## Minamata's Fight for Justice:

## How Japan's Failed Debate and Response Sparked Local and Global Change Annotated Bibliography

## **Primary Sources**

Asahi Shimbun. Minamata City officers dispose mercury poisoned fishes into a tank 30 years after mercury poisoning recognised on April 13, 1986 in Minamata, Kumamoto, Japan. 13 Apr. 1986. *Getty Images*,

www.gettyimages.com/detail/news-photo/minamata-city-officers-dispose-mercury-poisoned-fishe s-into-news-photo/994239020?adppopup=true. Accessed 20 Feb. 2022. This photograph displays two Minamata City officials dumping mercury-contaminated fish into a tank in 1986, around three decades after the causes of Minamata disease were first investigated in the late 1950s. It both demonstrates the long-term impact of Chisso's pollution in Minamata Bay and helps illustrate the process by which methylmercury was first ingested by fish, which was then consumed by residents. For these reasons, it was included in the "Investigation" page on my website.

- Basel Convention. U.N. Environment Programme, 22 March 1989,
  - http://www.basel.int/TheConvention/Overview/TextoftheConvention/tabid/1275/Default.aspx. This is the original text of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, an influential international treaty that made various regulations on harmful substances to limit their trade and transportation by governments. It was cited and displayed on my "Minamata Convention" page during my analysis of diplomatic efforts regarding chemical wastes since the tragedy in Minamata.
- Carson, Rachel. *Silent Spring*. Houghton Mifflin, 1962. Carson's 1962 environmental science, investigative book, often attributed with catalyzing the environmental movement of the 1960s, exposed the widespread damage caused by the chemical industry (including in public health). I quoted the opening chapter on my "Stockholm Conference" page for context on these events, as well as to draw a parallel between the crises she warned of and how they came to fruition in Minamata.
- Children playing with water in the Yamato River. Circa 1960-1970. *Environmental Justice Atlas*,
  www.cevreadaleti.org/conflict/yamato-river-the-dirtiest-river-in-japan. Accessed 21 Feb. 2022.
  This photograph provides an example of the dirty, polluted bodies of water often found elsewhere
  in Japan during the 1960s and 1970s. It demonstrates the need for national legislation to combat

environmental issues, such as the Basic Law that I mention in my "1960-1968" section, that the events and citizen action in Minamata also contributed to.

- "Digest of the following Storyteller's videos." *Minamata Disease Municipal Museum*, minamata195651.jp/list\_en.html. Accessed 20 Feb. 2022. This collection of interviews with victims of Minamata disease by the Minamata Disease Municipal Museum provides eye-opening stories on the tragedies faced by residents of the city, covering the physical, social, and political impacts of the disease. I referenced and quoted these individuals throughout my website, such as on the "Citizen Impact" and "1969-Present" pages, to convey their stories.
- *Environmental Control in Japan*. U.S. Environmental Protection Agency, 14 Nov. 1975. *United States Environmental Protection Agency*,

nepis.epa.gov/Exe/ZyNET.exe/9101H94T.txt?ZyActionD=ZyDocument&Client=EPA&Index=Pri or%20to%201976&Docs=&Query=%28Basic%20Law%29%20OR%20FNAME%3D%229101H 94T.txt%22%20AND%20FNAME%3D%229101H94T.txt%22&Time=&EndTime=&SearchMet hod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay =&UseQField=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5CZYFILES%5 CINDEX%20DATA%5C70THRU75%5CTXT%5C00000022%5C9101H94T.txt&User=ANONY MOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree= 0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack =ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1& slide. Accessed 20 Feb. 2022. This report on environmental regulations in Japan by the EPA provides in-depth descriptions of the Basic Law for Environmental Pollution Control, the Water Pollution Control Law, and other key statutes. I used it primarily for information on my "1960-1968" page to demonstrate how Minamata activists shifted national attention to issues of pollution and the environment and brought about political change.

- Halloran, Richard. "Japanese Decide Pollution Case." *The New York Times*, 21 March 1973, p. 2, https://www.nytimes.com/1973/03/21/archives/japanese-decide-pollution-case-36million-is-given -to-138-victims-of.html. Accessed 19 February 2022. This American newspaper article published after the Kumamoto District Court sided with victims in their lawsuit against Chisso provides a summary of the tragedy in Minamata, the case brought to the courts, and the response from Chisso and other parties to the decision. I included it in my "1969-Present" page to provide evidence of citizens' diplomatic efforts through the court system to achieve compensation and justice.
- Hasegawa, Kyoko. "Minamata mercury treaty signed at UN conference." *Phys.org*, 10 October 2013, https://phys.org/news/2013-10-conference-minamata-mercury-treaty.html. Accessed 6 March

2022. This article provides a detailed discussion of the goals outlined in the Minamata Convention on Mercury and a brief history of Minamata disease. I used an image of Japanese government and UNEP officials taken at the memorial for Minamata disease victims in my "Minamata Convention" section.

