini, saya:

Nama : Rafi Naufal Atmanvaji
NIM : 1002022161
Fakultas/Jurusan : Ilmu Sosial dan Ilmu Politik/Hubungan Internasional
E-mail address : [redacted] firafi18@outlook.com

Demi pengembangan ilmu pengetahuan, menyetujui untuk memberikan kepada Perpustakaan UIN Sunan Ampel Surabaya, Hak Bebas Royalti Non-Eksklusif atas karya ilmiah :
☑ Sekripsi ☐ Tesis ☐ Desertasi ☐ Lain-lain (.....)
yang berjudul :
KEBIJAKAN PEMERINTAH JEPANG MEMBUANG LIMBAH RADIOAKTIF PADA 2023 KE LAUT DI TENGAH KECAMAN INTERNASIONAL

beserta perangkat yang diperlukan (bila ada). Dengan Hak Bebas Royalti Non-Ekslusif ini Perpustakaan UIN Sunan Ampel Surabaya berhak menyimpan, mengalih-media/format-kan, mengelolanya dalam bentuk pangkalan data (database), mendistribusikannya, dan menampilkan/mempublikasikannya di Internet atau media lain secara ***fulltext*** untuk kepentingan akademis tanpa perlu meminta ijin dari saya selama tetap mencantumkan nama saya sebagai penulis/pencipta dan atau penerbit yang bersangkutan.

Saya bersedia untuk menanggung secara pribadi, tanpa melibatkan pihak Perpustakaan UIN Sunan Ampel Surabaya, segala bentuk tuntutan hukum yang timbul atas pelanggaran Hak Cipta dalam karya ilmiah saya ini.

Demikian pernyataan ini yang saya buat dengan sebenarnya.

Surabaya,

Penulis

(Rafi Naufal Atmanvaji)
nama terang dan tanda tangan

ABSTRACT

Atmanuaji, Rafi Naufal Atmanuaji. “The Japanese Government's Policy to Dispose of Radioactive Waste in 2023 into the Sea Amid International Condemnation.” Sunan Ampel State Islamic University Surabaya, 2025.

This research analyzes Japan's policy of dumping radioactive waste into the sea in 2023. The focus of this research is on the reasons Japan made the decision amid international condemnation. The method used is explanatory qualitative with data collection techniques in the form of documentation. The results showed that Japan had a choice in defusing international criticism from China and South Korea in this choice Japan chose to defuse South Korean criticism and dispose of the radioactive waste even though it was still criticized by China due to emergency urgency and had defused criticism from other countries and therefore Japan's actions were rational. Because in this urgent situation, Japan and China could not find a consensus.

Keywords: Japan, international condemnation, radioactive waste,

ABSTRAK

Atmanuaji, Rafi Naufal Atmanuaji. "Kebijakan Pemerintah Jepang Membuang Limbah Radioaktif pada 2023 ke Laut di Tengah Kecaman Internasional." Universitas Islam Negeri Sunan Ampel Surabaya, 2025.

Penelitian ini menganalisis kebijakan Jepang dalam membuang limbah radioaktif ke laut pada tahun 2023. Fokus penelitian ini adalah pada alasan-alasan Jepang membuat keputusan tersebut di tengah kecaman internasional. Metode yang digunakan adalah kualitatif eksplanatif dengan teknik pengumpulan data berupa dokumentasi. Hasil penelitian menunjukkan bahwa Jepang memiliki pilihan dalam meredakan kecaman internasional dari Cina dan Korea Selatan dalam pilihan tersebut Jepang memilih untuk meredakan kecaman Korea Selatan dan membuang limbah radioaktif tersebut meski masih dikecam oleh Cina dikarenakan urgensi darurat serta sudah meredakan kecaman dari negara lain dan karena itu tindakan Jepang merupakan tindakan yang rasional. Karena dalam situasi yang sudah mendesak ini, Jepang dan cina tidak menemukan titik temu kesepakatan.

Kata kunci: Jepang, kecaman internasional, limbah radioaktif,

DAFTAR ISI

DAFTAR GAMBAR

DAFTAR PUSTAKA

Graham T. Allison, *Essence of Decision: Explaining the Cuban Missile Crisis* (Boston: Little, Brown, 1971).

Allison, G. T., & Zelikow, P. (1999). Essence of Decision: Explaining the Cuban Missile Crisis (2nd ed.). New York: Longman.

Maxwell, Joseph A. "Using qualitative methods for causal explanation." *Field methods* 16, no. 3 (2004).

Moleong, Lexy J. "Metodologi Penelitian Kualitatif (Bandung: PT Remaja Rosdakarya, 1989)."

