

**Comments on the Report of the Court-Appointed Expert
Richard Cabrera Vega in the Case of
Maria Aguinda y Otros v. Chevron Corp.**

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Comments on the Report of the Court-Appointed Expert Ing. Richard Cabrera Vega in the Case of Maria Aguinda y Otros v. Chevron Corp.

We have reviewed the report “Informe Sumario del Examen Pericial” that was prepared by Ing. Richard Cabrera Vega, who was appointed as a technical expert by the Court in the case of María Aguinda y Otros against Chevron Corporation (Cabrera, 2008). Mr. Cabrera also prepared written responses to questions about the report that were submitted to the Court by the plaintiffs and defendant, which we also reviewed. In its original charge to Mr. Cabrera, the Court requested that Mr. Cabrera review the technical and scientific information for the case and prepare a report that presents his conclusions and recommendations on liability and damages caused by Texpet’s oilfield operations in the Napo Concession, Ecuador, and on the actions required to restore the environment to its condition prior to the damages. Mr. Cabrera is thus acting in the capacity of a neutral “expert” to the Court, and his role is to assist the Court in evaluating the scientific and technical information that was collected and compiled for the case. In the U.S. Court system, Mr. Cabrera would be called a Technical Special Master.

We reviewed the overall approach that Mr. Cabrera used to assess the damages caused by Texpet’s operations, and we reviewed the specific methods that he used to conduct his assessment. Based on our review, we conclude that the overall approach used by Mr. Cabrera is sound, reasonable, and consistent with approaches used in other environmental damage cases around the world. Mr. Cabrera’s report is backed by a significant quantity of data and technical information that was collected by Chevron, by the plaintiffs, and by himself, as well as data and information from the scientific literature. The data evaluation he conducts shows that data collected by both parties to the litigation as well as by Mr. Cabrera himself produced consistent scientific results from across the scores of oil production sites tested in the area. The conclusions and recommendations of Mr. Cabrera are consistent with the environmental damages at other large environmental contamination sites around the world.

The comments presented here reflect and incorporate the reviews of approximately 20 prominent scientists on the Cabrera report. These scientists include toxicologists, economists, ecologists, geochemists, hydrologists, environmental chemists, environmental scientists, and engineers. They include experts from academia and from the environmental industry.

1. The Expert’s Approach is Reasonable

Mr. Cabrera’s instructions from the Court were to evaluate the environmental damages caused by Texpet and to determine what needs to be done to repair the damages and return the environment

to what it was before any damages caused by Texpet began (Cabrera, 2008). After reviewing the extensive record of environmental data and information that was collected during the trial, and collecting some of his own data, Mr. Cabrera has concluded that Texpet's operations severely contaminated a large area of the Ecuadorian Amazon, and that the contamination has caused extensive damages to the environment and its inhabitants. Mr. Cabrera also found that Texpet is primarily responsible for the damages. To address the damages, Mr. Cabrera recommends the following:

1. That the extensive soil contamination throughout the region should be cleaned up to no more than 100 parts per million (ppm) total petroleum hydrocarbons (TPH), and that contaminated groundwater be cleaned up to meet standards for human health;
2. That the oil production infrastructure left behind by Texpet is inadequate, and should be repaired to prevent future discharges from continuing to pollute the region;
3. That the health and well-being of the people have suffered over decades because of the contamination, and therefore a system of clean drinking water and health care should be supplied to the affected inhabitants to improve living conditions and to help compensate for the decades of suffering caused by the contamination;
4. That assistance should be provided to the indigenous groups that were forced from their lands and had their cultural identity and values impacted as a result of Texpet's operations;
5. That Chevron is responsible for damages arising from the excess number of cancer deaths that have been caused by the oil contamination in the region;
6. That the damaged ecosystem should be ecologically restored to conditions prior to Texpet operations, to the extent possible.

Table 1 presents a summary of the monetary value of each of these components (taken from the Cabrera report and Cabrera's response to questions from the parties, in which some of the values were revised).

