

STATE OF VERMONT

SUPERIOR COURT
WASHINGTON UNIT

CIVIL DIVISION
DOCKET NO. 340-6-14 Wncv

State of Vermont

vs.

Atlantic Richfield Company, (formerly known as Atlantic Richfield Delaware Corporation), individually, as successor-by-merger to Atlantic Richfield Company (a Pennsylvania corporation), and doing business as ARCO Products Company

BP Products North America Inc., (f/k/a Amoco Oil Company and The American Oil Company, individually and as successor-by-merger to BP Exploration and Oil, Inc. and as successor-in-interest to BP North America Inc.)

Chevron U.S.A. Inc., (f/k/a Gulf Oil Corporation, and d/b/a Chevron Products Company and Chevron Chemical Company)

CITGO Petroleum Corporation, (f/k/a Cities Service RMT Corporation)

CITGO Refining and Chemicals Company L.P., individually, and as successor-by-merger to Citgo Refining and Chemicals Company, Inc.

Coastal Eagle Point Oil Company

ConocoPhillips Company, (f/k/a Phillips Petroleum Company and d/b/a Phillips 66 Company, Phillips Chemical Company, and Phillips Oil Company), individually, as successor-by-merger to Conoco, Inc. and Tosco Corporation

El Paso Merchant Energy-Petroleum Company, (f/k/a Coastal Refining & Marketing, Inc., Coastal Derby Refining Company, Derby Refining Company and as Colorado Oil and Gas Corporation)

Equilon Enterprises LLC, (d/b/a Shell Oil Products US) individually, as successor-by-merger to Equiva Services LLC

Exxon Mobil Corporation, (f/k/a Exxon

Corporation and d/b/a ExxonMobil Refining and Supply Company, Exxon Chemical U.S.A., and ExxonMobil Chemical Corporation)

ExxonMobil Oil Corporation, (f/k/a Mobil Oil Corporation, Socony Mobil Oil Company, Inc., and Socony Vacuum Oil Company, Incorporated)

Hess Corporation (f/k/a Amerada Hess Corporation)

Highlands Fuel Delivery, LLC (f/k/a Irving Oil Corporation)

Irving Oil Limited

Mobil Corporation

Motiva Enterprises LLC, (f/k/a Star Enterprises LLC)

PDV Midwest Refining, L.L.C.

Shell Oil Company

Shell Oil Products Company LLC, (d/b/a Shell Oil Products Company)

Shell Petroleum, Inc.

Shell Trading (US) Company, (individually, f/k/a Equiva Trading Company and d/b/a Stusco)

Sunoco, Inc. (R&M), (f/k/a Sun Company, Inc. (R&M), Sun Refining and Marketing Company, and Sun Oil Company of Pennsylvania)

TMR Company, (f/k/a Texaco Refining and Marketing, Inc.), individually and as successor-by-merger to TRME Company (f/k/a Texaco Refining and Marketing (East), Inc.)

Total Petrochemicals & Refining USA, Inc., (f/k/a TOTAL Petrochemicals USA, Inc., Atofina Petrochemicals, Inc., Fina Oil and Chemical Company, and American Petrofina Company of Texas)

TRMI-H LLC (f/k/a TRMI Holdings Inc., Texaco Refining and Marketing Inc., Getty Refining and Marketing Company, and Getty Oil Company (Eastern Operations), Inc.)

Ultramar Energy, Inc.

Valero Energy Corporation

Valero Marketing and Supply Company

Valero Refining-Texas, L.P. (f/k/a Valero Refining Company and Valero Refining Company-Texas)

PLAINTIFF'S SECOND AMENDED COMPLAINT¹

Plaintiff, the State of Vermont, makes the following allegations against the Defendants listed above.

I. SUMMARY OF THE CASE

1. The State of Vermont, by and through Attorney General Thomas J. Donovan, Jr., brings this action to protect and remedy important State interests affected by widespread contamination of the waters of the State with methyl tertiary butyl ether ("MTBE"), a chemical used in some gasoline, and tert butyl alcohol ("TBA"), a degradation product of MTBE.

2. The waters of the State, whether located above or below ground, are limited, precious, and invaluable public resources that are held in trust for the public benefit and that the State has the authority and responsibility to protect, conserve, and manage, in the interest of present and future generations. The State has a significant property interest in its waters and a quasi-sovereign interest in protecting the quality of such waters. The contamination of State waters by MTBE constitutes injury to the environment and to property held in public trust by the State for which the State seeks damages in its capacity as *parens patriae*. The State also acts to protect its own possessory interests in property.

3. Defendants' decision to use MTBE in gasoline, and their promotion, marketing, distribution, and sale of such gasoline has created an unprecedented and widespread degradation of, and future threat to, both the surface and ground waters of the State, including many public and private drinking water supplies and wells. Compared to other gasoline constituents, MTBE

¹ Plaintiff submits its Second Amended Complaint pursuant to and consistent with the Court's July 31, 2018 Decision on Plaintiff's Motion to Amend First Amended Complaint. Plaintiff does not waive any appeal rights, including but not limited to any appeal of the Court's July 31, 2018 Decision, by making this amendment.

contaminates and spreads in water resources more quickly and resists removal and treatment, thereby presenting a serious threat to the State's property and waters. MTBE and TBA have already contaminated numerous drinking water sources in the State and threaten to contaminate more, as a result of normal and foreseen storage, purchase, and use of gasoline in the State.

4. MTBE can cause significant adverse health effects and, even at very low concentrations, can render drinking water unpotable.

5. The defendants in this action are major oil and chemical companies that have refined gasoline, manufactured MTBE, blended MTBE into gasoline, and/or supplied gasoline containing MTBE to the State. The defendants include MTBE manufacturers and refiners and major brand marketers of gasoline containing MTBE that was sold and supplied in the State. Gasoline containing MTBE has damaged and continues to damage the State's waters and other property, both that owned by the State and that owned by citizens of the State.

6. In addition to manufacturing and/or supplying MTBE or gasoline containing MTBE for importation into and sale within the State, the defendants knowingly and willfully promoted, marketed, and sold MTBE and gasoline and other petroleum products (collectively referred to as "gasoline") containing MTBE, when they knew or reasonably should have known that MTBE would be released into the environment and cause contamination of property, water, water supplies, and wells throughout the State in violation of State law, would interfere with the State's interest in protecting and preserving both surface and ground waters as well as both public and private drinking water supplies, and would threaten public health and welfare and the environment, as has occurred and is continuing to occur within the State.

7. The State alleges that the defendants are: liable for natural resource damages and restoration under 10 V.S.A. § 1390; liable for altering the quality of groundwater as prohibited

by 10 V.S.A. §1410; liable for reimbursing the State's expenditures related to MTBE contamination; strictly liable for manufacturing and supplying a defective product; strictly liable for failing to provide adequate warnings in connection with that product; liable for negligently causing damage to the State's property and waters and to the property of citizens of the State; liable for trespass upon the State's property and waters and property of citizens of the State; in a subgroup, liable as co-conspirators with certain other defendants; and liable for all resulting damages, including punitive damages.

8. Plaintiff brings this action to recover compensatory damages and all other remedies, including all costs to investigate, monitor, abate, contain, prevent, treat, and remove MTBE and TBA from the State's property and waters, property of the citizens of the State, and public and private drinking water supplies, and to ensure that the responsible parties bear such expense, rather than the State or its citizens and taxpayers. The State also seeks punitive damages to reflect the aggravating circumstances caused by the defendants' willful, wanton, malicious, oppressive, fraudulent, and/or outrageously reprehensible conduct, and harms caused to public trust resources by defendants' intentional business choices.

II. PLAINTIFF

9. Plaintiff is the State of Vermont, as represented by and through the Attorney General of the State of Vermont, with its principal office at 109 State Street, Montpelier, Vermont 05609-1001.

10. The State brings this action as an exercise of its statutory authority to protect groundwater, and its common law police power, which includes, but is not limited to, its power to prevent pollution of the State's property and waters, to prevent nuisances, and to prevent and abate hazards to public health, safety, welfare, and the environment.

11. The State also brings this action in its *parens patriae* capacity for the benefit of the citizens of the State, whose private property, groundwater, and/or water supplies have been contaminated with MTBE; for the benefit of public water providers, whose property and/or water supplies have been contaminated with MTBE; for the benefit of governmental subdivisions, whose property and/or water supplies have been contaminated with MTBE and/or who have spent funds associated with MTBE contamination; and for the benefit of all citizens of the State who rely on public and private drinking water wells at their residences, schools, churches, workplaces, recreational sites, and elsewhere. The State holds its groundwater resources in trust for all citizens of the State, 10 V.S.A. § 1390(5), and all persons within the State have a right to the beneficial use and enjoyment of groundwater free from unreasonable interference by other persons. 10 V.S.A. § 1410(a)(4).

12. By bringing this suit, the State intends to occupy the field of litigation for property-related tort and public trust claims arising from MTBE contamination in the State of Vermont and to recover damages arising from any and all MTBE contamination in the State, except for any proceeds recovered in previous lawsuits for MTBE contamination of water supplies and wells in the State. The State intends specifically to preempt any similar or related action filed after the date of filing the first complaint in this case except, for example, private lawsuits alleging personal injury or diminution in property value associated with MTBE.

13. The contamination of the State's property and waters by MTBE is an injury to the environment and to property held in trust by the State, for which the State seeks damages. The State has a quasi-sovereign interest in protecting the quality of waters of the State.

14. The contamination of the State's property and waters by MTBE is also an injury to property the State owns in fee for which the State seeks damages. The State has an interest in remediating the contamination of its property and in preventing future contamination.

15. In this Complaint, the term "State's property and waters" refers to all property for which the State seeks damages, including: public property the State holds in trust; property the State owns in fee, property owned by citizens and others, surface water and groundwater in the State, drinking water supplies in the State, and State-owned, public, and private drinking water wells.