Sanada, Yukihisa, Tomohisa Abe, Miyuki Sasaki, Marina Kanno, Tsutomu Yamada, Takamasa Nakasone, Nobuyuki Miyazaki, Keisuke Oshikiri, dan Hiroshi Watabe. 2023. "Basic Study on Tritium Monitor Using Plastic Scintillator for Treated Water Discharge at Fukushima Daiichi Nuclear Power Plant." *Journal of Nuclear Science and Technology* 61 (5): 693–702. https://doi.org/10.1080/00223131.2023.2258880.

Wu, Ellen. "A Criticism of Fukushima Radioactive Water Discharge in the Lens of Environmental Justice." *TRAIL SIX* 19 (2025): 92. Accessed March 23, 2025. https://trailsix.geog.ubc.ca/files/2025/03/TrailSixVolume19.pdf#page=92.

The Straits Times**.** "Japan Releases Fukushima Water into the Ocean, Prompting Criticism, Seafood Bans." *The Straits Times*. Accessed March 23, 2025. https://www.straitstimes.com/asia/east-asia/japan-releases-fukushima-water-into-the-ocean-prompting-criticism-seafood-bans.

"Chinese, Japanese top officials meet in Jakarta," diakses 24 Juni 2025, https://www.aa.com.tr/en/asia-pacific/chinese-japanese-top-officials-meet-in-jakarta/2945760.

Kojiro Tanikawa dan Akiko Yoshinaga / Yomiuri Shimbun Staff Writers, "China Considers Its Opposition to the Release of 'Treated Water' as 'Diplomatic Card' in Dealing with Japan," 16 Juli 2023, https://japannews.yomiuri.co.jp/politics/politics-government/20230716-123089/

Leslie**,** Mitch**.** "Fukushima Water Release Stirs Controversy." *Engineering* 34 (March 1, 2024): 6–8. https://doi.org/10.1016/j.eng.2024.02.003.

Dharmadji, Jessica Sujanto, Abigail Daniel, Hsiu Mei Lin, Maela Madel L. Cahigas, Reny Nadlifatin, dan Ma Janice J.Gumasing**.** "Willingness to Eat Seafood among Taiwanese after the 2023 Fukushima Radioactive Water Release: An Extended Theory of Planned Behavior Approach." *Nuclear Engineering and Technology* 57, no. 4 (April 1, 2025): 103282. https://doi.org/10.1016/j.net.2024.10.044.

Madigan, Daniel J., Zofia Baumann, dan Nicholas S. Fisher**.** "Pacific Bluefin Tuna Transport Fukushima-Derived Radionuclides from Japan to California." *Proceedings of the National Academy of Sciences* 109, no. 24 (June 12, 2012): 9483–86. https://doi.org/10.1073/pnas.1204859109.

van Deventer, Emilie, Maria del Rosario Perez dan Angelika Tritscher**.** "WHO's Public Health Agenda in Response to the Fukushima Daiichi Nuclear Accident." *Journal of Radiological Protection: Official Journal of the Society for*

Radiological Protection 32 (March 1, 2012): N119–22. https://doi.org/10.1088/0952-4746/32/1/N119

Tokyo Electric Power Company (TEPCO). *ALPS Water Treatment and Disposal Plan.* 2022.

Liu,Yi, Yi-Lin Li, Yan-Tao Min, Shengli Chen, Wu Yang, Jin-Tao Gu, Wei-Jie Feng, Yihong Li, Chaopeng Hong, Jinqiu Du, Sunwei Li, Binbin Li, Yutao Guo, Jian-Min Zhang, dan Zhen-Zhong Hu. "Fukushima Contaminated Water Risk Factor: Global Implications | Environmental Science & Technology," diakses 26 Mei 2025, https://pubs.acs.org/doi/10.1021/acs.est.4c08145.

Chang, Yen-Chiang, Xiaonan Zhao, Anqi Jian, dan Ying Tan. "Frontier Issues in International Ocean Governance: Japan's Discharge of Nuclear Contaminated Water into the Sea." *Marine Pollution Bulletin* 198 (January 1, 2024): 115853. https://doi.org/10.1016/j.marpolbul.2023.115853.

Yuan, Yingyi, Tianyuan Xie, Xuxuan Dong, dan Jiaguo Liu. "Analysis of the Influence of Japan's Nuclear Waste Water Release on South Korean Fishery People from the Perspective of News Reports." *Marine Policy* 163 (May 1, 2024): 106125. https://doi.org/10.1016/j.marpol.2024.106125.

Wang, Bojing. "Study of the Implications of Japan's Nuclear Wastewater Discharges on Consumer Behavior." In *2024 2nd International Conference on Digital Economy and Management Science (CDEMS 2024)*, 362–71. Atlantis Press, 2024. https://doi.org/10.2991/978-94-6463-488-4_40.