Table 1. Values for type of damage

	Estimated cost
Remediation and restoration	
Soil remediation	\$2,743,000,000
Groundwater remediation	\$3,236,000,000
Health care system	\$480,000,000
Indigenous impacts	\$430,000,000
Drinking water system	\$428,000,000
Infrastructure	\$375,000,000
Total	\$7,692,000,000
Compensation for losses	
Excessive cancer deaths	\$9,527,000,000
Ecosystem losses	\$875,000,000 to \$1,697,000,000
Total	\$10,402,000,000 to \$11,224,000,000
Total for remediation, restoration, and compensation	\$18,094,000,000 to \$18,916,000,000

Mr. Cabrera's recommendations thus include actions to clean up the environmental contamination, restore the environment, improve the lives of the people affected by Texpet's operations, and compensate for the losses that they have suffered. Together, these recommendations are a reasonable approach to dealing with the environmental problems caused by Texpet's operations. He appropriately concluded that the contamination that continues to cause ongoing harm to people and the environment must be cleaned up, and future contamination must be prevented. However, Mr. Cabrera recognizes that cleaning up and preventing future contamination alone is not enough, because the people and the environment have suffered from the damages for many decades. Indigenous groups largely have been displaced from the area. He also concludes that many people have suffered serious health effects, including cancer and death, as a result of the contamination, that the ecosystem has been severely impacted by the contamination, and that there have been serious human rights violations. Cleaning up the contamination now does nothing to compensate for these damages and losses, it only helps to stop them from continuing to occur. Therefore, the recommendations of Mr. Cabrera include two basic components: (1) clean up the contamination problem as it exists now; and (2) compensate for the losses that have happened over time.

Mr. Cabrera's recommendations are in keeping with standard legal and technical practice for assessing and awarding environmental damages caused by pollution. For example, after the Gulf War in 1991, Kuwait and other affected countries filed claims with the United Nations against Iraq for the impacts to the environment, public health, and cultural resources caused by, among other things, the extensive oil contamination from well fires and oil spills. In considering how to assess the environmental damages, the United Nations Compensation Committee determined that Iraq was liable for both the cost of cleaning up the oil contamination and for compensating for

the damages to the environment and public health that occurred over time (UNCC Governing Council, 2005). This is exactly the same approach used by Mr. Cabrera. Similarly, the environmental damages and awards resulting from the Exxon Valdez oil spill were also assessed as both the costs to conduct the oil cleanup and to compensate for the damages and losses caused by the oil spill.

U.S. and international environmental laws also require that the same approach be used in assessing environmental damages. In the U.S., the Oil Pollution Act, Superfund Law, Clean Water Act, and many state laws include provisions for both the clean up of environmental contamination and compensation for the environmental damages that occur over time until the clean up is completed. The U.S. laws state that cleaning up the contamination without also addressing the damages and losses over time is only a partial response to the damages caused by the contamination.

Therefore, Mr. Cabrera's approach to addressing the environmental harm caused by Texpet – which is to clean up the contamination, prevent future contamination, and provide compensation for the losses – is consistent with other environmental pollution cases and environmental laws in the world.

2. The Report Conclusions are Grounded in Data

Mr. Cabrera based his conclusions on a large amount of data and information. His technical analyses are based on data collected from the field investigations that were conducted as part of trial, on the other data and information submitted by the parties as part of the trial, and on a variety of data collected from the scientific literature. As a result, the conclusions of Mr. Cabrera have a strong foundation in data.

First, Mr. Cabrera relied on data collected from the Concession itself to assess the damages caused by Texpet operations, including:

- ▶ **Data on environmental contamination** collected by both parties and by Mr. Cabrera himself as part of the trial. In all, Mr. Cabrera used a database with over 64,000 chemical analysis results from over 90 different sites in the Concession. A large majority of this data was collected by Chevron. Prior to including the data in his analysis, he conducted a data quality review. He also considered environmental contamination data collected by other parties prior to the litigation. Mr. Cabrera used these data to understand and describe the nature and extent of environmental contamination that has resulted from Texpet operations.