III. DEFENDANTS

16. Defendants are petroleum industry corporations including manufacturers and promoters of MTBE and the refiners and marketers of MTBE and/or gasoline containing MTBE. The following defendants, at times relevant to this action, refined, marketed, and/or otherwise supplied (directly or indirectly) MTBE and/or gasoline containing MTBE that each such defendant knew or should have known would be delivered into areas affecting the State's property and waters, or otherwise did business in the State:

a. **Atlantic Richfield Company**, (formerly known as Atlantic Richfield Delaware Corporation), individually, as successor-by-merger to Atlantic Richfield Company (a Pennsylvania corporation), and doing business as ARCO Products Company), is a Delaware corporation with its principal place of business at: 501 Westlake Park Boulevard, Houston, Texas 77079. Atlantic Richfield Company may be served with process through its registered agent, CT Corporation Company, 350 North St. Paul Street, Suite 2900, Dallas, Texas 75201.

b. **BP Products North America Inc.**, (f/k/a Amoco Oil Company and The American Oil Company, individually and as successor-by-merger to BP Exploration and

Oil, Inc. and as successor-in-interest to BP North America Inc.), is a Maryland corporation with its principal place of business at: 501 Westlake Park Boulevard, Houston, Texas 77079. BP Products North America Inc. may be served with process through its registered agent, Prentice-Hall Corporation System, 104 N. Main Street, Barre, Vermont 05634.

c. **Chevron U.S.A. Inc.**, (f/k/a Gulf Oil Corporation, and d/b/a Chevron Products Company and Chevron Chemical Company), is a Pennsylvania corporation with its principal place of business at: 6001 Bollinger Canyon Road, San Ramon, California 94583. Chevron U.S.A. Inc. may be served with process through its registered agent, Prentice-Hall Corporation System, 104 N. Main Street, Barre, Vermont 05634.

d. **CITGO Petroleum Corporation**, (f/k/a Cities Service RMT Corporation), is a Delaware corporation with its principal place of business at: 1293 Eldridge Parkway, Houston, Texas 77077. Citgo Petroleum Corporation may be served with process through its registered agent, CT Corporation System, 400 Cornerstone Dr., #240, Williston, Vermont 05495.

e. **CITGO Refining and Chemicals Company L.P.**, individually, and as successor-by-merger to Citgo Refining and Chemicals Company, Inc., is a Delaware limited partnership with its principal place of business at: 6100 South Yale Avenue, Tulsa, Oklahoma 74136. Citgo Refining and Chemicals Company, LP may be served with process through its registered agent, CT Corporation Company, 350 North St. Paul Street, Suite 2900, Dallas, Texas 75201.

f. **Coastal Eagle Point Oil Company** is a Delaware corporation with its principal place of business at: 1001 Louisiana Street, Suite 1000, Houston, Texas 77002. Coastal

Eagle Point Oil Company may be served with process through its registered agent, CT Corporation Company, 350 North St. Paul Street, Suite 2900, Dallas, Texas 75201.

g. **ConocoPhillips Company**, (f/k/a Phillips Petroleum Company and d/b/a Phillips 66 Company, Phillips Chemical Company, and Phillips Oil Company), individually, as successor-by-merger to Conoco, Inc. and Tosco Corporation, is a Delaware corporation with its principal place of business at: 600 North Dairy Ashford Road, Houston, Texas 77079. ConocoPhillips Company may be served with process through its registered agent, U.S. Corporation Company, 159 State Street, Montpelier, Vermont 05602.

h. **El Paso Merchant Energy-Petroleum Company**, (f/k/a Coastal Refining & Marketing, Inc., Coastal Derby Refining Company, Derby Refining Company and as Colorado Oil and Gas Corporation), is a Delaware corporation with its principal place of business at: 1001 Louisiana Street, Suite 1000, Houston, Texas 77002. El Paso Merchant Energy-Petroleum Company may be served with process through its registered agent, CT Corporation Company, 350 North St. Paul Street, Suite 2900, Dallas, Texas 75201.

i. **Equilon Enterprises LLC**, (d/b/a Shell Oil Products US) individually, as successor-by-merger to Equiva Services LLC, is a Delaware limited liability company with its principal place of business at: 910 Louisiana, Houston, Texas 77002. Equilon Enterprises LLC may be served with process through its registered agent, CT Corporation System, 400 Cornerstone Dr., #240, Williston, Vermont 05495.

j. **Exxon Mobil Corporation**, (f/k/a Exxon Corporation and d/b/a ExxonMobil Refining and Supply Company, Exxon Chemical U.S.A., and ExxonMobil Chemical Corporation), is a New Jersey corporation with its principal place of business at: 5959 Las Colinas Boulevard, Irving, Texas 75039. Exxon Mobil Corporation may be served with

process through its registered agent, Corporation Service Company, 104 N. Main Street, Barre, Vermont 05641.

k. **ExxonMobil Oil Corporation**, (f/k/a Mobil Oil Corporation, Socony Mobil Oil Company, Inc., and Socony Vacuum Oil Company, Incorporated), is a New York corporation with its principal place of business at: 5959 Las Colinas Boulevard, Irving, Texas 75039. ExxonMobil Oil Corporation may be served with process through its registered agent, Prentice-Hall Corporation System, 104 N. Main Street, Barre, Vermont 05634.

l. **Hess Corporation (f/k/a Amerada Hess Corporation)** is a Delaware corporation with its principal place of business at: 1185 Avenue of the Americas, New York, New York 10036. Hess Corporation may be served with process through its registered agent, CT Corporation System, 400 Cornerstone Dr., #240, Williston, Vermont 05495.

m. **Highlands Fuel Delivery, LLC (f/k/a Irving Oil Corporation)** is a Maine corporation with its principal place of business at 190 Commerce Way, Portsmouth, New Hampshire 03801. Highlands Fuel Delivery, LLC may be served with process through the Vermont Secretary of State.

n. **Irving Oil Limited**, is a Canadian corporation with its principal place of business at 1 Germain Street, Saint John, E2L 4V1 NB Canada. Irving Oil Limited may be served with process through the Vermont Secretary of State.

o. **Mobil Corporation**, is a Nevada corporation with its principal place of business at: 800 Bell Street, Suite 1503, Houston, Texas 77002. Mobil Corporation may be served

with process through the Office of the Secretary for Mobil Corporation, 5959 Las Colinas Blvd., Irving, Texas 75039-2298.

p. **Motiva Enterprises LLC**, (f/k/a Star Enterprises LLC), is a Delaware limited liability company with its principal place of business at: OSP 25th Floor, 910 Louisiana Street, Houston, Texas 77002. Motiva Enterprises LLC may be served with process through its registered agent, CT Corporation System, 400 Cornerstone Dr., #240, Williston, Vermont 05495.

q. **PDV Midwest Refining, L.L.C.**, is a Delaware limited liability company with its principal place of business at: 1293 Eldridge Parkway, Houston Texas 77077. PDV Midwest Refining, LLC may be served with process through its registered agent, CT Corporation Company, 350 North St. Paul Street, Suite 2900, Dallas, Texas 75201.

r. **Shell Oil Company** is a Delaware corporation with its principal place of business at: 910 Louisiana Street, Houston, Texas 77002. Shell Oil Company may be served with process through its registered agent, CT Corporation System, 400 Cornerstone Dr., #240, Williston, Vermont 05495.

s. **Shell Oil Products Company LLC**, (d/b/a Shell Oil Products Company), is a Delaware limited liability company with its principal place of business at: 910 Louisiana Street, Houston, Texas 77002. Shell Oil Products Company, LLC may be served with process through its registered agent, CT Corporation Company, 350 North St. Paul Street, Suite 2900, Dallas, Texas 75201.

t. **Shell Petroleum, Inc.**, is a Delaware corporation with its principal place of business at: 910 Louisiana Street, Houston, Texas 77002. Shell Petroleum, Inc. may be

served with process through its registered agent, The Corporation Trust Company, 1209 Orange Street, Wilmington, Delaware 19801.

u. **Shell Trading (US) Company**, (individually, f/k/a Equiva Trading Company and d/b/a Stusco), is a Delaware corporation with its principal place of business at: 1000 Main, 12th Floor, Houston, Texas 77002. Shell Trading (US) Company may be served with process through its registered agent, CT Corporation System, 400 Cornerstone Dr., #240, Williston, Vermont 05495.

v. **Sunoco, Inc. (R&M)**, (f/k/a Sun Company, Inc. (R&M), Sun Refining and Marketing Company, and Sun Oil Company of Pennsylvania), is a Pennsylvania corporation with its principal place of business at: 1818 Market Street, Suite, 1500, Philadelphia, Pennsylvania, 19103. Sunoco, Inc. (R&M) may be served with process through its registered agent, Corporation Service Company, 104 N. Main St., Barre, Vermont 05641.

w. **TMR Company**, (f/k/a Texaco Refining and Marketing, Inc.), individually and as successor-by-merger to TRME Company (f/k/a Texaco Refining and Marketing (East), Inc.), is a Delaware corporation with its principal place of business at: 910 Louisiana, Houston, Texas 77002. TMR Company may be served with process through its registered agent, CT Corporation System, 400 Cornerstone Dr., #240, Williston, Vermont 05495.

x. **Total Petrochemicals & Refining USA, Inc.**, (f/k/a TOTAL Petrochemicals USA, Inc., Atofina Petrochemicals, Inc., Fina Oil and Chemical Company, and American Petrofina Company of Texas), is a Delaware corporation with its principal place of business at: 1201 Louisiana Street, Suite 1800, Houston, Texas 77002. Total Petrochemicals & Refining USA, Inc. may be served with process through General

Counsel for Total Petrochemicals & Refining USA, Inc., 1201 Louisiana Street, Suite 1800, Houston, Texas 77002.

y. **TRMI-H LLC (f/k/a TRMI Holdings Inc., Texaco Refining and Marketing Inc., Getty Refining and Marketing Company, and Getty Oil Company (Eastern Operations), Inc.)** is a Delaware corporation with its principal place of business at: 6001 Bollinger Canyon Road, San Ramon, California 94583. TRMI-H LLC may be served with process through its registered agent Corporation Service Company, 2338 West Royal Palm Road, Suite J, Phoenix, Arizona 85021.

z. **Ultramar Energy, Inc.** is a Delaware corporation with its principal place of business at: One Valero Way, San Antonio, Texas 78249. Ultramar Energy, Inc. may be served with process through its registered agent CT Corporation System, 400 Cornerstone Dr., #240, Williston, Vermont 05495.

aa. **Valero Energy Corporation** is a Delaware corporation with its principal place of business at: One Valero Way, San Antonio, Texas 78429. Valero Energy Corporation may be served with process through its registered agent CT Corporation Company, 350 North St. Paul Street, Suite 2900, Dallas, Texas 75201.

bb. **Valero Marketing and Supply Company**, is a Delaware corporation with its principal place of business at: One Valero Way, San Antonio, Texas 78429. Valero Marketing and Supply Company may be served with process through its registered agent, CT Corporation System, 400 Cornerstone Dr., #240, Williston, Vermont 05495.

cc. **Valero Refining-Texas, L.P.** (f/k/a Valero Refining Company and Valero Refining Company-Texas) is a Texas Limited Partnership with principal place of business at: One Valero Way, San Antonio, Texas 78429. Valero Refining-Texas, L.P. may be

served with process through its registered agent CT Corporation System, 350 North St. Paul Street, Suite 2900, Dallas, Texas 75201.

17. The entities identified in paragraph 16 will be collectively referred to as “Defendants.” Defendants, among other things: (a) designed, manufactured, formulated, refined, set specifications for, exchanged, promoted, marketed, sold, and/or otherwise supplied (directly or indirectly) MTBE and/or gasoline containing MTBE that was delivered into areas affecting the State’s property and waters, such that releases of MTBE contaminate and threaten the State’s property and waters; (b) acted with actual or constructive knowledge that blended gasoline containing MTBE would be delivered into areas affecting the State’s property and waters; (c) are legally responsible for and committed each of the multiple tortious and wrongful acts alleged in this Complaint; (d) participated in one or more joint enterprises to promote MTBE and/or gasoline containing MTBE, despite the availability of reasonable alternatives and their actual or constructive knowledge that the pollution alleged in this Complaint would be the inevitable result of their conduct; and/or (e) in doing the tortious and wrongful acts alleged in this Complaint, acted in the capacity of joint venturer, partner, agent, principal, successor in interest, surviving corporation, controller, alter ego, co-conspirator, licensee, licensor, patent holder and/or indemnitor of other Defendants.