Shan, Guangcun dan Zejian Ding. "Emergency management of nuclear-contaminated water discharged into the ocean for marine environment security," Sustainable Horizons 10 (1 Juni 2024): 100089, https://doi.org/10.1016/j.horiz.2024.100089.

Zhou, Xiaoqi. "Uncharted effects of Fukushima Nuclear Plant Wastewater Discharge on marine life | Journal of Plant Ecology | Oxford Academic," diakses 23 Maret 2025, https://academic.oup.com/jpe/article/17/3/rtae006/7588758.

Liu, Jinlin Huanqing Yuan, Zhangyi Xia, Peimin He. "Paying attention to the safety of global edible seaweeds after the discharge of nuclear-contaminated water from Japan," Algal Research 84 (1 Desember 2024): 103811, https://doi.org/10.1016/j.algal.2024.103811.

Wei, Yaqiang, Jiao Zhang, Xinde Cao, Tian-Chyi Jim Yeh, Yuling Chen, Chao Chen, Minghui Xiang, Liheng Wang, Zi Zhan, dan Hui Li. "Fukushima's Radioactive Water Threatens Coastal Groundwater | Environmental Science & Technology." Diakses 23 Maret 2025. https://pubs.acs.org/doi/10.1021/acs.est.4c10136.

Liang, Xiao, Shilong Yang, Zhichao Lou, and Abdelrahman Ali. 2024. "The Impact of Japan's Discharge of Nuclear-Contaminated Water on Aquaculture Production, Trade, and Food Security in China and Japan" *Sustainability* 16, no. 3: 1285. https://doi.org/10.3390/su16031285.

Zhang, Xiwen. "The Impact of Japan's Nuclear Wastewater Discharge on Marine Fisheries Stock Prices in Japan and China," 2024. https://studenttheses.uu.nl/handle/20.500.12932/47412.

Tsutsui, Yuji, Tatsuo Ujiie, Rieko Takaya, Hiroyuki Uchida, Youichi Odagiri, Misako Tominaga, Madoka Takahara. "11-Year Trends of Psychological

Impact on Fukushima Mothers and Children Post-Nuclear Accident." *Journal of Applied Developmental Psychology* 95 (November 1, 2024): 101727. https://doi.org/10.1016/j.appdev.2024.101727.

Liu, Zijian. "How Does Nuclear Wastewater Discharge Affect Fishery and Marine Environment: A Case Study of Japan." *E3S Web of Conferences* 424 (2023): 04012. https://doi.org/10.1051/e3sconf/202342404012.

Zhang, Qiang, Fang Yang, dan Yaru Chen. "The Predicament and Outlet of Environmental Impact Assessment Mechanism from the Perspective of Risk Society: Taking Japan's Accident-Type Nuclear Sewage Disposal as a Cut-In." *International Journal of Environmental Research and Public Health* 20, no. 5 (Januari 2023): 3929. https://doi.org/10.3390/ijerph20053929.

Laksana, Andil Putri Pratama Dharma. "KEBIJAKAN INTERNASIONAL DALAM PENGELOLAAN DAMPAK ZAT RADIOAKTIF FUKUSHIMA TERHADAP MANUSIA DAN LINGKUNGAN." *Jurnal Arajang* 6, no. 2 (2023): 73–90. https://doi.org/10.31605/arajang.v6i2.3339.

Zhang, Dingfan, Bin Chen, Klaus Hubacek, Jing Meng, Mingxing Sun, Jiafu Mao, Mingzhou Jin. "Potential impacts of Fukushima nuclear wastewater discharge on nutrient supply and greenhouse gas emissions of food systems." *Resources, Conservation and Recycling* 193 (1 Juni 2023): 106985. https://doi.org/10.1016/j.resconrec.2023.106985.

Gao, Qia, Jing Lin, dan Qizheng Tang. "Analysis of the International Community's Response Strategies to Japan's Illegal Nuclear Wastewater Discharge into the Sea." *Journal of Education, Humanities and Social Sciences* 24 (31 Desember 2023): 412–18. https://doi.org/10.54097/twcv5491.

Liao, Hiupeng Danyi Sun, Zifan Yang, Wenyu Huang, dan Qian Di. "Health impact of nuclear waste water discharge from the Fukushima Daiichi nuclear plant | medRxiv," diakses 23 Maret 2025, https://www.medrxiv.org/content/10.1101/2023.04.23.23288984v1.

Li, Meng, and Xuedong Wang. "Legal Responses to Japan's Fukushima Nuclear Wastewater Discharge into the Sea—from the Perspective of China's Right-Safeguarding Strategies." *Heliyon* 9, no. 5 (May 1, 2023): e15701. https://doi.org/10.1016/j.heliyon.2023.e15701.