"Historical Overview | Company Profile." JNC Corporation,

https://www.jnc-corp.co.jp/english/company/time-line.html. Accessed 19 February 2022. This timeline by the Chisso Corporation relays significant events and years in the corporation's history, such as when it established its plant in Minamata. I used it in my early research for basic information on the company and the city of Minamata.

- Ishimure, Michiko, and Livia Monnet. *Paradise in the Sea of Sorrow: Our Minamata Disease*. U of M Center For Japanese Studies, 2003. This non-fiction book by Minamata activist Michiko Ishimure offers a detailed record of the history of Minamata and Chisso, the initial investigation of and debates about Minamata disease, the disease's impacts on members of the local community, and the protests and movement to compensate victims and hold Chisso accountable. I quoted it several times throughout my website to relay the first-hand experiences of fishermen and victims.
- Koshiba, Kazuyoshi. Fish contaminated with mercury that were caught in Minamata Bay. 1976. *The Mainichi*, mainichi.jp/english/graphs/20211221/hpe/00m/0na/001000g/4. Accessed 20 Feb. 2022. This is a photograph of fish that were caught in Minamata Bay, but were later disposed of because they contained mercury from Chisso's pollution, even after the corporation halted the production of acetaldehyde in 1968. Such indicates the long-lasting, destructive effects of the factory and the urgent need for local and national environmental reform.
- Kuwabara, Shisei. Members of New Japan Nitrogenous Fertilizer Co. (present-day Chisso Corp.)'s labor union march in protest at the Minamata factory. Aug. 1962. *The Mainichi*, mainichi.jp/english/graphs/20211221/hpe/00m/0na/001000g/5. Accessed 20 Feb. 2022. This photograph showcases Chisso's employees protesting the corporation in solidarity with the victims of Minamata disease. Their action demonstrates the debate occurring within Minamata and Chisso, specifically and the great extent to which many were aware of and opposed the corporation's avoidance of accountability and justice.
- Marine Safety Council, United States, et al. *Proceedings of the Marine Safety Council, Volume 39, Issue 4.*U.S. U.S. Department of Transportation, U.S. Coast Guard, 1982. *Google Books*,
  books.google.com/books?id=7TYxY-RTiN4C&printsec=frontcover#v=onepage&q&f=false.
  Accessed 18 Feb. 2022. This publication by the Marine Safety Council includes acetaldehyde as the "chemical of the month" and, accordingly, provides a detailed explanation and history of its

chemical and industrial properties. I used it in my "Industrial Revolution" section to offer scientific and historical context for Chisso and the chemical industry.

"Mercury and Minamata Disease: a Lesson from Japan | United Nations | UN in Action." *YouTube*, uploaded by United Nations, 29 Oct. 2021, youtu.be/80KJ9gqHrYo. Accessed 20 Feb. 2022. This video produced by the United Nations is an oral account from Masami Ogata, a victim of Minamata disease who discusses the devastating social and physical effects Minamata disease has had on himself and his community. It also includes details on the Minamata Convention, which was produced by an organ of the U.N., the UNEP.

Mills on the Merrimack River, Lowell, Mass. 1908. History of Massachusetts,

historyofmassachusetts.org/massachusetts-textile-mills/. Accessed 20 Feb. 2022. This photograph showcases textile mills in Massachusetts during a period of great economic growth, particularly for the chemical industry. Acetaldehyde, in particular, was used for fabric production; given this connection, I incorporated it into my "Industrial Revolution" section to provide context for the global development of industry and cities prior to the events in Minamata.

Minamata Convention on Mercury. U.N. Environment Programme, September 2019,

https://www.mercuryconvention.org/en/resources/minamata-convention-mercury-text-and-annexe s. This is the original text of the Minamata Convention on Mercury, a recent international treaty created to reduce the effects of mercury and mercury compounds on public health and the environment. It was named after the city of Minamata to remember the disease victims and prevent such an incident of mercury poisoning from occurring again. I used it on my "Minamata Convention" page to give a clear example of the impact of the tragedy and victims' movements on successful environmental diplomacy in the modern day.

"Nets removed from Minamata Bay." The Japan Times, 21 August 1997,

https://www.japantimes.co.jp/news/1997/08/21/national/nets-removed-from-minamata-bay/. Accessed 21 February 2022. This article from an English-language Japanese newspaper, published after the dividing nets were first removed from Minamata Bay, provides a description of this process and the importance of the nets. I used it in my section on "1969-Present" to briefly relay how the issue was ultimately resolved, largely as a result of citizen action.

Public Health: Industrial Workplace a. Potteries landscape, source unknown (newspaper cutting). b.
Training dept. for wrapping and packing, Bournville. 1926. *Wellcome Collection*,
wellcomecollection.org/works/m7jarbgt. Accessed 20 Feb. 2022. This photograph of factories in
England and the enormous amount of smog that they are producing clearly illustrates industries'
pollution of the surrounding environment. I used it on my "Industrial Revolution" page to provide context for this phenomenon, which was reflected in the Minamata tragedy.