18. To the extent any act or omission of any of the Defendants is alleged in this Complaint, the officers, directors, agents, employees or representatives of each such defendant committed or authorized each such act or omission, or failed to adequately supervise or properly control or direct their employees while engaged in the management, direction, operation or control of the affairs of such Defendants, and did so while acting within the scope of their duties, employment or agency.

19. Any and all references to a Defendant or Defendants in this Complaint include any predecessors, successors, parents, subsidiaries, affiliates, and divisions of the named Defendants.

IV. JURISDICTION AND VENUE

20. This Court has jurisdiction over the subject matter of this action pursuant to 4 V.S.A. § 31. In addition, this Court may exercise jurisdiction over Defendants because they either are or at the relevant time were: authorized to do business in Vermont, registered with the Vermont Secretary of State, transacting sufficient business with sufficient minimum contacts in Vermont, or otherwise intentionally availing themselves of the Vermont market through the sale, manufacturing, distribution, and/or processing of petroleum-related products in Vermont to render the exercise of jurisdiction over Defendants by the Vermont courts consistent with traditional notions of fair play and substantial justice.

21. Venue is proper in this Court because the principal *situs* of the State is in Montpelier, in Washington County.

V. LIABILITY SUMMARY

22. The injuries to the State's property and waters caused and/or threatened by Defendants' conduct as alleged in this Complaint constitute an unreasonable interference with, and alteration of, limited, precious, and invaluable natural resources that the State holds in trust for the benefit of the public and protects in its *parens patriae* capacity. The State's unique public trust interest in protecting the quality of its waters constitutes a sufficient basis for the State to seek damages for harm to and restoration of such waters. Defendants' conduct has also caused injuries to property owned by the State. The State's exclusive possessory interest in such property constitutes a sufficient basis for the State to seek damages for those injuries.

23. Defendants knew, or reasonably should have known, that: (a) the gasoline distribution and retail system contained leaking gasoline storage and delivery systems; (b) MTBE is more readily released from gasoline storage and delivery systems than the constituents of conventional gasoline; (c) releases of MTBE into the environment would be an inevitable consequence of placing MTBE into the stream of commerce; (d) when released into the environment, MTBE would travel great distances, mix easily with groundwater, resist biodegradation, and render drinking water unsafe and/or non-potable; and (e) removing such contamination from property, surface water, groundwater, drinking water supplies, and water wells would require significant expense.

24. At all times relevant to this litigation, Defendants were or should have been aware that MTBE contamination of groundwater and drinking water was inevitable due to MTBE's water-seeking properties, recalcitrance to biodegradation and bioremediation, and the long and ongoing history of nationwide gasoline spills, leaks, and other losses during distribution, sale, and use.

25. Despite their knowledge that MTBE posed a devastating risk of groundwater and drinking water contamination, and despite the availability of reasonable alternatives, Defendants failed to warn customers, retailers, regulators, or public officials, and failed to take any other precautionary measures to prevent or mitigate such contamination. Instead, Defendants promoted MTBE, and gasoline containing MTBE, as environmentally sound products appropriate for widespread use. Moreover, certain Defendants engaged in separate and joint activities to suppress, conceal, and/or discredit studies and other information regarding the hazards of MTBE. Defendants' intentional business choices harmed the State.

26. In their Material Safety Data Sheets and other materials, Defendants provided instructions regarding the use, handling, and storage of MTBE that affirmatively misrepresented

or omitted the risks involved in those activities. Indeed, Defendants represented that gasoline containing MTBE could be handled in the same fashion as conventional gasoline and required no special measures to protect against, respond to, or mitigate suspected releases to the subsurface.

27. Defendants made such misrepresentations or material omissions although they had not conducted adequate testing before they began adding MTBE to gasoline. Defendants did not perform the standard toxicological studies before placing MTBE into the stream of commerce, and they did not conduct long-term cancer studies, although research showed that MTBE caused cancer in animals. Certain Defendants misled the EPA and convinced the Agency not to test MTBE. In 1986, the federal Interagency Testing Committee (“ITC”), established pursuant to the Toxic Substances Control Act, recommended testing and review to assess MTBE’s health and environmental risks. Recognizing its high water solubility and persistence in groundwater, ITC recommended chemical fate monitoring of MTBE to determine the risk MTBE poses to the environment as well as medical testing of MTBE. The oil industry, including certain Defendants, mobilized to convince the EPA that additional testing of MTBE was not needed. They downplayed the risks of groundwater contamination with MTBE and omitted material facts known to Defendants at the time, even when government officials expressed concern over the need to assess the potential for MTBE to cause groundwater contamination.

28. Certain Defendants also misled Congress when it was preparing to take action to address the nation’s smog problem. As a result of tremendous lobbying efforts by the industry, including Defendants, Congress adopted the Reformulated Gasoline (RFG) Program as part of the 1990 Amendments to the Clean Air Act. According to the EPA, “The concept of reformulated gasoline (RFG) was originally generated, developed and promoted by industry, not the Environmental Protection Agency (EPA) or other parts of the federal government.”

29. At times relevant to this action:

- a. Defendants manufactured, promoted, marketed, supplied, and/or sold MTBE for use as a component of gasoline and/or refined, blended, promoted, marketed, supplied, and/or sold gasoline containing MTBE.
- b. Gasoline containing MTBE was delivered to commercial and consumer users such as retail gasoline stations and other gasoline delivery systems in the State (and areas affecting the State's property and waters).
- c. Gasoline containing MTBE was released to the subsurface from retail gasoline facilities, from other commercial and consumer uses, and from other sources at locations throughout the State and/or in areas affecting the State's property and waters. Such releases of gasoline containing MTBE occurred over time in varying amounts at different locations.
- d. MTBE, which takes time to migrate from release points through the subsurface to locations where it may be detected in groundwater, has migrated and continues to migrate from dispersed release points at or near the surface at retail gasoline facilities and other sources and facilities within or near the State's boundaries, causing and threatening to cause pollution, contamination, and substantial and continuing damage to the State's property and waters, including drinking water, causing damage to the State.

30. As a direct and proximate result of Defendants' negligent and intentional acts described in this Complaint, MTBE was released into the environment, where it remains, causing and threatening to cause widespread contamination of the State's property and waters and endangering water supplies including drinking water supplies.

VI. FACTUAL ALLEGATIONS

A. The Contaminant at Issue - MTBE

31. MTBE is a synthetic chemical blended into some gasolines by some refiners at some times since 1979. As used in this Complaint, “MTBE” refers not only to methyl tertiary butyl ether, but also to the contaminants in and degradation byproducts of MTBE, including TBA.

32. One way that MTBE contaminates the environment is through releases, leaks, overfills, and spills from gasoline delivery facilities — including, but not limited to, gasoline stations, gasoline storage, transfer, delivery, and dispensing systems (“gasoline delivery systems”).

33. Another way that MTBE contaminates the environment is through releases, leaks, overfills, and spills of gasoline associated with or incident to certain consumer activities, such as use of snowmobiles, motorized watercraft, and lawnmowers and operation of junkyards and vehicle maintenance and repair facilities, which result in releases of MTBE into the State’s property and waters.

34. As a result of its physical characteristics, MTBE finds pathways for release into the environment from gasoline delivery systems and is more readily released from such systems than conventional gasoline components.

35. Once released to the environment, MTBE’s unique characteristics cause extensive environmental contamination and a corresponding threat to the public health and welfare beyond that caused by gasoline that does not contain MTBE. In particular, the fate and transport of MTBE in the subsurface differs significantly from that of gasoline constituents that have historically been of environmental and/or toxicological concern, specifically the “BTEX compounds” (benzene, toluene, ethylbenzene, and xylene).

36. In groundwater, MTBE moves freely at approximately the rate of the water's movement, unlike BTEX compounds, which tend to adhere to soil and float on the surface of water. This makes MTBE contamination more difficult to remediate than contamination involving only BTEX compounds.

37. MTBE is also more persistent than BTEX compounds because it does not readily biodegrade in groundwater. Because of its recalcitrance, unless MTBE is actively cleaned up from groundwater, plumes of MTBE can persist in underground aquifers for decades, far longer than other gasoline components. Once an MTBE plume reaches a well, it continues to contaminate the water drawn from that well unless cleanup technologies are used to remove the MTBE from the well water. As a result, while it is possible to clean up MTBE from groundwater, it is more difficult and expensive to remove from groundwater than BTEX compounds.

38. In sum, when MTBE is released into the environment, it migrates farther and faster through soil and groundwater, penetrates deeply into aquifers, resists biodegradation, and results in persistent contamination that is very costly to address. As a result of these properties, MTBE has contaminated, and continues to contaminate and threaten, the State's property and waters.

39. Not all of the MTBE contamination of water resources in the State can be traced to a specific source or release.

40. MTBE is a fungible product: MTBE made and/or used by one Defendant is chemically identical to MTBE made and/or used by any other Defendant. Once blended into gasoline, it is impossible, based on physical characteristics, to identify the manufacturer of the MTBE.

41. Once MTBE leaves the refinery and enters the stream of commerce, it is impossible, based on physical characteristics, to identify the refiner of the gasoline containing it. In addition,

gasoline containing MTBE from various refiners is commingled during transmission from refineries to distribution centers. The gasoline at any particular service station is, therefore, an intentionally blended product made up of gasoline from many different refiners. Thus, a subsurface plume, even if released from a single identifiable tank, pipeline, or vessel, is the product of mixed batches of gasoline originating from different refiners. It is impossible, based on any physical characteristics, to identify what portions of commingled gasoline containing MTBE were refined, manufactured, and/or supplied by any particular defendant.

42. Once released into the environment, MTBE lacks characteristics or a chemical signature that would enable identification of the refinery or company that manufactured the product. Even when a source of a plume of MTBE — such as a leaking underground storage tank — is identified, the identity of the manufacturer of the MTBE and refiner of the offending gasoline generally cannot be determined due to the commingled and fungible nature of the products. Identification is further complicated by the Defendants' practice of trading, bartering, or otherwise exchanging product.

43. Federal and other studies link MTBE to a variety of adverse health effects. MTBE is a known animal carcinogen and a possible human carcinogen.

44. In addition to the health and environmental risks MTBE poses in drinking water supplies, MTBE imparts a turpentine odor and chemical taste onto previously potable water. MTBE's taste and odor alone can render water unfit for human consumption.

45. TBA also threatens and contaminates the waters of the State.

46. TBA, a chemical used to produce MTBE and sometimes blended into gasoline, is also an intermediate product of MTBE biodegradation. As a result, TBA may appear wherever there is MTBE contamination.