IOPscience**.** "Reaction of Japanese Media to Discharging Fukushima Nuclear Waste Water into Ocean and the Analysis—Taking Relevant Reports of Japanese Media as Examples." Accessed March 23, 2025. https://iopscience.iop.org/article/10.1088/1755-1315/1087/1/012004.

Cahill, Ben, Jane Nakano, dan Kunro Irié. "How Japan Thinks about Energy Security," 22 Mei 2024, https://www.csis.org/analysis/how-japan-thinks-about-energy-security.

Hugo, ibrahim dan Indra Kusumawardhana. "Way of the Samurai: Understanding Japan's Energy Security Strategy Post-Fukushima Disaster," *Journal of Social Political Sciences* 4, no. 1 (Februari 2023)

Yanmei, Xie dan Steven Dolley. "Damaged Reactor Design Has Weakness, But Not Cause for Crises, Say Experts," Nucleonics Week, March 17, 2011, p. 1.

International Atomic Energy Agency. *IAEA Comprehensive Report on the Safety Review of the ALPS-Treated Water at the Fukushima Daiichi Nuclear Power Station*. Vienna: IAEA, 2023.

"Fukushima Nuclear Disaster: Activists March against Tokyo's Waste Plan." 12 Agustus 2023. https://www.bbc.com/news/world-asia-66486233.

"ALPS Treated Water Q&A / METI Ministry of Economy, Trade and Industry," diakses 26 Mei 2025, https://www.meti.go.jp/english/earthquake/nuclear/decommissioning/qa.html.

World **Nuclear Association.** "Fukushima Daiichi Accident - World Nuclear Association." Accessed March 21, 2025. https://world-nuclear.org/information-library/safety-and-security/safety-of-plants/fukushima-daiichi-accident

"Background and Scientific Explanation for the Discharge of Treated Water," Background and Scientific Explanation for the Discharge of Treated Water | Tokyo Electric Power Company Holdings, Incorporated, diakses 26 Mei 2025, https://www.tepco.co.jp/en/decommission/progress/treated-water-lan/index-e.html..

"全国都道府県市区町村別面積調 | 国土地理院," diakses 24 Juni 2025, https://web.archive.org/web/20250424081541/https://www.gsi.go.jp/KOKUJYOHO/MENCHO-title.htm.

"Population Census 2020 Population Census Basic Complete Tabulation on Population and HouseholdsPopulation, Households, Sex, Age and Marital Status 3-1 Population by Sex, Age (Single Years), Month of Birth and All Nationality or Japanese - Japan | View Statistical Table/Graph," Portal Site of Official Statistics of Japan, diakses 24 Juni 2025, https://www.e-stat.go.jp/en/dbview?sid=0003445154

"Backgrounder on Radioactive Waste," NRC Web, diakses 24 Juni 2025, https://www.nrc.gov/reading-rm/doc-collections/fact-sheets/radwaste.html.

"TEPCO : Establishment of Fukushima Daiichi Decontamination & Decommissioning Engineering Company." Diakses 3 Juli 2025. https://www.tepco.co.jp/en/press/corp-com/release/2014/1235009_5892.html.

"TEPCO : Establishment of Fukushima Daiichi Decontamination & Decommissioning Engineering Company." Diakses 7 Juli 2025. https://www.tepco.co.jp/en/press/corp-com/release/2014/1235009_5892.html.

ALPS *Treated Water Discharge: Applying Scientific Evidence for Monitoring and Results*, 2024, https://www.youtube.com/watch?v=Q8IaXmb5I0c.

Japan PM Fumio Kishida Visits Fukushima Before Treated Radioactive Water Is Released Into Pacific, 2023, https://www.youtube.com/watch?v=2uTSoY-ztNs.

Japan to release treated Fukushima water | The World, 2021, https://www.youtube.com/watch?v=dJx6poBSzlg

S. Korea, Japan fail to reach an agreement on 2nd working-level talks on Fukushima wastewater ..., 2023, https://www.youtube.com/watch?v=DSjqLXFrh1k.

Senior Chinese Diplomat Meets Japanese FM over Bilateral Ties, 2023, https://www.youtube.com/watch?v=2Xrp8gWfZjI.

Soal Pembuangan Limbah Nuklir Jepang ke Laut, Korsel Pastikan Aman dan Berizin IAEA, 2023, https://www.youtube.com/watch?v=-RGQFR0M8Ko.

S. Korea, China strongly protest against Japan discharging Fukushima water; U.S. on different note, 2021. https://www.youtube.com/watch?v=bCYA-M_Ly0E.

China supports S. Korea demanding revocation of Fukushima water dump plan, 2021. https://www.youtube.com/watch?v=DVufRX-wDbQ.

China: Govt. expresses concern over releasing radioactive water, 2021. https://www.youtube.com/watch?v=Oy4T6aTNfNg.