"Shinobu Sakamoto, Minamata disease survivor calls on governments to end pollution." United Nations Environment Programme, 30 Nov. 2017,

www.unep.org/news-and-stories/video/shinobu-sakamoto-minamata-disease-survivor-calls-gover nments-end-pollution. Accessed 21 Feb. 2022. This oral account by Shinobu Sakamato primarily includes discussions of her early childhood and story, her trip to the Stockholm Conference, and her input on how mercury poisoning and chemical pollution must continually be combated to prevent the tragedy from repeating itself. I used it on my "Minamata Convention" page to provide an impactful, inspiring glimpse at how victims from Minamata have been able to diplomatically use their voices for political change.

- Smith, Aileen M. Direct negotiations with Chisso after the patient's court victory. Sakamoto Fujie, mother of congenital Minamata victim Sakamoto Shinobu, holds a mike to president Shimada of Chisso demanding an answer about annual payments. *Kyoto Journal*, www.kyotojournal.org/conversations/aileen-mioko-smith-pt1/. Accessed 21 Feb. 2022. This photograph displays a crowd of reporters at a meeting between citizens of Minamata and Chisso's leadership. It highlights the people's diplomatic negotiations to receive adequate compensation, along with the lawsuits' substantial impacts, after continued failures of the Japanese government.
- Smith, W. Eugene. A much more recent second outbreak of Minamata Disease broke out in Niigata prefecture in 1965. The case ended last September (1971) with the victory of the plaintiffs. 1971. *ICP*,

www.icp.org/browse/archive/objects/a-much-more-recent-second-outbreak-of-minamata-diseasebroke-out-in-niigata. Accessed 20 Feb. 2022. This photograph showcases a crowd of reporters after a court decision concerning compensation for the Niigata Minamata disease victims ruled in favor of the plaintiffs. Although it was not included in the final website to retain focus on Minamata, it added to my understanding of the national media attention placed on the cases and movements in both Niigata and Kumamoto to achieve justice for victims.

- Smith, W. Eugene. Shinobu Sakamoto, Minamata Disease victim. Circa 1972. ICP,
  www.icp.org/browse/archive/objects/shinobu-sakamoto-minamata-disease-victim. Accessed 21
  Feb. 2022. This is a photograph of Shinobu Sakamoto, a victim of congenital Minamata disease
  who later became an outspoken activist, playing outside as a teenager. I used it in my "Stockholm Conference" section when I discussed her background and significance.
- Smoke monsters: An aerial view of factories near the city of Kawasaki, Kanagawa Prefecture, in 1970. 1970. *Japan Times*,

www.japantimes.co.jp/life/2019/05/11/environment/reading-air-tokyo-still-work-air-pollution/. Accessed 21 Feb. 2022. This is a photograph showcasing extreme air pollution from Japanese factories during the 1970s. While not included in my final website, it strengthened my understanding of the widespread pollution in Japan that, in addition to Minamata, contributed to national environmental legislation and reform during this period.

Stockholm Declaration. U.N. Environment Programme, 16 June 1972,

https://wedocs.unep.org/bitstream/handle/20.500.11822/29567/ELGP1StockD.pdf?sequence=1&i sAllowed=y. This is the original text of the Stockholm Declaration, developed by diplomats at the Stockholm Conference and influenced by the events in Minamata; many provisions concern the regulation of chemical pollution and the transportation of hazardous substances. I used it in my "Stockholm Conference" section to relate the successful environmental diplomacy resulting from victims' efforts in Minamata.

Suliman, Thomas. Tennant's Stalk. 1864. Lost Glasgow,

www.lostglasgow.scot/posts/the-stalk-of-the-town-723/. Accessed 20 Feb. 2022. This drawing of St. Rollox's chemical works, originally published in the *London Illustrated News*, offers an early glimpse at the pollution resulting from the chemical industry when it first arose in the mid-19th century. I included it on my "Industrial Revolution" page to showcase this historical context.

- Tokuomi, H. Cat with Minamata disease. Food and Foodies in Japan, J70 Fall 2013 UCLA, foodandfoodiesinjapan.files.wordpress.com/2012/03/minamata\_archive\_kumanoto\_daigaku0.jpg. Accessed 20 Feb. 2022. This image of a cat exhibiting strange symptoms in its movement and behavior from a University of California, Los Angeles site for a course about food in Japan provides a visual for the way in which Minamata disease was first significantly observed in cats and other animals that ate fish from the bay. I used it in my "Discovery" section to relay this phenomenon.
- Weisskopf, Michael. "30 Years After Mercury Poisoning at Minamata: Ecological Disaster at Japan Village Leaves Legacy of Suffering." *LA Times*, 10 May 1987,

https://www.latimes.com/archives/la-xpm-1987-05-10-mn-6457-story.html. Accessed 20 February 2022. This American newspaper article discusses the lingering impacts of Minamata disease on the city of Minamata and highlights the discrimination faced by victims and the debate concering their current movement for compensation. It includes quotes from residents on both sides; I used one, from a Kumamoto Prefecture environmental official, in my "1969-Present" section to convey the criticism of the victims' movement.