47. TBA has the same characteristics as MTBE that make it a persistent and pernicious groundwater contaminant including high solubility (even higher than MTBE) and resistance to biodegradation. In addition, TBA is highly toxic when inhaled and is irritating to the skin, eyes, and mucous membranes. Some animal studies link TBA to cancer and kidney and thyroid tumors.

48. TBA contamination is even more expensive to clean up than MTBE. In fact, the presence of TBA in water being treated for MTBE may generate additional compounds of health and environmental concern, limiting the usefulness of these technologies and further increasing costs.

49. Defendants failed to warn the State, regulators, and the general public that Defendants often added TBA to their gasoline and that MTBE breaks down into TBA. Further, Defendants failed to warn the State of the need to test its water supplies for contamination by TBA.

B. History of MTBE Use

50. Oil companies began blending MTBE into gasoline in the late 1970s. Initially used as an octane enhancer, MTBE was used throughout the 1980s at low concentrations in some gasoline by some refiners, primarily in high-octane grades. MTBE was not the only viable option to achieve higher octane in gasoline. Rather, its use reflected Defendants' intentional business decision to find a profitable use for a waste byproduct of the refining process.

51. Prior to 1990, Congress was preparing to take action to address the nation's smog problem.

52. During this timeframe, the oil industry, including Defendants, became concerned that Congress might consider requiring alternative non-petroleum based fuels.

53. As a result of tremendous lobbying efforts by the industry, including Defendants, Congress adopted the Reformulated Gasoline Program as part of the 1990 Amendments to the Clean Air Act. According to the EPA, “The concept of reformulated gasoline (RFG) was originally generated, developed and promoted by industry, not the Environmental Protection Agency (EPA) or other parts of the federal government.”

54. Congress mandated the use of RFG containing at least 2% oxygen by weight in those areas of the country with the worst ozone or smog problems. The 1990 Amendments authorized the EPA to designate certain areas of the country to participate in RFG programs.

55. In 1992, in conjunction with the Clean Air Act, the EPA initiated the Oxygenated Fuel Program (“Oxyfuel Program”), which required at least 2.7% oxygen by weight in gasoline in certain metropolitan areas to reduce carbon monoxide emissions during the fall and winter months.

56. The Clean Air Act’s RFG program required the use of an oxygenate in certain gasoline beginning in 1995, but it did not require the oxygenate to be MTBE. Rather, MTBE became Defendants’ “oxygenate of choice” because it was the most inexpensive oxygenate to produce and offered Defendants the highest profit margin of all the oxygenates available. Defendants could manufacture MTBE from their already available refinery by-products and therefore were not forced to purchase a different oxygenate, such as ethanol, from a third party.

57. National annual production figures for MTBE reflect the oil industry’s decision to make MTBE its oxygenate of choice: MTBE production increased from 1.5 million barrels in 1980 to 75 million barrels in 1998.

58. Much of the gasoline sold in air quality non-attainment areas under the RFG Program exceeded that Program’s minimum 2% or 2.7% oxygenate requirements, and MTBE composed

up to 15% of every gallon of gasoline used in those areas. MTBE composed a significant amount of gasoline even in areas that did not participate in the RFG Program.

59. Defendants started shipping high MTBE-content gasoline for sale in certain metropolitan areas in 1992 as part of the Oxyfuel Program.

60. In or around January 1995, Defendants started placing gasoline containing higher levels of MTBE into the stream of commerce when moved by market factors and financial considerations to do so. Gas station owners and pump operators, whom Defendants did not warn about the properties of MTBE or gasoline containing MTBE, started selling Defendants' gasoline with greatly elevated concentrations of MTBE.

61. At its peak, most if not all gasoline supplied to the RFG areas contained high concentrations (11 to 15 percent) of MTBE. In addition, gasoline containing elevated concentrations of MTBE was often sold at other locations, including Vermont, at the discretion of the oil industry, including Defendants.

62. In making MTBE their oxygenate of choice, Defendants decided to forgo safer oxygenates, such as ethanol. In fact, belatedly, some gasoline sellers subsequently publicly acknowledged that MTBE is neither environmentally safe nor necessary. Getty Marketing, for example, placed full page ads in the New York Times on October 13, 1999 stating:

Protecting our water supply means making a commitment to doing business in environmentally-friendly ways. That's what we're doing at Getty. We have replaced MTBE with **ethanol** in our gasoline because it helps clean the air without harming our drinking water.

63. Safer, more environmentally sound alternatives were at all times available and known to Defendants.

64. Defendants, not the State, chose to use MTBE in gasoline in Vermont.

65. As a result of Defendants' intentional business choices, MTBE was widely used throughout the United States, including Vermont, and it now widely contaminates the State's property and waters.

66. In addition, combustion of gasoline containing MTBE in car engines actually increases exhaust emissions of formaldehyde, nitrous oxide and other toxic chemicals including MTBE itself.

C. Defendants Were Well Aware of MTBE's Threat to Groundwater

67. At times relevant to this litigation, Defendants were aware that, on a nationwide level, gasoline was leaking from multiple sources, including underground storage tanks ("USTs"). Industry reports, Congressional testimony, and EPA concerns reflect Defendants' knowledge that the systems used for shipping, storing, pumping, and using gasoline involved leaks and spillages at all links in the gasoline distribution chain.

68. At times relevant to this litigation, Defendants were or should have been aware that thousands of gallons of gasoline entered the soil annually from gasoline-dispensing stations due to UST releases and leaks, consumer and jobber overfills, and mishandling.

69. Defendants also had first-hand knowledge and experience regarding leaking gasoline delivery systems and releases of MTBE to groundwater from those systems. These defendants obtained such first-hand knowledge and experience because each of them owned, operated and/or controlled individual gasoline stations and/or were aware of leaks at terminals, service stations and refineries.

70. At times relevant to this litigation, Defendants were or should have been aware that additional quantities of MTBE reached the soil and groundwater through vaporization from

USTs, and that such vaporization and other small releases occurred even when a tank is considered to have tested tight.

71. Defendants also knew or should have known that releases, leaks, overfills, and spills of gasoline associated with or incident to certain consumer activities, such as use of snowmobiles, motorized watercraft, and lawnmowers, and operation of junkyards and vehicle maintenance and repair facilities, would result in releases of MTBE into waters of the State.

72. At times relevant to this litigation, Defendants were or should have been aware that MTBE contamination of groundwater was inevitable. MTBE's water-seeking properties, recalcitrance to biodegradation and bioremediation, and the long and ongoing history of nationwide gasoline spills, leaks, and other losses during distribution, sale, and use guaranteed substantial and repeated releases of MTBE-containing gasoline into the environment.

73. For example, the American Petroleum Institute ("API"), a trade association representing the domestic petroleum industry, including certain Defendants, in a broad range of topics, formed a Toxicology Committee in or around 1980. The Toxicology Committee included representatives from Exxon, Mobil, Shell, Atlantic Richfield Company ("ARCO"), and Chevron Texaco, among others.

74. API's Toxicology Committee meeting minutes make plain that committee members shared information and repeatedly discussed MTBE's propensity to contaminate groundwater. The Committee specifically acknowledged the need for certain toxicological information due to MTBE's propensity to contaminate groundwater and the resulting likelihood of extensive ingestion of MTBE through drinking water.

75. Despite early knowledge and a shared recognition of the need to do long-term, low-level ingestion studies on the effects of MTBE, Defendants postponed such studies for decades and never completed such a study during the relevant time period.

76. Defendants possess and have always possessed vastly superior knowledge, resources, experience and other advantages, in comparison to anyone or any agency, concerning the manufacture, distribution, nature, and properties of gasoline in general and MTBE in particular.

77. By virtue of their tremendous economic power and analytical resources, including the employment of scientists such as hydrogeologists, chemists, engineers, and toxicologists, Defendants have at all relevant times been in a position to know, identify, and confirm the threat MTBE posed and poses to groundwater.

78. In addition, by virtue of this superior knowledge, and/or by virtue of the Defendants' partial and incorrect statements regarding the nature and impacts of MTBE, Defendants had a duty to disclose the truth and to act in accordance with the truth about MTBE.

79. Defendants knew or should have known of the impact of MTBE and its contamination of water prior to their widespread introduction of MTBE into the nation's gasoline system.

80. In or around October 1980, certain Defendants learned of a serious incident of MTBE groundwater contamination in Rockaway, New Jersey, which substantiated the threat that MTBE poses to drinking water supplies. Approximately 4,000 residents of Rockaway tasted MTBE or DIPE (another ether) in water from a municipal well. This evidence of contamination prompted leading oil industry insiders to further investigate the groundwater threat posed by MTBE.

81. In April 1983, a serious MTBE incident in Jacksonville, Maryland came to public attention. Spills or leaks that occurred at least two years earlier at two different gas stations, one

owned by what is now ExxonMobil, created a large underground reservoir of MTBE that fouled the domestic wells of local residents and stalled a planned housing project.

82. Certain Defendants were also aware of two MTBE groundwater contamination events in Liberty, New York and East Patchogue, New York, both of which preceded by several years the introduction of gasoline with higher concentrations of MTBE and presaged the now widespread calamity.

83. At the East Patchogue site, spilled gasoline left over from the operation of a filling station whose underground storage tanks had been dug up and removed in 1988 sent a plume of MTBE into Long Island's sole source aquifer. The MTBE plume was detected when the water from a private well 4,000 feet from the old filling station site was rendered undrinkable with 350 ppb of MTBE. Although trace levels of BTEX were eventually found in neighboring wells, that did not happen until the MTBE levels had reached the astounding level of 7,600 ppb.

84. A decade after the spill in East Patchogue, government officials were still tracking the MTBE plume through the aquifer thousands of feet from the site. In contrast, BTEX compounds were found concentrated in the soils and water much closer to the spill site, and the mass of these compounds was observed to be steadily decreasing.

85. The Liberty incident started sometime before August 1990, which is when state health officials detected MTBE in the public water supply.

86. In December 1992, MTBE was again found in Liberty's water at concentrations approximately three times higher than the New York State Department of Health drinking water standard of 50 ppb at the time.

87. In 1986, Peter Garrett and Marcel Moreau of the Maine Department of Environmental Protection drafted a paper titled "Methyl Tertiary Butyl Ether as a Ground Water Contaminant"

(“the Garrett Report”).² The Garrett Report described approximately 30 wells in Maine that were contaminated with MTBE. The authors explained that as a result of their experience dealing with the contamination, they learned that: (a) groundwater contaminated with MTBE is difficult to remediate, (b) MTBE is more soluble than the other constituents of gasoline and therefore a plume of MTBE in groundwater will be more extensive than the plume of the other gasoline components, and (c) MTBE has a distressing “terpene-like” odor in low concentrations.

88. As a result of MTBE’s characteristics, the Garrett Report’s authors recommended that MTBE be banned as a gasoline additive or at least be stored in double-contained facilities. The authors planned to present their paper and have it published in the proceedings of the “Petroleum Hydrocarbons and Organic Chemicals in Ground Water Conference” sponsored by the National Well Water Association and the API in November of 1986.