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- ▶ **Detailed information on the history of Texpet operations in the Concession,** including data on the amount of oil, formation water, and gases produced over time, and Texpet's waste handling practices. He also used detailed geographic information system data that pinpoint the location and sizes of all of the wells, wellpads, and production stations operated by Texpet and all of the roads that they constructed. Mr. Cabrera used these data to understand how Texpet operations caused the contamination, the complete extent of contamination caused by Texpet operations, and how the impacts changed over time.
 - ▶ **Data on the number, location, size, and condition of over 900 waste pits built by Texpet in the Concession.** Mr. Cabrera relied on a detailed characterization of the waste pits built by Texpet, including aerial photography and detailed well site and production station maps. He used these data to understand the distribution of contamination across the Concession and at individual sites, and to calculate the amount of soil remediation necessary at the pits.
 - ▶ **Extensive surveys of the health and wellbeing of people in the Concession.** As part of his work, Mr. Cabrera conducted detailed in-person surveys of over 1,000 families who live in the Concession. The surveys were used to collect extensive data on cancer, spontaneous abortions, and birth deformities, as well as on rapes, kidnappings, and other human rights violations. These surveys provided valuable and direct information on the health and well-being of the people that live in the area.
 - ▶ **Field surveys of plant and animal communities** in and around oil wells that describe the impact of the oilfield operations on plants and animals.

In developing his recommendations to address the environmental damages, Mr. Cabrera then relied on a significant quantity of information from the Concession, from other comparable contaminated sites, from the scientific literature, and from international environmental regulations:

- ▶ **For the environmental cleanup costs,** Mr. Cabrera relied on actual cleanup cost data from other sites that were contaminated with similar kinds of petroleum spills and have been cleaned up using the same methods that he proposed for the Concession.
- ▶ **For costs to improve the inadequate oilfield infrastructure,** Mr. Cabrera used actual data on the amount of formation water and flare gases being produced in the Concession. He used actual costs of gas capture from the stations that have already been built and operated within the Concession, and actual costs of reinjection wells in other parts of South America.

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- ▶ **For the potable water supply costs**, Mr. Cabrera used census data from the Concession to design a supply system that gets the appropriate amount of potable water to where it is needed. He also used actual cost data from the World Bank on how much it costs to install potable water systems in Ecuador.
 - ▶ **For health care costs**, Mr. Cabrera conducted an evaluation of the current health care system and its needs, and developed cost estimates for a proper health care system using detailed costing data from other projects.
 - ▶ **For calculating the value of the lives lost because of cancer**, Mr. Cabrera relied on the public health survey in the Concession to determine the number of “excess” cancer deaths caused by oilfield contamination. He then used the value of lives lost that is also used by the U.S. Environmental Protection Agency (U.S. EPA) when they consider the impacts of pollution on people. The U.S. EPA value has been extensively vetted within the scientific community and is used in regulatory analysis in the U.S.
 - ▶ **For the value of the losses to the rainforest ecosystem**, Mr. Cabrera used detailed geographic information system data from aerial photography of the Concession to determine the amount of rainforest that has been lost. The value of the lost rainforest was calculated using values from the peer-reviewed scientific literature and actual rainforest restoration costs from other similar projects.
 - ▶ **For the unjust enrichment analysis**, Mr. Cabrera used cost data from other, similar oilfield operations to determine what Texpet should have spent to operate the oilfield properly. He then used economic data on Texaco and Chevron finances to determine how those unspent dollars accrued over time.

Clearly, the work of Mr. Cabrera is based on a large quantity of data, of many different types, from the Concession itself and from other relevant sources.

3. The Report Uses Sound Methods

Mr. Cabrera used sound and valid methods to conduct his analysis of the extensive data. Some examples that demonstrate the soundness and reasonableness of the methods used by Mr. Cabrera are:

- ▶ The evaluation of contaminant data included an initial assessment of data quality, which is standard practice.