## **Secondary Sources**

- Barrett, Julia R. "An Uneven Path Forward: The History of Methylmercury Toxicity Research." *Environmental Health Perspectives*, vol. 118, no. 8, Aug. 2010,
  https://doi.org/10.1289/ehp.118-a352b. This article provides a brief history of mercury and
  methylmercury pollution, with a spotlight on the events in Minamata, and scientists' and doctors'
  investigative and research endeavors concerning the issue. Such improved my understanding of
  how Minamata disease fits into broader concerns about mercury pollution and the specific human
  health impacts of the problem.
- Dixon, Marion W. "Chemical Fertilizer in Transformations in World Agriculture and the State System, 1870 to Interwar Period." *Journal of Agrarian Change*, vol. 18, no. 4, 12 Mar. 2018, pp. 768-86, https://doi.org/10.1111/joac.12259. Accessed 17 Feb. 2022. This article abstract conveys the developments in chemical fertilizers throughout the late 19th through 20th centuries. It provides a succinct overview of how the chemical revolution transpired amidst the greater industrial revolution, which was particularly helpful for comprehending historical events prior to Chisso's creation and the factory's role in Minamata.
- "Acetaldehyde." Science Direct, Elsevier B.V.,

https://www.sciencedirect.com/topics/engineering/acetaldehyde. Accessed February 18 2022. This detailed description of the chemical compound acetaldehyde includes a section on acetaldehyde production, especially on the hydration of acetylene with mercury's catalyzation of the reaction. This offers important scientific background for how the Chisso factory's industrial processes began polluting the waters of Minamata Bay with mercury, which was then consumed by fish and, ultimately, the people.

Allan, Jennifer. "The Incremental Approach to Governing Mercury." *International Institute for Sustainable Development*, 1 November 2021, https://www.iisd.org/articles/governing-mercury.
Accessed 19 February 2022. This article provides an in-depth history and discussion of the events, treaties, and laws resulting in the regulation of mercury, along with statistics on mercury contamination's continued prevalence today. It places particular emphasis on the tragedy of Minamata disease and the proceedings of the Minamata Convention, indicating successful international diplomatic efforts ultimately resulting from citizens' action to achieve justice in Japan.

"Changes since the Industrial Revolution." American Chemical Society,

https://www.acs.org/content/acs/en/climatescience/greenhousegases/industrialrevolution.html. Accessed 20 February 2022. This article discusses the dramatic increases in greenhouse gas emissions since the start of the Industrial Revolution and provides accompanying graphs and statistics. I used this information for my "Industrial Revolution" page to provide historical context for widespread pollution and environmental destruction resulting from the rise of factories, such as Chisso.

- Chasek, Pamela, and Indira Gandhi. "Stockholm and the Birth of Environmental Diplomacy." *International Institute for Sustainable Development*, 10 September 2020, https://www.iisd.org/articles/stockholm-and-birth-environmental-diplomacy. Accessed 19
  February 2022. This article offers information and analysis on the Stockholm Conference, along with photographs and videos of the event, important figures, and its impacts. It names specific programs, agreements, and principles originating from diplomats' discussions. There is also a section on the influence that Minamata disease had on sparking concern for the environment and the need for such a conference, demonstrating the significance of the tragedy and the victims' movement in achieving successful environmental diplomacy.
- Cooper, Ashley, and Freddie Wilkinson. "Industrial Revolution and Technology." *National Geographic Society*, 9 January 2020, https://www.nationalgeographic.org/article/industrial-revolution-and-technology/?utm\_source=Bi

bblioRCM\_Row. Accessed 17 February 2022. This article contains various details and images that provide a strong background of the global industrial revolution. I used it mainly for its section on the rise of the chemical industry, which was then incorporated into my website section on historical context and the industrial revolution.

- Daigle, Michelle Deborah Joanne. "Modern Ambivalences: The Minamata Disease Disaster, Haptics, and the Social Movement in Japan." *ScholarSpace at the University of Hawaii at Manoa*, 2020, https://scholarspace.manoa.hawaii.edu/handle/10125/68909. Accessed 19 February 2022. This abstract relates an informative overview of Minamata disease and the certification system, with statistics on the number of victims who have been compensated and those who have been left out for varying reasons. I used this data in my "1969-Present" section to convey the unresolved aspects of the tragedy and the failures of debate and diplomacy related to the national government's response.
- DiGangi, Joseph. "Opinion: A Call for Action on Mercury Poisoning in Minamata, Japan." *Scientific American*, 10 October 2013,

https://www.scientificamerican.com/article/opinion-a-call-for-action-on-mercury-poisoning-in-mi namata-japan/. Accessed 19 February 2022. This opinion piece provides background on the tragedy of Minamata disease and describes some citizens' opposition to the name of the Minamata Convention on Mercury, for many have still not been compensated and achieved justice from the national government. It also touches on their hopes for the international treaty and the future of their situation in Japan.