89. As soon as the existence of the Garrett Report was known, even before it was published, the draft was widely circulated throughout the oil industry. Oil industry representatives, including many of the Defendants, joined forces to pressure the authors to radically revise their negative conclusions and recommendations about MTBE. Even after succeeding in having the report’s language softened, Defendants attempted to discredit the report.

90. Arco Chemical, which was then a part of ARCO, aggressively challenged the initial draft of the Garrett Report before its presentation. Arco Chemical provided “data that indicated that many of their theories were incorrect” to the authors of the paper in an attempt to change their opinions. Despite Arco Chemical’s efforts, however, the authors concluded that “MTBE

² Peter Garrett, Marcel Moreau & J.D. Lowry, “MTBE as a Ground Water Contaminant,” in NWWA/API Conference on Petroleum Hydrocarbons and Organic Chemicals in Ground Water - Prevention, Detection, and Restoration, Houston, TX, November 12-14, 1986 [Proceedings]: Dublin, OH, National Water Well Ass’n, pp. 227-238.

presented an environmental hazard different to other gasoline components” and proceeded with their presentation of the paper to the National Well Water Association in November of 1986.

91. On December 23, 1986, a staff member to API’s Groundwater Technical Task Force (“GWTTF”) forwarded the Garrett Report to members of the GWTTF, including representatives of Shell and Exxon. API asked these individuals to review the Garrett Report and provide comments and critiques. API asked for responses because the article was “of possible grave concern to the oxygenate producers.”

92. The comments from the GWTTF members culminated in a letter from API to the National Well Water Association, which was to present the paper. The letter stated in part:

The authors’ “recommendations” that MTBE ... be either banned as gasoline additives or require double-lined storage is clearly a policy statement and not an objective credible scientific conclusion. Further, data presented in this paper as well as those generated by ongoing API research indicate that such a policy is reactionary, unwarranted and counter-productive.

93. But the API letter to the National Well Water Association in no way refuted the Garrett Report’s conclusions regarding MTBE’s solubility, MTBE’s low odor and taste threshold, the fact that MTBE could travel faster in groundwater than the other gasoline constituents, or the conclusion that MTBE was difficult to remediate. These issues were not even addressed.

94. BP Corporation (then known as “Amoco”) publicly denounced the Garrett Report, stating flatly that the report “isn’t true.”

95. Privately, however, Defendants acknowledged that the major findings of the Garrett Report were correct. For instance, while the oil companies, via the GWTTF, attacked the authors of the Garrett Report, saying the paper had a “general lack of technical data to support the rather strong policy statements,” they admitted internally that the authors might in fact be correct. Arco Chemical, in communications to others within the oil industry, admitted that it had

no data to refute the Garrett Report's conclusions. For example, a letter dated February 4, 1987, stated, "we don't have any data to refute comments made in the paper that MTBE may spread farther in a plume or may be more difficult to remove/clean up than other gasoline constituents."

96. On or around May 6, 1987, Mobil's laboratory prepared and circulated a memo based on a compilation of data on MTBE contamination of groundwater in New York State and elsewhere in the region, including laboratory analyses verifying the presence of MTBE in water samples from three wells in Harrison, New York and four wells in Port Jefferson, New York. In its report, Mobil's laboratory stated: "We agree that MTBE in gasoline will dissolve in groundwater at a faster rate than any gasoline hydrocarbon, including benzene." The report further stated that "[b]ecause of its more frequent occurrence, even when other hydrocarbons are not found, we feel it is important for you to be aware of MTBE. From an environmental and engineering standpoint, you may need to be informed of its presence to assist you in responding effectively to regulatory and remedial requirements."

97. Similar communications circulated among officials at Chevron Texaco (Chevron). A 1987 memo, widely circulated within the company, stated:

Two considerations impact MTBE. One is potential health risk, and the second is increased solubility over normally regulated constituents of interest, i.e. benzene, toluene and xylene (BTX).

MTBE is significantly more soluble in water than BTX. Consequently, the dissolved "halo" from a leak containing MTBE can be expected to extend farther and spread faster than a gasoline leak that does not include MTBE as one of its constituents.

Further compounding the problem of increased solubility, MTBE is more difficult to remove from groundwater using current technology (air stripping or carbon adsorption). Because of its lower volatility, MTBE requires more than double the air stripping capacity to reach a 95 percent reduction. Removal using carbon adsorption is even worse. MTBE breaks through activated carbon four times faster than BTX.

98. In 1992, Shell employees C. C. Stanley, W.G. Rixey, and C.Y. Chiang created a document titled “MTBE WHITE PAPER - The Impact of MTBE on Groundwater.” They intended to circulate among the employees of various Shell companies a report about the movement of MTBE in groundwater.

99. According to Shell’s MTBE White Paper, MTBE is nearly 25 times more soluble than benzene and, therefore, MTBE’s plumes would move faster and farther than benzene plumes emanating from a gasoline spill. Further, the White Paper indicated that MTBE would not biodegrade in the subsurface environment. Finally, the document confirmed that MTBE has a low odor and taste threshold and, further, that “at many locations odor and taste criteria may determine clean-up levels.”

100. Shell’s MTBE White Paper further stated:

MTBE has had an impact on groundwater management at only a few Shell marketing terminals and service stations to date. However, as the usage of this oxygenate begins to increase, a stringent clean-up criteria for MTBE will become adopted in more states, we should anticipate increased concerns over how its release to groundwater is managed.

This paper was never published outside of Shell.

101. A June 1997 Shell document titled “Summary of Current MTBE Issues and Status” stated:

MTBE is relatively quite soluble in water (compared to other components in gasoline, like BTEX), and it moves essentially with the ground water, thus MTBE tends to “lead the plume” whenever there is a gasoline spill or leak. MTBE also has a very low biodegradation potential, which makes it more difficult to remove from ground water than other gasoline components such as BTEX.

D. Defendants Concealed the Risks Associated with MTBE

102. Defendants added MTBE to gasoline even though no long-term cancer studies had been undertaken. Existing studies showed MTBE causes cancer in animals. Although it is and was at

all relevant times common practice to conduct toxicological tests before introducing a widely-used chemical like MTBE, Defendants did not perform any such tests to determine MTBE's effects before placing it into the stream of commerce. Instead, certain Defendants attempted to convince the EPA that health testing was not needed. Thus, Defendants exposed millions of Americans to potential harm without warning of MTBE's potential health risks.

103. Despite their superior knowledge of the groundwater threat MTBE posed, certain Defendants, beginning in the early 1980s, formed various formal and informal task-forces and committees for the purpose of concealing MTBE's actual threat, facilitating the Defendants' MTBE use without regard to its impact on the State, and convincing the public and regulators that increasing concentrations of MTBE in gasoline was desirable. These joint task-forces and committees were formed under the auspices of trade organizations such as the API and the Oxygenated Fuels Association ("OFA"). Certain Defendants, as members of these joint task forces and committees, conspired to conceal the risk of MTBE contamination of groundwater and used MTBE, thereby placing corporate profits above known-but-concealed harm to the environment and the State. Certain Defendants manufactured and distributed MTBE with actual knowledge of MTBE's defects and with actual knowledge that MTBE would cause harm in groundwater and production wells, and took affirmative steps to conceal those effects.

104. In 1986, the federal Interagency Testing Committee ("ITC"), established pursuant to the Toxic Substances Control Act, recommended testing and review to assess MTBE's health and environmental risks.³ The ITC characterized MTBE as having relatively high water solubility, and stated that MTBE's persistence in groundwater following spills was unknown but that it was

³ Nineteenth Report of the ITC to the Administrator, Receipt and Request for Comments Regarding Priority List of Chemicals, 51 Fed. Rep. 220 (1986) (the "1986 Notice").

likely not to be readily biodegradable. The ITC recommended chemical fate monitoring of MTBE to determine the risk MTBE poses to the environment. The ITC also recommended additional medical testing of MTBE and invited written comments. The 1986 Notice credited the Dynamac Corporation for supplying the government with MTBE information.

105. The oil industry, including certain Defendants, mobilized to convince the EPA that additional testing of MTBE was not needed.

106. On or about December 12, 1986, ARCO, speaking on behalf of and/or with the approval of certain Defendants, responded to the 1986 Notice in an effort to derail further testing of MTBE. ARCO's comments included a critique of the Dynamac Corporation's information review of MTBE, on which the ITC had relied. ARCO stated that its "critique of the CRCS/Dynamac report revealed that some erroneous assumptions had been made that cause the hazards of MTBE to be seriously overestimated." In further comments to the EPA, ARCO stated the following:

Characteristics - Moderate water solubility is reported. However, an ARCO Technical Bulletin states that 'MTBE is only slightly soluble in water ...'

The CRSC/Dynamac report states that potential environmental exposure is 'high.' This conclusion is not supported by the available information.

Exposure from accidental spills of MTBE could occur, but should be regarded as a minimal possibility. The closed nature of the manufacturing and transportation process reduces worker exposure and product loss. Training and safety programs also lower the possibility of accidental spills. Many current programs at EPA and industry are underway to monitor and reduce the possibility of gasoline loss from leaking underground storage tanks MTBE losses would be extremely small from this source.

Environmental Information

As has been repeatedly stated, environmental entry would not occur in every stage of the gasoline marketing chain Environmental entry of MTBE from this source would be considerably less than the report indicates.

MTBE is only slightly soluble so environmental fate projections based on this assumption will not be correct.

ARCO's comments, made with certain other Defendants' explicit or implicit approval, were misleading when made. The comments improperly downplayed the risks of MTBE contamination of groundwater and omitted material facts known to Defendants at the time.

107. On or around December 17, 1986, EPA held a Public Focus Meeting to hear comments on the need for additional testing of MTBE. The minutes of the meeting show that government officials expressed concern over the need to assess the potential for groundwater contamination. The minutes show that ARCO and Exxon made a presentation to support the industry position that additional medical testing of MTBE was unnecessary. Other Defendants assented to these representations either explicitly or by their silence.

108. In or around early 1987, certain Defendants formed the "MTBE Committee," with the express and stated purpose, as set forth in a written agreement, of "addressing the environmental, health, safety, legislative and regulatory issues concerning MTBE of importance to the public and the producers and users of MTBE." The MTBE Committee included Defendants BP Corporation (Amoco), Arco, Chevron Texaco (Chevron), Citgo, ExxonMobil (Exxon), Shell, and Sunoco, among others.

109. The MTBE Committee lauded itself as "being a source of information to MTBE producers, users, the government and the public" and stated that its goal was to "address

environmental health and safety issues relating to MTBE ... , provide technical data to appropriate regulatory agencies and legislative bodies ... , conduct[] and fund[] testing of MTBE required under a Toxic Substances Control Act Section 4 Consent Order or Test Rule ... , [and] make available to interested parties and the general public technical and scientific information relating to the use of MTBE in fuels.”