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- ▶ The description of environmental contamination was based on background concentrations of contaminants that would be present had Texpet not polluted the area.
 - ▶ The description of the contamination is thorough and complete, as evidenced by the detailed presentation of the data for every site sampled during the trial.
 - ▶ There was a careful analysis of whether the sites sampled during the trial are representative of all of the sites operated by Texpet in the Concession. This careful analysis concluded that the sampled sites are representative of all sites in the Concession, and therefore that the results from the sampled sites can be applied to the entire Concession.
 - ▶ The need for environmental cleanup is based on standards set by Ecuadorian law. That in itself should be sufficient, but Mr. Cabrera takes the additional step of verifying that the Ecuadorian standards are consistent with international standards for environmental cleanup (and he concluded that they are).
 - ▶ In his evaluation of the adequacy of the actions taken in the 1990s by Texpet to remediate the Concession, Mr. Cabrera's conclusions about the effectiveness of what Texpet did are based on the chemical data, not on the claims or allegations made by the parties. Most of these chemical data were collected by Chevron, and they show that the cleanup was not effective (i.e., the sites are still highly contaminated).
 - ▶ Mr. Cabrera considered the toxicological properties of the chemicals that pollute the Concession in evaluating the results of the public health surveys. For example, he concluded that the types of cancers observed at higher rates in people in the Concession are caused by the chemicals in crude oil and drilling fluids. This is an important step in linking the observed negative health effects to the oilfield contamination.
 - ▶ Mr. Cabrera's evaluation of contaminant impacts to the ecology in the Concession is conducted in a manner consistent with standard U.S. and international practices for ecological risk assessments at polluted sites. He concludes that the contamination poses a significant risk to plants, wildlife, and other biota in the area.
 - ▶ The method used by Mr. Cabrera to calculate the unjust enrichment gained by Chevron from not operating the Concession safely is the same as the standard method used by the U.S. EPA to calculate unjust enrichment.
 - ▶ Mr. Cabrera's reliance on a multi-disciplinary team to address the many technical issues he faced is also consistent with standard practice. He tapped a wide range of technical disciplines to address the complex and interdisciplinary nature of the required analyses, which is standard practice.

4. The Report's Conclusions are Consistent with Other Large Environmental Cases

The recommendations of Mr. Cabrera are that Texpet is responsible for \$18.1 billion to \$18.9 billion in environmental damages. Of this amount, approximately \$6.0 billion is for environmental cleanup and the remainder (\$12.1 billion to \$12.9 billion) is for environmental restoration and compensating for damages.

For comparison, Tables 2 and 3 summarize the cleanup costs and damages for other large environmental contamination cases and several other large oil spills. All dollars have been converted to 2008 dollars using standard consumer price indices. The tables show that the costs and values from these other cases are comparable and, in many cases, much higher than the costs and values in Mr. Cabrera's report. Therefore, the conclusions of Mr. Cabrera are consistent with actual cleanup costs and damages at other large environmental contamination cases around the world.

Table 2. Major international oil spills

Oil spill, location, year	Magnitude of spill	Cleanup costs and damages (in 2008\$^a)	Reference
Texaco operations in the Oriente of Ecuador	Contamination over about 1,500 square miles for over 40 years	\$1.7 billion in cleanup costs \$5.5 billion to \$6.3 billion in damages	Cabrera Court Expert report
Prestige oil spill, Coast of Spain, 2002	20 million gallons; cleanup began immediately	\$2 to \$3 billion in cleanup costs (actual) \$1.2 billion in damage claims	IOPCF, 2002 New York Times, 2003a, 2003b
Exxon Valdez, Valdez Alaska, 1989	11 million gallons; cleanup began immediately	\$2.9 billion in cleanup costs (actual) \$4.1 billion in damages claims (settled for \$1 billion) \$3.6 billion in punitive damages (reduced to \$500 million on appeal)	Duffield, 1997; <i>Exxon Valdez</i> Oil Spill Trustee Council, 2007
Amoco Cadiz, Brittany France, 1978	186 miles of coastline; cleanup began immediately	\$3.4 billion in cleanup costs and damages (actual)	New York Times, 1989; Lenntech, 2006
Oil spills in Kuwait from Gulf War, 1991	100 square miles, contaminated for several years before cleanup	\$2.2 billion in cleanup costs (actual amount granted by UNCC; claim amount was over \$100 billion)	UNCC Governing Council, 2005

a. 2008 dollars were calculated using inflation factors through April 2008. When the year of initial cost estimate was unclear, the most recent date identified was used to calculate 2008 dollars.