Esteban, Miguel, et al. Map showing the location of Minamata city, Kumamoto Prefecture, Japan. Sustainability science: Field methods and exercises - Scientific Figure on ResearchGate., Jan. 2016,

researchgate.net/figure/Map-showing-the-location-of-Minamata-city-Kumamoto-Prefecture-Japa n-Inset-map-shows\_fig18\_317772377. Accessed 20 Feb. 2022. Map. This simple map, initially from a book by academics at the University of Tokyo, magnifies Minamata on an outlined map of Japan; it labels the locations of the Shiranui Sea, Chisso's factory, Hyakken Harbor, and Minamata Bay. I used it in my section on Minamata and Chisso's Pollution to provide context for the events discussed throughout the website.

- Fawcett, Harry. "Minamata patients speak out on anniversary of disease." *Al Jazeera*, 1 May 2016, https://www.aljazeera.com/news/2016/5/1/minamata-patients-speak-out-on-anniversary-of-diseas
  e. Accessed 6 March 2022. Ahead of the 60th anniversary of the discovery of Minamata disease, this article relates Minamata disease victims' fight for compensation and the physical, social, and economic challenges that they face. I used one of the quotes it offers in my "Citizen Impact" section.
- "First Person: Telling the tragic story of mercury poisoning in Japan." *UN News*, 30 October 2021, https://news.un.org/en/story/2021/10/1103842. Accessed 20 February 2022. This piece is largely a first-hand account from Masami Ogata, a victim of Minamata disease who did not receive certification until 2007, in which he discusses the story of his family and the discrimination they faced; there is also a brief explanation of Minamata disease and the key provisions of the Minamata Convention on Mercury. I quoted Ogata in my "Citizen Impact" section.
- Funakoshi, Minami, and Kyung Hoon Kim. "More than 60 years on, Japan's mercury-poison victims fight to be heard." *Reuters*, 20 September 2017,

https://www.reuters.com/article/us-japan-minamata-victims/more-than-60-years-on-japans-mercu ry-poison-victims-fight-to-be-heard-idUSKCN1BV326. Accessed 19 February 2022. This article highlights the continued impact of Minamata disease on victims and offers several quotes from them, including from Sakamoto. Such demonstrates the failures of the government's delayed response, spurred by early debates over the disease's cause and later ones over the victims' movement. I cited a quote from Sakamoto in my section on the Minamata Convention on Mercury.

Genova, Alexandra. "W. Eugene Smith's Warning to the World." *Magnum Photos*, 15 Apr. 2019, www.magnumphotos.com/newsroom/health/w-eugene-smith-minamata-warning-to-the-world/.

Accessed 6 Mar. 2022. This article contains numerous photos taken by W. Eugene Smith and Aileen Mioko Smith documenting the crisis, from the turmoil of victims and fishermen to their significant political movements, in Minamata. I used these photos in several places across my website.

- George, Timothy S. *Minamata: Pollution and the Struggle for Democracy in Postwar Japan.* Harvard University Asia Center, 2002. This book provides in-depth information and analysis, along with photographs, charts, and statistics, on the entire tragedy, from Chisso's early foothold in Minamata to the debates over the investigation of the disease and the victims' and fishermen's movements in the 1950s through 1980s. It was extremely helpful as I researched these events and crafted my argument, and I cited it throughout my website.
- Gerhardt, Robert E. "Shisei Kuwabara: Minamata Disease, and the Poisoning of a Town." *Blind Magazine*, 27 March 2021,

https://www.blind-magazine.com/en/stories/shisei-kuwabara-minamata-disease-and-the-poisonin g-of-a-town/. Accessed 19 February 2022. This article discusses Japanese photographer Shisei Kuwabara's documentation of the tragedy in Minamata and provides several photographs that he took of victims, fishermen, and the environment from the 1960s through 1980s. I used these images throughout my website for viewers to better visualize the historical events and processes that I cover.

- Gill, Tom, and Tsurumi Kazuko. "New Lives: Some Case Studies of Minamata." *The Asia-Pacific Journal: Japan Focus*, 24 August 2014, https://apjjf.org/2014/12/34/Tom-Gill/4169/article.html. Accessed 20 February 2022. This in-depth essay provides a robust background of the tragedy in Minamata, with specific information on the social and economic impacts of Chisso's presence, and discusses several case studies of victims' confrontational and non-confrontational approaches to achieve justice. I primarily used its discussion of Teruo Kawamato for my section on "1969-Present," but it was very helpful for understanding the successes of citizen action during the movement. I also used a photograph of the Chisso factory for my page on the historical context of Minamata.
- Hachiya, Noriyuki. *The History and the Present of Minamata Disease Entering the second half a century*. Japan Medical Association Journal, Mar. 2006. *Semantic Scholar*, www.semanticscholar.org/paper/The-History-and-the-Present-of-Minamata-Disease-%E2%80%9
  4-a-Hachiya/559ae0de374311baaaecf4320d963d72033a4b01#paper-header. Accessed 19 Feb. 2022. This article provides a detailed history of the scientific, social, and political aspects of the events in Minamata, particularly on the investigations of the causes of the disease, the responses of the national government and its public health and environmental departments, and the debates

and lawsuits over certification and compensation; it also highlights the events' legacy and present-day controversies. I not only referenced it for this information, but also included its charts and images in various sections of my website.