110. On January 29, 1987, the MTBE Technical Subcommittee, a subcommittee of the MTBE Committee, had its first meeting. The meeting minutes, circulated February 2, 1987, indicate:

[T]he plan of attack on the combined response to the EPA on the ITC report is as follows: Since each producer must respond to the EPA before February 12 on the SA and SD [sic] questions and many will respond individually to production and economic questions which were also sought by EPA, a letter will be sent by George Dominguez requesting that information requested by the EPA be sent to the MTBE Committee before February 9. A form will be included in George’s letter the Technical Committee will then meet on February 19 to combine the three reports from the working groups and draft a response to the EPA which will then be passed on to the Steering Committee for their approval on February 20 ... The combined response to the EPA will be submitted by February 27, to be followed shortly thereafter by a formal visit to EPA. Dominguez will meet with EPA and notify them that the MTBE Committee has been formed and will be submitting its overview.

111. Although Defendants were keenly aware that the EPA was interested in obtaining more information about MTBE in groundwater, the Defendants, generally, were not forthcoming with their responses. On February 12, 1987, Arco Chemical responded to the EPA’s request for information about “data gaps” concerning MTBE’s environmental and health effects in a letter stating:

Item D requests more information on the presence and persistence of MTBE in groundwater. We are not aware of any incidents where MTBE contaminated groundwater at manufacturing facilities. Where gasoline containing MTBE is stored at refineries, terminals, or service stations, there is little information on MTBE in groundwater. We feel

there are no unique handling problems when gasoline containing MTBE is compared to hydrocarbon-only gasoline.

112. At nearly the same time that Arco Chemical was telling the EPA that MTBE posed no significant environmental or health problems, Arco Chemical admitted to other Defendants that it “had no data to refute the claims made in the Garrett Report that MTBE posed a significant threat of groundwater contamination.”

113. On or around February 27, 1987, the MTBE Committee submitted written comments drafted to convince the EPA not to require additional health and environmental testing of MTBE. The information was misleading and false. For example, the MTBE Committee provided information to the EPA representing that MTBE is only slightly soluble in water, that potential environmental exposure is not high, and that MTBE has excellent biodegradation characteristics. The MTBE Committee’s Statement added:

The following discussion establishes that there is no evidence that MTBE poses any significant risk of harm to health or the environment, that human exposure to MTBE and release of MTBE to the environment is negligible, that sufficient data exists to reasonably determine or predict that manufacture, processing, distribution, use and disposal of MTBE will not have an adverse effect on health or the environment, and that testing is therefore not needed to develop such data. Furthermore, issuance of a test rule requiring long term chronic testing will have a significant adverse environmental impact.

114. The MTBE Committee’s agenda is reflected in the following excerpt from those comments addressed to the issue of medical testing:

If a test rule is issued requiring chronic testing that will take 3-4 years to complete, great uncertainty will be created as to whether MTBE is a safe fuel additive. As a result, demand for MTBE and expansion of productive capacity is not likely to grow significantly. Refiners will be likely to commit capital to more costly alternative methods of octane enhancement such as isomerization and reformat plants that do not have the environmental benefits of MTBE. Thus, requiring long term testing of MTBE will have a significant adverse environmental and economic impact.

115. The MTBE Committee acknowledged in its February 27, 1987 comments that MTBE had not been the subject of long term chronic health testing, but claimed that such testing was unnecessary. Under the heading “MTBE in Groundwater,” it stated that:

[T]he results of a number of acute and sub-chronic health effect studies are presented in the Health Effects Summary of this report. These data suggest that the odor detection level of 700 ppb (approximately 0.7 mg/l) is such that the organoleptic properties of MTBE are sufficient to protect against human ingestion of toxic quantities of MTBE.

The Committee sought to represent that MTBE did not present a health risk, without conducting the research needed to reach such a conclusion.

116. On the issue of biodegradation, the MTBE Committee publicly stated that “a Japanese study ... reports that MTBE in the presence of gasoline has excellent biodegradation characteristics.” This representation, however, omitted the contrary and more accurate information that MTBE was already known to be recalcitrant to biodegradation. This significant misrepresentation further illustrates the efforts of certain Defendants to conceal evidence from government regulators and the public about the actual risk that MTBE poses to groundwater.

117. On or around January 21, 1988, MTBE and/or gasoline manufacturers and distributors, including BP Corporation (Amoco), ExxonMobil (Exxon) and Sunoco among others, signed a Testing Consent Order with EPA.⁴ Those companies, however, subsequently convinced EPA that the chemical fate of MTBE was sufficiently understood so that it posed no undue risk to the environment, and further testing was not necessary.

118. The oil industry, including certain Defendants, thus succeeded in withholding their knowledge concerning the fate and transport of MTBE from the EPA.

⁴ Testing Consent Order on Methyl Tert-Butyl Ether and Response to the Interagency Testing Committee, 53 Fed. Reg. 62 (1988).

119. The MTBE Committee's representations provide evidence of a pattern of exaggerating MTBE's environmental benefits while understating or concealing its environmental hazards, all of which Defendants knew or should have known at the time. The comments also reveal the plans to forestall all public scrutiny of Defendants' decision to increase concentrations of MTBE in gasoline and avoid or obstruct important health and environmental safety research that would have corroborated Defendants' knowledge of MTBE's harmful effect on groundwater. In making and supporting, and/or not correcting, such representations, the Defendants demonstrated their willingness to place their economic interests above the health, property and well-being of citizens of the State, particularly, and the American public, generally. These statements also confirm that Defendants intended to continue to use MTBE without regard to its impact on the State and the environment, and that some Defendants intended to affirmatively prevent governments and citizens, including the State, from becoming aware of the potential for contamination and/or impact of contamination from MTBE.

120. Although the MTBE Committee represented to the EPA that the Committee was going to "address environmental issues related to MTBE by a) collecting data from member companies and other sources, and b) sponsoring programs to develop data unavailable from other sources," the MTBE Committee did no such thing. The MTBE Committee's Charter statement was intended to mislead the government and the public, including the State. The MTBE Committee disbanded approximately one year after achieving its goal of preventing testing.

E. Defendants Combined to Protect the Use of MTBE

121. The State realleges and reaffirms each and every allegation set forth in all preceding paragraphs as if fully restated in this section.

122. At all times relevant to this lawsuit, Defendants knew or should have known of the hazards which MTBE posed to groundwater throughout Vermont. Defendants combined and acted in concert throughout the relevant time period to ensure their ability to use MTBE as an oxygenate in gasoline.

123. Defendants have demonstrated a pattern and practice of failing to warn the public, those that handle gasoline containing MTBE, water providers, federal and state regulators, and federal and state governments about MTBE and its harmful effects on human health and the environment.

124. Indeed, oftentimes the Oil Industry in general and various Defendants in particular, provided inaccurate and misleading information about MTBE and its characteristics, both when they had an affirmative duty to provide honest information without inquiry, and/or in response to direct inquiries by the EPA and others for such information.

Ad Hoc MTBE Group

125. One of the earlier examples of a concerted effort to protect MTBE involved the Ad Hoc MTBE Group created in 1979, whose sole purpose was to assess the health effects of MTBE and conduct toxicological testing on MTBE.

126. Members of the Ad Hoc MTBE Group included Defendants Arco, Gulf, Exxon, Phillips, Texaco, and Shell.

127. This group supported certain limited studies on MTBE.

128. Even though the Ad Hoc MTBE Group members specifically agreed that they had a duty to make the studies public, they did not immediately publish the studies. Rather, they waited an unreasonable and unjustified period of time after completion to publish them. And when the Ad

Hoc MTBE Group finally published the studies, the abstracts were misleading and did not accurately describe their results.

129. The Ad Hoc MTBE Group routinely reported its on-going efforts to the members of the API Toxicology Committee, whose members were aware of the studies and aware that they were not being reported within a reasonable time after completion. Members of the API Toxicology Committee in that general time frame included Defendants Conoco, BP, Marathon, Texaco, Exxon, Shell, Mobil, Arco, Unocal, Sun, Phillips, Gulf, and Chevron.

130. As a direct result of these actions, public health officials did not have the information that was available to the Defendants because it was not in the public domain. Public health officials, accordingly, could not use the information when responding to the public's health effects concerns.

131. As a result of these Defendants' collective actions, regulators and the public were kept in the dark regarding MTBE's health effects. The full understanding of MTBE's risks, which ultimately resulted in MTBE largely being removed from gasoline in the United States, was significantly delayed.

The Oxygenated Fuel Association's MTBE Committee

132. On November 1, 1986, the ITC transmitted its nineteenth report to the EPA, and the report included an "intent to designate" MTBE under §§ 8(a) and 8(d) of the Toxic Substances Control Act.

133. The ITC's presentation indicates that the designation "will allow preliminary review of health and safety data which will be used by the Committee to either designate or not designate MTBE in a subsequent report to the Administrator."

134. The ITC recommended that MTBE be tested for “chemical fate” including “monitoring studies to determine typical concentrations of MTBE at representative sites where MTBE containing gasoline is transferred.” In addition, the Test Rules Development Branch requested “more information on the presence and persistence of MTBE in groundwater.”

135. In response, the MTBE Committee was formed in January of 1987, under the auspices of the OFA. Members of MTBE Committee included Defendants Texaco, Exxon, Citgo, Phillips, Amoco, Conoco, Valero, and Sun.

136. One of the MTBE Committee’s stated purposes, as reflected in the proposal for its formation, was to “handle the development of communication between companies and the EPA.”

137. The “rationale behind the establishment of an MTBE group” was “not only because of the EPA action which might necessitate [study of the] toxicological and environmental effects of MTBE,” but “in order to provide an organization that would be responsive to the overall needs of the development of MTBE itself.”

138. On February 27, 1987, the MTBE Committee presented a Statement to the EPA relative to the Federal Register announcement of the ITC’s intention to designate MTBE for priority testing. In the MTBE Committee’s Statement, its members represented to the EPA that:

The following discussion establishes that there is no evidence that MTBE poses any significant risk of harm to health or the environment, that human exposure to MTBE and release of MTBE to the environment is negligible, that sufficient data exists to reasonably determine or predict that manufacturer, processing, distribution, use and disposal of MTBE will not have an adverse effect on health or the environment, and that testing is therefore not needed to develop such data. Furthermore, issuance of a test rule requiring long term chronic testing will have a significant adverse environmental impact.

139. Despite the representation that they would collect and provide data from member companies to the EPA and the general public, the MTBE Committee members provided a statement that they knew was false.

140. The MTBE Committee was largely successful in its purpose of reducing testing and protecting MTBE. Although the EPA initially expressed interest in requiring testing with respect to the environmental aspects of MTBE, the Oil Industry ultimately signed a Consent Agreement with the EPA that did not require such testing.

141. The Oil Industry's response to the Garrett Report, described above, provides another example of the Defendants' coordinated effort to protect MTBE and its use as an oxygenate.

142. Various Defendants' involvements in these committees and others reflect their general participation in this combined effort.

143. Such activities were not limited to industry-wide organization committees.

144. Defendant Amoco coordinated the formation of the "Consumers for Fuel Quality" lobbying association to oppose alcohol fuel blend mandates and companies involved with this group included Exxon, Marathon, Phillips, Unocal, Mobil and others.