Table 3. Contaminated waste sites

Contaminated waste site, location	Approximate size of site	Cleanup costs and damages (in 2008\$^a)	Reference
Texaco operations in the Oriente of Ecuador	Contamination over about 1,500 square miles for over 40 years	\$1.7 billion in cleanup costs \$5.5 billion to \$6.3 billion in damages	Cabrera Special Master report
Mercury contamination, Minamata Bay, Japan	27 tons of mercury compounds released	\$2.6 billion for cleanup and compensation (actual, through 1997)	American University, 1997 New York Times, 1997
Rocky Flats, Colorado	25 square miles	\$7.2 billion in cleanup costs (actual)	DOE, 2005; Author Unknown, 2007
Rocky Mountain Arsenal, Colorado	27 square miles	\$2.7 billion in cleanup costs (actual and estimated)	DoD, 1996
Oak Ridge National Laboratory, Tennessee	8.1 square miles	\$2.25 billion in cleanup costs (actual)	Bechtel, 2008
Hanford Nuclear Reservation, Washington	560 square miles	\$53 to \$63 billion in cleanup costs (estimated)	DOE, 2007 U.S. Water News, 2006
Base Realignment and Closure, United States Military Bases	Military bases in the U.S. and its territories	\$12.7 billion in cleanup costs through 2005 (actual) Total estimated cleanup cost: up to \$168 billion	GAO, 2001, 2007; Bearden, 2005; Navy Historical Center, 2005
Los Alamos National Lab, New Mexico	40 square miles	\$1 billion in cleanup costs (actual and estimated)	Los Alamos National Laboratory, 2006; Las Cruces Sun-News, 2008
Fernald Nuclear Site, Ohio	1.6 square miles	\$4.5 billion in cleanup costs (actual)	Fluor Corporation, 2007

a. 2008 dollars were calculated using inflation factors through April 2008. When the year of initial cost estimate was unclear, the most recent date identified was used to calculate 2008 dollars.

One case that is not included in Table 2 is a case that provides a direct comparison to Mr. Cabrera's valuation of the loss of life. In 2002, the government of Libya settled claims for the deaths of passengers killed in the bombing of Pan Am Flight 103 over Lockerbie, Scotland, for a total of \$3.2 billion, or \$12 million for each of the 270 lives lost (in 2008 dollars). Of this amount, \$9.5 million per life lost (or \$2.6 billion total, both in 2008 dollars) has already been paid (CNN.com, 2002).

As a comparison, Mr. Cabrera recommends payments of \$6.8 million per life lost because of excess cancer deaths (for a total of \$2.7 billion for the 428 lives lost). Thus Mr. Cabrera's recommendations are for a bit more than half of what the Lockerbie case *settled* for.

5. Chevron's False Attacks on the Cabrera Report

Not surprisingly, Chevron has initiated a vigorous attack campaign in an attempt to discredit the Cabrera report. Some examples of Chevron's twisting of the truth¹ in their campaign include:

Chevron statement: *Cabrera completely ignored his court-ordered mandate to determine causation and chronology of environmental conditions.*

Mr. Cabrera carefully chronicled the timing and effects of Texaco's operations on the natural environment. Information from Texaco's own audits in the early 1990s demonstrates that they violated Ecuadorian laws and regulations and customary industry practice and guidelines during every phase of their operations in the Oriente, and Mr. Cabrera relies on this information to conclude that Texaco caused widespread contamination.

Chevron statement: *Cabrera even makes Texaco Petroleum (Texpet) liable for all environmental impact caused solely by Petroecuador during its 18-plus years of operation of the Concession.*

Cabrera went to great lengths to identify the operational history of each waste pit and site in the Concession, and he only included in his evaluation those pits and sites that were built and operated by Texaco. Cabrera clearly states in his report that the sites and pits operated exclusively by Petroecuador were excluded from his evaluation.