Hagino, Naoji. Minamata Disease: 20 times more patients exist than the Japanese government recognizes.17 Mar. 2014. Pollution Solutions Online,

www.pollutionsolutions-online.com/white-paper/hazardous-waste/20/company/minamata-disease nbsp20-times-more-patients-exist-than-the-japanese-government-recognizes/21. Accessed 19 Feb. 2022. This report by a doctor at the Kido Hospital in Niigata, Japan, includes a timeline and various charts displaying the history of acetaldehyde production, the recognition of patients, and the number of victims across both instances of Minamata disease. It was helpful for gaining insight on how these events, especially the certification processes, developed over time.

Harada, Masazumi, et al. *Minamata disease: a challenge for democracy and justice*. 2013. *Semantic Scholar*,

www.semanticscholar.org/paper/Minamata-disease-%3A-a-challenge-for-democracy-and-Yorifuji -Tsuda/7691633e5cd8abc0b5c75e3cbc8b184604cf2798. Accessed 19 Feb. 2022. This article primarily discusses the history of the national and international responses to Minamata disease. I frequently used its photographs on my website, such as on my "Stockholm Conference" and "Minamata & Chisso" pages.

Hernon, Matthew. "Minamata disease victims struggle to find closure." *The Japan Times*, 24 October 2020,

http://www.japantimes.co.jp/news/2020/10/24/national/social-issues/minamata-disease-victims-cl osure/. Accessed 9 March 2022. This article contains various quotes from victims of the disease and photographs by W. Eugene and Aileen Mioko Smith. It provided valuable information on the continual impacts of the events in Minamata, relating the city's history to today.

- Honda, Shun'ichi, et al. "Recent Advances in Evaluation of Health Effects on Mercury with Special Reference to Methylmercury—A Minireview." *Environmental Health and Preventive Medicine*, vol. 11, no. 4, July 2006, pp. 171-76, https://doi.org/10.1007/BF02905275. Accessed 20 Feb. 2022. This abstract offers a scientific explanation of mercury and methylmercury, along with the effects of exposure and contamination in people, as what occurred with Minamata disease. It provided me with basic information on this phenomenon, and I used it for my discussion on the "Industrial Revolution" page.
- Leah, Rick. "Minamata." *Mercury: Minamata Bay Details*, University of Liverpool, http://pcwww.liv.ac.uk/aquabiol/mercury/minamata/minamatanotes\_long.htm. Accessed 20 February 2022. This academic article provides background on Minamata disease and focuses on

the legal processes and issues surrounding the fight to compensate victims; it also touches on the cultural factors that influenced the debate between Chisso, victims, and government officials. It includes a quote from the Kumamoto District Court's opinion for the first major lawsuit, which I cited in my "1969-Present" section.

- The Long Road to Recovery: Community Responses to Industrial Disaster. United Nations University
  Press, 1996. United Nations University, United Nations University Press,
  archive.unu.edu/unupress/unupbooks/uu21le/uu21le05.htm#introduction. Accessed 18 Feb. 2022.
  This book contains a section on Minamata disease; it discusses citizens' diplomatic efforts to
  achieve relief and reparations and shut down the Chisso plant amidst the prefectural and national
  governments' inaction. It also seeks to analyze reasons for these issues and how officials could
  have acted more effectively. I used its information and included its quotes from government
  bodies for various sections found on my website.
- Minamata Disease Municipal Museum, editor. *Minamata Disease: Its History and Lessons*. Minamata City Planning Division, Dec. 2007. *Minamata Disease Municipal Museum*, minamata195651.jp/pdf/kyoukun\_en/kyoukun\_eng\_all.pdf. Accessed 19 Feb. 2022. This 58-page report on Minamata disease, including the discovery and investigations of the outbreak, the environmental and compensatory measures, the restoration of Minamata, citizens' movements, and implications for today, provides a comprehensive discussion and evaluation of the tragedy. I used the information, quotes, charts, and images it holds throughout my website.
- ---. Personal interview with the author. 8 Feb. 2022. Through my interview over email with experts at the Minamata Disease Municipal Museum, I received answers to outstanding questions regarding pollution measures in Minamata before the 1950s, the role of Minamata residents aside from Sakamoto at the Stockholm Conference, and other topics related to events in Minamata. I quoted their response in my "Stockholm Conference" section.
- ---. "Timeline of Minamata Disease History (1889-2007)." *Minamata Disease Municipal Museum*, minamata195651.jp/pdf/timeline\_en.pdf. Accessed 19 Feb. 2022. This timeline includes the specific dates of hundreds of relevant events from 1889 to 2007. I used it for general reference throughout the research and website-building processes.
- "The Meiji Restoration and Modernization." *Asia for Educators*, Columbia University, http://afe.easia.columbia.edu/special/japan\_1750\_meiji.htm. Accessed 18 February 2022. This article offers a comprehensive overview of the causes and effects of the Meiji Restoration in Japan. I mainly used it for my "Minamata & Chisso" historical context section to demonstrate the conditions in Japan during Chisso's establishment and, ultimately, highlight the environmental degradation resulting from such industrialization.