145. Had Defendants been open and honest about MTBE instead of doing their best to protect it, the publicity and interest in MTBE that began to develop later would have occurred substantially earlier than they did.

146. Illustrative of the delay in knowledge, the Defendants already knew and had discussed internally in the early-to-mid-1980s all of the areas of concern that the EPA discussed years later in its March 2000 Advance Notice of Intent to Initiate Rulemaking. Had the Defendants disclosed these concerns in the late 1980s, it is unlikely that the EPA or Congress would have approved the use of MTBE in gasoline.

147. The Defendants possessed information concerning MTBE's fate and transport, its low biodegradation rate, and its taste and odor thresholds at the time of the Clean Air Act Amendments and the subsequent regulatory negotiations with the EPA.

148. Certain Defendants' representatives formed part of the group involved in assisting the federal government in drafting regulations for the enforcement and requirements under the Clean Air Act Amendments of 1990.

149. In order to ensure that only MTBE-favorable information was presented to the EPA by the Oil Industry, the representatives frequently met to determine what information the Defendants would and would not disclose to the federal government.

150. Defendants failed to disclose to the EPA information concerning MTBE's negligible biodegradation rate and its probable long-term presence in groundwater.

151. Defendants failed to disclose to the EPA information concerning MTBE's low taste and odor detect thresholds and, accordingly, the adverse impact that a very small release of MTBE into an aquifer could have on water supplies.

152. Defendants failed to disclose to the EPA information concerning the known releases of MTBE into the environment, the characteristics of such releases, the number of these releases with the limited use of MTBE prior to 1990 and any projections of potential contamination of public water supplies from a widespread use of MTBE in gasoline.

153. Defendants failed to disclose to the EPA information concerning the significant environmental risk that MTBE presented to groundwater, aquifers, and private and public drinking water wells.

154. Defendants also failed to disclose to the EPA information concerning the extent of their near-total commitment to MTBE as their oxygenate to comply with the CAAA, and the hundreds

of millions of dollars that Defendants had already committed to producing or purchasing MTBE before the regulatory process was even completed.

155. Defendants also worked in concert against other retail providers of gasoline and other companies to limit or block ethanol as an alternative permitted oxygenate.

F. Defendants Misrepresented And/Or Withheld Their Knowledge About MTBE's Risks

156. Defendants misrepresented MTBE's properties and/or withheld information even as they were insisting that no such information existed.

157. On April 1-2, 1987, George Dominguez of the MTBE Committee gave an oral presentation at a Conference on Alcohols and Octane. Mr. Dominguez represented that "MTBE removal from groundwater is consistent with commercial experience. MTBE gasoline spills have been effectively dealt with." Although the MTBE Committee was represented to have been formed to address environmental issues and to make available to the general public information regarding MTBE use in fuels, Mr. Dominguez did not inform the audience that MTBE is different from the other components of gasoline, that it is resistant to biodegradation, that it is difficult to remediate, or that it causes a greater risk of groundwater contamination.

158. In 1994, in response to an article that raised questions about the environmental and health benefits of MTBE, an official with the API, an agent of Defendants, wrote to rebut what he called "an inaccurate and negative view of methyl tertiary butyl ether (MTBE), one of the oxygenates that help make gasoline cleaner burning by reducing carbon monoxide emissions." The letter unambiguously represented that there was "no basis to question the continued use of MTBE." Given information known to Defendants and API at the time, this statement misrepresented to the general public the safety of gasoline with MTBE and concealed known hazards.

159. As the reality of widespread MTBE groundwater contamination started coming to light, Defendants continue to mislead. For example, in April 1996, the Oxygenated Fuels Association, an agent of Defendants, published and distributed a pamphlet titled “Public Health Issues and Answers” that stated: “On rare occasions, MTBE has been discovered in private drinking water wells where the source of MTBE has been attributed to leaks from nearby underground storage tanks.” OFA expressed confidence that federal regulations and industry practices made such contamination largely a thing of the past. Such minimizing and misleading communication concealed from public officials, persons and entities engaged in the storage, transport, handling, retail sale, use, and response to spills of such gasoline (referred to in this Complaint as “downstream handlers”) and the general public the dangers posed by MTBE and omitted and concealed information required to reduce and respond to such dangers.

160. In its April 1996 pamphlet, OFA also suggested that MTBE in groundwater actually provides a public and environmental health service. According to OFA’s reasoning, when MTBE pollutes water it “can serve as an early indicator of gasoline contamination in groundwater, triggering its cleanup and remediation, and limiting the probability of harm from the usual constituents of gasoline.”

161. This “canary-in-the-coal-mine” spin, repeated often by Defendants, rings false in light of the fact that MTBE is usually not merely the first but also the worst, and sometimes the only, contaminant imported to groundwater by gasoline.

162. Had Defendants warned the government, users, and the general public of the known hazards MTBE presented to groundwater and drinking water supplies, the applicable federal and state agencies would have required alternatives and demanded that Defendants provide environmentally responsible gasoline free of MTBE.

163. As a result of Defendants' failure to warn of the hazards posed by MTBE contamination of groundwater, the State was deprived of facts from which its injury from MTBE contamination could reasonably have been inferred, prevented, and/or mitigated.

G. MTBE has had a Predictably Catastrophic Effect on Groundwater and Groundwater Wells

164. Before the 1980s, production and sales totals for MTBE were negligible, but by 1996, MTBE ranked second among all organic chemicals produced in the United States, with virtually the entire production going into gasoline. As discussed above, Defendants dramatically increased their use of MTBE in gasoline following the RFG program's creation.

165. Since gasoline containing MTBE at increased levels was introduced in the early 1990s, the United States Geological Survey ("USGS") has reported that MTBE is the second most frequently detected chemical in groundwater in the United States. MTBE-contaminated wells were found from coast-to-coast with serious incidents in states from Vermont to California.

166. The USGS annually tests the groundwater not near any known gasoline leaks or spills, and detected MTBE in over 20% of aquifers tested in places where high MTBE-content gasoline was used.

167. A September 15, 1999 report by a special EPA Blue Ribbon Panel stated that MTBE is a "threat to the nation's drinking water resources"; that MTBE "has caused widespread and serious contamination"; and that MTBE is found in 21% of ambient groundwater tested in areas where MTBE is used in RFG areas. As stated, the EPA's review of existing information on contamination of drinking water resources by MTBE "indicates substantial evidence of a significant risk to the nation's drinking water supply."

168. In its September 15, 1999 report, the EPA Blue Ribbon Panel recommended substantial reductions in MTBE use and some Panel members recommended that it be eliminated entirely.

The Panel also recommended accelerating, particularly in areas where high MTBE-content gasoline was used, assessments of drinking water protection areas required under the Safe Drinking Water Act. The Panel further recommended “a nationwide assessment of the incidence of contamination of private wells by components of gasoline” and “regular water quality testing of private wells.”⁵

169. Based upon the recommendations of the Blue Ribbon Panel, the EPA initiated another Advanced Notice of Proposed Rulemaking regarding MTBE under the Toxic Substances Control Act in an effort to eliminate or limit the use of MTBE as a fuel additive in gasoline.

H. New MTBE contamination continues to be discovered and existing contamination continues to injure wells and sites.

170. MTBE has contaminated public drinking water supplies, public drinking water wells, private drinking water wells, UST sites, natural resources, groundwater, and other property and waters. This contamination damages these resources, threatens State citizens’ health, safety, and welfare, and interferes with the use of these precious resources.

171. The State of Vermont has experienced extensive environmental contamination from MTBE in two primary categories: “sites” (i.e. locations where due to a spill or other release the Department of Environmental Conservation’s Sites Management Section has established a “site file” and is involved in site management) and “wells” (i.e. specific public or private wells used for drinking water and contaminated with MTBE).

SITES

172. The State owns – in fee – sites that are known to have been contaminated by MTBE. Revised Appendix A lists the sites owned by the State where there has been a detection of

⁵ “Achieving Clean Air and Clean Water: The Report of the Blue Ribbon Panel on Oxygenates in Gasoline” (Sept. 15, 1999).

MTBE in groundwater after June 5, 2008. Revised Appendix A lists for each such site the date of the initial detection of MTBE in groundwater, and the date of the most recent detection of MTBE in groundwater after June 5, 2008. MTBE can be successfully remediated in groundwater down to non-detect and treated in drinking water down to non-detect at all of the sites listed in Revised Appendix A.

173. After June 5, 2008, testing at sites and monitoring or production wells across the State has revealed for the first time newly discovered MTBE contamination in groundwater that was not reasonably discoverable prior to then.

174. In some instances, the State has traced these recent initial detections to newly discovered leaks or other faults in UST systems. In other instances, MTBE's presence in the groundwater and/or soil was unknown, undetected and not reasonably discoverable until soil testing was prompted by, for example, a newly discovered leaking UST or UST removal. In yet other instances, only the subsequent appearance of a petroleum odor in a well reasonably enabled individuals to locate and identify an underlying contaminant plume, containing MTBE, within an aquifer.

175. MTBE was detected for the first time, and on information and belief, was not reasonably discoverable prior to then, in soil and/or groundwater at the sites listed in Revised Appendix B sometime on or after June 5, 2008.

176. Revised Appendix C-2 lists known MTBE contamination sites where MTBE was detected in groundwater for the first time after June 5, 2008. MTBE can be successfully remediated in groundwater down to non-detect and treated in drinking water down to non-detect at all of the sites listed in Revised Appendix C-2.

177. Given MTBE's properties, including its resistance to biodegradation, MTBE plumes from releases that occurred years ago in Vermont continue to travel in the groundwater and cause initial groundwater contamination in new locations, adversely impacting public and private drinking wells as well as groundwater at and adjacent to sites.

178. MTBE continues to contaminate a number of sites and wells with longstanding MTBE contamination. Defendants' acts and omissions directly and proximately caused and continue to cause MTBE to intrude into and contaminate sites and wells. When the wrongful act or omission occurred or continues to occur and causes injury to a site or well within six years of the filing of the first complaint in this case, such act or omission is considered a continuing tort or the cause of a new injury and is not barred by a statute of limitation.

179. Closed sites (i.e. sites that have received a Site Management Activity Completed or "SMAC" designation) are no longer tested for MTBE contamination after receiving such designation. Given, *inter alia*, MTBE's pernicious groundwater characteristics, including its resistance to biodegradation, on information and belief it is more likely than not that the MTBE contamination still exists at closed sites where MTBE levels were above non-detect at some point prior to closure.

180. MTBE can always be cleaned up. MTBE can be successfully remediated from groundwater down to non-detect and successfully treated in drinking water down to non-detect in Vermont, including at all of the sites and wells listed in Revised Appendices A, B, C-2, and F-2. There are known, well-recognized, and successful methods to remediate MTBE in groundwater that can be, and have been, used in Vermont, including MTBE source removal, pump and treat, and soil vapor extraction. Source removal involves removing MTBE-contaminated soil from which MTBE is leaching into groundwater to prevent further migration of MTBE from soil into

groundwater. Pump and treat involves pumping the MTBE-contaminated groundwater out of the ground and then using air stripping and/or carbon filtration to remove the MTBE from the groundwater before re-injecting the water back into the aquifer or discharging to a surface water. Air stripping involves passing MTBE-contaminated water through an aeration tower that removes the MTBE into the air, where it is collected and disposed of properly. Carbon filtration involves passing the MTBE-contaminated water through one or more beds of carbon. The MTBE sticks to the carbon and is successfully removed from the water. Soil vapor extraction involves extracting MTBE vapors from soil to prevent further migration of MTBE from soil into groundwater.