Chevron statement: *With no justification, Cabrera arbitrarily concluded that 80 percent of well pits and 100 percent of production-station pits need to be remediated, regardless of past or current remediation efforts.*

1. Direct quotes from Chevron's September 15, 2008 press release.

Cabrera's conclusion was not arbitrary. The extent of remediation was based on a detailed analysis of the extensive chemistry data collected during the recent trial (most of it by Chevron). His analysis showed conclusively that Texaco's alleged "cleanup" was ineffective. Soils at sites "remediated" by Texaco were just as contaminated as sites with no cleanup, demonstrating that a real remediation is still required to clean up the environment.

Chevron statement: *Cabrera completely fabricated a claim for unjust enrichment damages of \$8.3 billion. There is no basis for the claim and no foundation for the number.*

In fact, Cabrera's calculation of Chevron's unjust enrichment was based on a detailed economic analysis using the company's own financial data. The calculation conducted by Cabrera is consistent with standard economic practices for calculating unjust enrichment, including those used by the U.S. EPA to calculate unjust enrichment in environmental damage cases.

Chevron statement: *The remainder of Cabrera's alleged damages and proposed remedies are unrelated to the environmental impact that the court ordered him to assess.*

In fact, Cabrera presented ample evidence to link the damages to Texaco's activities in the Oriente. As described above, Cabrera includes actions both to clean up the existing contamination and to compensate for the losses and suffering that have occurred, which is consistent with standard and legal practice in environmental damage cases. The actions that Chevron calls "unrelated" are actually actions to compensate for the losses and suffering.

Chevron statement: *The judicial-inspection process was demonstrating that remediation conducted by Texaco Petroleum, acquired by Chevron in 2001, was properly conducted at sites in the 1990s.*

Mr. Cabrera's report uses the chemical data collected during the judicial inspection process (including the data collected by Chevron) to specifically answer the question of whether the Texaco cleanup was effective. The data clearly demonstrate that the cleanup was not effective, and the Cabrera report states this fact clearly.

References

AEHS. 2008. The Association for Environmental Health and Sciences. 2003 Survey of States' Soil and Groundwater Cleanup Standards. Available: <http://www.aehs.com/surveys.htm#map>.

American University. 1997. TED Case Studies – Minamata Disaster. January 11. Available: <http://www.american.edu/TED/mimamata.html>. Accessed May 20, 2008.

Author Unknown. 2007. Rocky Flats Reborn. *Science* 317:433. July 27.

Bearden, D.M. 2005. Military Base Closures: Role and Costs of Environmental Cleanup. CRS Report for Congress. April 11. Available: <http://www.globalsecurity.org/military/library/report/crs/46465.pdf>. Accessed 15 May 2008.

Bechtel. 2008. Oak Ridge Environmental Cleanup. Available: http://www.bechtel.com/oak_ridge_cleanup.html. Accessed 15 May 2008.

Cabrera, R.S.V. 2008. Informe Sumario del Examen Pericial. Prepared for the President of the Court of Nueva Loja (in Spanish). March 24.

CNN.com. 2002. Libya, Lockerbie families reach \$2.7 billion settlement. October 29. Available: <http://archives.cnn.com/2002/LAW/10/29/lockerbie.agreement/>.

DoD. 1996. Final Agreement on Rocky Mountain Arsenal Cleanup Signed. U.S. Department of Defense. June 11. Available: <http://www.defenselink.mil/releases/release.aspx?releaseid=931>. Accessed 13 May 2008.

DOE. 2005. DOE Certifies Rocky Flats Cleanup “Complete.” U.S. Department of Energy. December 8. Available: <http://www.energy.gov/news/2790.html>. Accessed 13 May 2008.

DOE. 2007. Information – Hanford Site Map. U.S. Department of Energy, Hanford Site. Available: <http://www.hanford.gov/?page=81&parent=15>. Last updated 5 February 2007.

Duffield, J. 1997. Nonmarket valuation and the courts: The case of the *Exxon Valdez*. *Contemporary Economic Policy* Vol. XV.