- "Mercury Emissions: The Global Context." U.S. Environmental Protection Agency, 1 February 2021, https://www.epa.gov/international-cooperation/mercury-emissions-global-context. Accessed 21 February 2022. This article provides an explanation of and statistics regarding worldwide mercury pollution using information from the past five years. I included a map of global emissions on my "Minamata Convention" page to relate their continued prevalence today and the need for diplomacy to negotiate regulations on them.
- "Mercury: The Tragedy of Minamata Disease." *The Collaborative on Health and the Environment*, https://www.healthandenvironment.org/environmental-health/social-context/history/mercury-the-t ragedy-of-minamata-disease. Accessed 19 February 2022. This brief article relates the scientific lessons that can be learned from the events in Minamata. It gave me important background during the early research process and further indicated the significance of these issues.
- Minamata Disease: The History and Measures. Government of Japan Environmental Health Department, 2002. Ministry of the Environment, www.env.go.jp/en/chemi/hs/minamata2002/index.html.
  Accessed 19 Feb. 2022. This multichapter report of the history of Minamata disease, from the first outbreaks to the prefectural and national governments' long-term response and the settlements for compensation, was another helpful resource for information, statistics, charts, maps, and images. For example, I used one of its maps regarding the restoration of Minamata Bay on my "1969-Present" page.
- "Minamata Disease: The case of Shinobu Sakamoto of Japan." *IPEN*, 9 October 2017, https://ipen.org/news/minamata-disease-case-shinobu-sakamoto-japan. Accessed 19 February 2022. This article provides a background on Shinobu Sakamoto's life and discusses her attendance at the first meeting of the Conference of Parties to the Minamata Convention on Mercury. These additional details improved my understanding of how the diplomacy of the Minamata Convention has transpired since the treaty's creation.
- Mishima, Akio. *Bitter Sea: The Human Cost of Minamata Disease*. Kosei Publishing Company, 1992.
  This book covers the causes of Minamata disease and its impacts on victims, with a focus on the endeavors of Michiko Ishimure, the activist who wrote *Paradise in the Sea of Sorrow*, also known as *Paradise in the Bitter Sea*. It built on my understanding of these topics and helped me draw greater connections and conclusions when reading Ishimure's piece.
- Nishi, Takaharu. "Minamata disease patients mark 65 yrs since official recognition amid concerns for future." *The Mainichi*, 1 May 2021,

https://mainichi.jp/english/articles/20210501/p2a/00m/0na/022000c. Accessed 20 February 2022. This article discusses the stories and experiences of several victims who continue to navigate life with Minamata disease, and includes their input on lessons to be learned from the tragedy and

hopes for the future. I used a quote from Kimiyo Ito in my section on the "Citizen Impact" of the disease.

"Patients and Victims." Minamata Disease Museum,

- https://www.minamatadiseasemuseum.net/patients-and-victims. Accessed 20 February 2022. This page contains various charts, graphs, and statistics on victims' compensation and the certification system. I used one chart in my "1969-Present" section to illustrate how the prefectural and national governments failed to develop an effective certification system, which ultimately originates from the debate over the causes and resolution of the disease and their reluctance to hold Chisso accountable.
- Peterson, S.A., and M. Okada. *Water Pollution Control Policy and Management: the Japanese Experience*. Gyosei Pub., 2000. *Water Environment Partnership in Asia*, www.wepa-db.net/policies/cases/minamatawan/top.htm. Accessed 19 Feb. 2022. This report on the events in Minamata contains significant information and data on the investigations regarding the causes of the disease. I used two of the charts it provides from the Kumamoto University Study Group's research on my "Investigation" page.
- Rome, Adam. "Earth Day 1970 was more than a protest. It built a movement." *The Washington Post*, 22 April 2020,

https://www.washingtonpost.com/outlook/2020/04/22/earth-day-1970-was-more-than-protest-it-b uilt-movement/. Accessed 21 February 2022. This article discusses the environmental movement of the 1960s through 1970s and highlights the lead-up to and impacts of the first Earth Day in 1970. I used one of its photographs in my "Stockholm Conference" page during my discussion of how the tragedy and movements in Minamata fit into wider political change concerning environmental policy.

Rosen, Miss. "Revisiting "Minamata," W. Eugene Smith's Final Photo Series." *Blind Magazine*, 3 June 2021,

https://www.blind-magazine.com/en/stories/revisiting-minamata-w-eugene-smiths-final-photo-ser ies/. Accessed 19 February 2022. This article contains photographs of W. Eugene Smith and Aileen Mioko Smith to share their story, as well as images that they took during their time in Minamata. It improved my understanding of the global attention paid to the events in Minamata, and I used these photos throughout my website.

Rowe, David. "History of the chemical industry, 1750 to 1930." *RSC Education*, https://edu.rsc.org/download?ac=509455. Accessed 17 February 2022. This scientific article provides an in-depth history of the rise of the chemical industry, which I used to inform my discussion on the "Industrial Revolution" page. It offers important historical context for the rise of Chisso itself and how the events in Minamata reflected broader social and economic issues and trends from this period.

- Social Scientific Study Group on Minamata Disease. In the Hope of Avoiding Repetition of the Tragedy of Minamata Disease: What We Have Learned from the Experience. 2001. National Institute for Minamata Disease, nimd.env.go.jp/syakai/webversion/pdfversion/e\_houkokusho.pdf. Accessed 19 Feb. 2022. This 138-page report largely covering environmental measures before the 1950s, the competing investigations of Minamata disease, and the responses of the city, prefectural, and national governments includes enormously helpful quotes, statistics, images, and information on the situation in Minamata during this period. I referenced it for information throughout my website, but it was particularly useful for my discussion on the "Investigation" page.
- Streets, David G., et al. "Five Hundred Years of Anthropogenic Mercury: Spatial and Temporal Release Profiles\*." *Environmental Research Letters*, vol. 14, no. 8, 22 July 2019, p. 084004, https://doi.org/10.1088/1748-9326/ab281f. Accessed 20 Feb. 2022. This study offers information on mercury pollution from roughly 1500 to the present day and highlights the role of industries and factories, such as Chisso, in the dramatic increase since the 18th century. I used one of its graphs in my "Industrial Revolution" section to relate such processes.
- "10 Things to Know about Minamata Disease." Minamata Disease Museum, https://www.minamatadiseasemuseum.net/10-things-to-know. Accessed 19 February 2022. This page provides ten explanations and photographs of important aspects of the events in Minamata. It was useful during my early research to gain a background on the major players and issues, and I used its images across my website, like in my "Minamata & Chisso" section.
- Tetsuji, Okazaki. "Lessons from the Japanese Miracle: Building the Foundations for a New Growth Paradigm." *Nippon*, 9 February 2015, https://www.nippon.com/en/in-depth/a04003/. Accessed 20 February 2022. This article includes information and statistics on Japan's postwar economic growth, which provided significant historical context for conditions that would have contributed to the governments' submission to Chisso. I used one of its graphs in my "Minamata & Chisso" section to relate the impact of the Meiji Restoration and the importance of industry in Japan during the 1950s.
- "Tokyo's Role in Addressing Air Pollution in Japan." *Japan for Sustainability*, 31 March 2005, https://www.japanfs.org/en/news/archives/news\_id027794.html. Accessed 19 February 2022. This article provides an overview of anti-pollution measures in Japan from the 1940s to the early 2000s. It was particularly useful for my discussion of the Tokyo Prefectural Ordinance for Factory Pollution Control in my "Minamata & Chisso" historical context section.

- Tsuda, Toshihide, and Takashi Yorifuji. "The History of Minamata Disease and Public Health Policy." *Epidemiology*, vol. 22, Jan. 2011, p. S99, https://doi.org/10.1097/01.ede.0000391971.19081.05. This abstract includes an overview of the slow, ineffective public health responses of the prefectural and national governments after the initial discovery of the disease, exhibiting the failures of such debate and the need for citizens' diplomatic movements and action. It was especially helpful for its discussion of the Food Sanitation Act, which I mentioned in my "1956-1959" section.
- "Water and Air Pollution." History Channel, 30 March 2020,

https://www.history.com/topics/natural-disasters-and-environment/water-and-air-pollution. Accessed 17 February 2022. This article describes the impact of the industrial revolution on increasing water and air pollution and discusses the resulting environmental movement of the 1960s through 1970s, along with specific pieces of legislation that were achieved. It was helpful for my "Industrial Revolution" section to set the scene for the discussion of Chisso's pollution in Minamata and the following protests of fishermen and victims.

"Working with our environment: an introduction." The Open University,

https://www.open.edu/openlearn/nature-environment/the-environment/environmental-science/wor king-our-environment-introduction/content-section-2.3. Accessed 17 February 2022. This article relays the urbanization that resulted from the industrial revolution and the environmental impacts of new cities and factories. It was useful for research on the historical context prior to Minamata and to draw a parallel between these broader trends and the events in Minamata.

Yokoyama, Hisashi. "Mercury Pollution in Minamata." *SpringerBriefs in Environmental Science*, 2018, https://doi.org/10.1007/978-981-10-7392-2. This book provides in-depth information on the scientific and political aspects of the history of Minamata disease; it was particularly useful for its discussions of Chisso's counterclaims after the first investigations of the disease and the graphics of acetaldehyde production by the factory. It also includes a detailed overview of the applications of lessons learned from these events to methylmercury pollution issues today. I referenced its information and images throughout my website.