Exxon Valdez Oil Spill Trustee Council. 2007. History – Details of the Settlement. Available: http://www.evostc.state.ak.us/History/settlement_detail.cfm. Accessed 13 May 2008.

Fluor Corporation. 2007. Fluor Receives Formal Acceptance from U.S. Department Of Energy; Fernald Clean-Up is Complete. January 29. Available: http://www.lm.doe.gov/land/sites/oh/fernald_orig/NewsUpdate/pdfs%5CFluor%20Fernald%20Receives%20Formal%20DOE%20Acceptance.pdf. Accessed 15 May 2008.

GAO. 2001. Environmental Liabilities: DOD Training Range Cleanup Cost Estimates Are Likely Understated. United States General Accounting Office Report to the Chairman, Committee on the Budget, House of Representatives. April. Available: <http://www.gao.gov/new.items/d01479.pdf>. Accessed 15 May 2008.

GAO. 2007. Military Base Closures: Opportunities Exist to Improve Environmental Cleanup Cost Reporting and to Expedite Transfer of Unneeded Property. United States Government Accountability Office Report to Congressional Committees. January. Available: <http://stinet.dtic.mil/cgi-bin/GetTRDoc?AD=ADA461933&Location=U2&doc=GetTRDoc.pdf>. Accessed 15 May 2008.

IOPCF. 2002. Prestige. International Oil Pollution Compensation Funds. Available: <http://www.iopcfund.org/prestige.htm>. Updated 5 February 2008.

Las Cruces Sun-News. 2008. IG Says Los Alamos Not Meeting Cleanup Schedule. April 15. Available: http://www.lcsun-news.com/ci_8935159. Accessed 16 May 2008.

Lenntech. 2006. Environmental Disasters – Top 10 of Anthropogenic and Natural Environmental Disasters. Available: <http://www.lenntech.com/environmental-disasters.html>. Accessed 14 May 2008.

Los Alamos National Laboratory. 2006. Information Sheet – Land Transfer. Available: http://www.lanl.gov/environment/cleanup/docs/factsheets/fs_land_transfer_er2006-0418.pdf. Accessed 16 May 2008.

Navy Historical Center. 2005. Military Base Closures: Role and Costs of Environmental Cleanup. April. Available: <http://www.history.navy.mil/library/online/mil%20base%20close.html>. Accessed 15 May 2008.

New York Times. 1989. Company News; Exxon Estimating \$1.28 Billion Cost for Spill Cleanup. July 25. Available: <http://query.nytimes.com/gst/fullpage.html?res=950DE0DB1F3BF936A15754C0A96F948260&sec=&spon=&pagewanted=2>. Accessed 14 May 2008.

New York Times. 1997. Mercury, Mostly Gone from Bay in Japan, Still Poisons Town's Life. August 23. Available: <http://query.nytimes.com/gst/fullpage.html?res=9B07E1D6133EF930A1575BC0A961958260&sec=&spon=&pagewanted=all>. Accessed 14 May 2008.

New York Times. 2003a. A Sleeping Tanker Turns Spain's Beaches Into an Oily Sandbox. August 31. Available: <http://query.nytimes.com/gst/fullpage.html?res=9B07E3D71738F932A0575BC0A9659C8B63&scp=2&sq=prestige+oil+spill+cost&st=nyt>. Accessed 15 May 2008.

New York Times. 2003b. World Briefing. Europe: Spain: Effects Of Oil Spill Will Last 10 Years. August 19. Available: <http://query.nytimes.com/gst/fullpage.html?res=>

[9E04E5DF1130F93AA2575BC0A9659C8B63&scp = 4&sq = prestige+oil+spill+cost&st = nyt.](#)
Accessed 15 May 2008.

UNCC Governing Council. 2005. Report and Recommendations Made by the Panel of Commissioners Concerning the Third Installment of “F4” Claims. United Nations Compensation Committee. S/AC.26/2003/31. December 18.

U.S. Water News. 2006. Hanford Plant Cost May Top \$10 Billion. February. Available:
<http://www.uswaternews.com/archives/arcquality/6hanfplan2.html>. Accessed 15 May 2008.