181. Source removal, pump and treat, and soil vapor extraction are recognized by U.S. EPA as successful methods to remediate MTBE in groundwater, and are standard methods used to successfully remediate MTBE in groundwater that are used in numerous other states. The Vermont Agency of Natural Resources (“ANR”) has approved the use of all of these clean-up methods at MTBE contamination sites in Vermont, including at over 175 sites within the past ten years. In each case where remediation has been completed, the remediation has succeeded in lowering the concentration of MTBE in groundwater to levels below the Vermont Groundwater Enforcement Standards (“VGES”).

182. There also are known, well-recognized, and successful methods to treat MTBE in public and private drinking water wells, including the use of air stripping and/or carbon filtration to remove the MTBE from drinking water. ANR has approved the use of these treatment methods in public and private drinking water wells contaminated with MTBE in Vermont.

183. Air stripping and carbon filtration are recommended by U.S. EPA to successfully treat MTBE in drinking water, and are standard methods successfully used to treat MTBE in drinking

water in numerous other states. ANR has approved the use of these treatment methods at MTBE contamination sites in Vermont, including at approximately 15 sites where MTBE had contaminated public drinking water wells and at approximately 40 sites where MTBE had contaminated private drinking water wells over approximately the last ten years. In each case, the treatment succeeded in lowering the concentration of MTBE in the well to levels below the VGES.

184. Absent use of the remediation and treatment methods for MTBE, including those described above, MTBE contamination plumes continue to move and migrate through the groundwater at sites and impact new locations and drinking water wells, including at the sites and wells listed in Revised Appendices A, B, C-2, and F-2. MTBE contamination will continue to spread through the groundwater until it is remediated at sites or treated in drinking water wells using well-established and successful remediation and treatment methods, including those described above. Although MTBE is persistent in the environment and does not biodegrade or break down absent remediation or treatment, MTBE can be successfully remediated in groundwater and successfully treated in contaminated wells, but at significant expense.

185. MTBE contamination levels in groundwater and drinking water wells typically fluctuate, *i.e.*, go up and down, over time as MTBE moves through groundwater underground and due to other factors, including changes in seasonal precipitation levels. MTBE levels can fluctuate at a single MTBE contamination site over time. For this reason, the only way to be certain that MTBE no longer exists in groundwater at a site or drinking water in a well is to remediate and treat the MTBE.

186. The petroleum industry itself recognizes that MTBE can be successfully remediated from groundwater and successfully treated in drinking water, albeit at significant expense. API, a

trade association representing the domestic petroleum industry, including certain Defendants, has stated in a Technical Bulletin entitled “Ten Frequently Asked Questions About MTBE in Water” that MTBE can be successfully cleaned up from groundwater: “The presence of MTBE and other ether oxygenates in groundwater does not prevent application of conventional active remedial methods such as air stripping, carbon adsorption, and soil vapor extraction (SVE) for gasoline spills but it may increase the cost (Zogorski *et al.*, 1997), depending on effluent discharge limits and remediation goals.” API, API Soil & Groundwater Research Bulletin, Ten Frequently Asked Questions About MTBE in Water (Mar. 1998).

187. The federal government also recognizes that MTBE can be successfully remediated from groundwater. The U.S. Environmental Protection Agency (“EPA”), in a 2000 notice of rulemaking stated that while “spills involving MTBE require much more aggressive management and remediation than do spills of conventional gasoline,” it identified “[t]wo common treatment techniques [for MTBE remediation]” *i.e.*, “air stripping and use of granular activated carbon (GAC).” U.S. EPA, Advance Notice of Intent to Initiate Rulemaking Under the Toxic Substances Control Act To Eliminate or Limit the Use of MTBE as a Fuel Additive in Gasoline, 65 Fed. Reg. 16,094, 16,102 (Mar. 24, 2000). EPA explained:

In air stripping, contaminated groundwater is passed through an aeration tower that effectively removes the chemicals from the water and releases it into the air. Where necessary, the chemical is then removed from the air into a solid medium that can be disposed of. MTBE does not readily partition from water to the water vapor phase. Air stripping of MTBE is most effective when higher air to water ratios, or higher temperatures are used than would be required for other more volatile compounds. In a GAC system, water is passed through one or more beds of carbon; contaminants in the water are sorbed onto the carbon, which can either be disposed of or ‘refreshed’ by driving out the contaminants (usually by heating). However, the relatively low sorption of MTBE to solid particles means that the GAC must be used in greater quantities, driving up treatment costs.

Id.

188. In addition, EPA formed a Blue Ribbon Panel on MTBE, which stated in a 1999 report that MTBE can be successfully remediated in groundwater, *i.e.*, that the “conventional and innovative technologies used for ground water remediation of nonoxygenated gasoline releases are also applicable for MTBE remediation.” U.S. EPA, Achieving Clean Air and Clean Water, The Report of the Blue Ribbon Panel on Oxygenates in Gasoline, at 53 (1999). The Blue Ribbon Panel report identified known, and well-established methods for successfully remediating MTBE in groundwater, including pump and treat, and in-situ oxidation. According to the Panel report, “Pump and treat is a mature, well-understood technology that pumps ground water to the surface for subsequent treatment and discharge,” and “MTBE’s high solubility and low soil sorption should enable MTBE to be more readily extracted from an aquifer than benzene.” *Id.* With respect to in-situ oxidation, the report stated that “[b]ecause MTBE oxidizes rapidly, it will be removed during the course of routine water treatment by this technique.” *Id.* at 55. The Panel report also stated that MTBE can be successfully treated in drinking water through air stripping, activated carbon and/or advanced oxidation. The Panel report stated with respect to air stripping: “Treatment of extracted air and water effluents is typically accomplished using air stripping, a process in which contaminated water flows down a column filled with packing material while upward-flowing air volatilizes the contaminant from the water.” *Id.* at 50. The Panel report stated with respect to activated carbon: “Activated carbon, or carbon adsorption, is also widely employed to remove low levels of organic compounds from water by pumping it through a bed of activated carbon. Additionally, many individual homeowners use small carbon canisters to remove a variety of contaminants, including MTBE, from impacted private wells.” *Id.* And with respect to advanced oxidation, the report stated: “Advanced oxidation technologies use appropriate combinations of ultraviolet light, chemical oxidants, and catalysts to transform

contaminants. Oxidation technologies have been demonstrated to oxidize a wide range of organic chemicals, including MTBE.” *Id.* EPA’s 1997 Drinking Water Advisory: Consumer Acceptability Advice and Health Effects Analysis on Methyl Tertiary-Butyl Ether (MtBE) stated that MTBE can be successfully treated in drinking water: “Public water systems detecting MtBE in their source water at problematic concentrations can remove MtBE from water using the same conventional treatment techniques that are used to clean up other contaminants originating from gasoline releases, such as air stripping and granulated activated carbon (GAC).” U.S. EPA, Fact Sheet, Drinking Water Advisory: Consumer Acceptability Advice and Health Effects Analysis on Methyl Tertiary-Butyl Ether (MtBE), at 4 (Dec. 1997). It continued: “Oxidization of MtBE using UV/peroxide/ozone treatment may also be feasible, but typically has higher capital and operating costs than air stripping and GAC.” *Id.*

189. The State of California, which has experienced widespread MTBE contamination, has also found that MTBE can be remediated. A November 1998 California report found that MTBE could be successfully removed from groundwater using air stripping: “Air stripping is a proven technology, which has been applied commercially to treat MTBE-contaminated water at low and very high flowrates. It can achieve high removal efficiencies, is mechanically reliable and flexible enough to handle some variations in feed stream MTBE concentrations without a significant effect on removal efficiency.” Health & Environmental Assessment of MTBE, Report to the Governor and Legislature of the State of California as Sponsored by SB 521, Vol. I Summary and Recommendations, at 42 (Nov. 1998). The report also found that granular activated carbon (GAC) can successfully remove MTBE from water: “GAC is a well-proven technology for treating water contaminated with organics. Very high removal efficiencies are achieved with proper operation. GAC is a simple technology with high mechanical reliability

that can handle large variations in influent MTBE concentrations as well as variations in water flow rate.” *Id.* at 43.

PUBLIC AND PRIVATE WELLS

190. MTBE has been detected in many public drinking water wells which have already been tested. Revised Appendix F-2 provides a list of public drinking water wells where MTBE was detected for the first time after June 5, 2008. MTBE can be successfully treated in drinking water at all of the drinking water wells listed in Revised Appendix F-2.⁶

191. Upon information and belief, MTBE’s presence and migration in Vermont’s groundwater at the sites and wells in Revised Appendices A, B, C-2, and F-2, absent large-scale and costly remediation, will continue for many years.

J. Collective liability and indivisible injuries; punitive damages

192. As discussed above, it is impossible, based on physical characteristics, to identify the manufacturer or refiner of any given quantity of gasoline that was the source of MTBE found in surface water, groundwater, or water wells. The State must therefore pursue all Defendants, jointly and severally, for those injuries that Defendants have collectively visited upon the State. Defendants are collectively liable under traditional causation theories as well as theories of market share liability, alternative liability, concert of action liability, commingled product liability, and/or enterprise liability for injuries caused by Defendants.

193. Defendants knew that it was substantially certain that their acts and omissions described above would threaten public health and result in extensive contamination of the State’s property

⁶ In its Order dated December 5, 2017, the Court granted Defendants’ Motion to Dismiss claims as to the sites listed in Appendices D, E, and G to Plaintiff’s First Amended Complaint. The Court dismissed all trespass, public nuisance, and private nuisance claims (except trespass claims for sites listed in Appendix A) in its Order on July 31, 2018. This effectively dismissed Plaintiff’s continuing trespass and nuisance claims for sites and wells listed in Revised Appendices C-1 and F-1, where MTBE was detected for the first time before June 5, 2008.

and waters, and public and private drinking water supplies. Defendants' conduct was outrageously reprehensible and malicious. Defendants acted and/or failed to act with conscious and deliberate disregard for a known, substantial, and intolerable risk of harm, with the knowledge that their acts or omissions were substantially certain to result in the threatened harm, and/or as a matter of free and intentional business choices. Such conduct was not the result of a mistake of fact or law, honest error or judgment, overzealousness, or other human failing.

VII. FIRST CAUSE OF ACTION

Civil Action for Natural Resources Damages and Restoration, 10 V.S.A. § 1390

(All Defendants)

194. This claim applies to site number 20124312 in Revised Appendix A and the sites and/or wells in Revised Appendices B, C-2, and F-2.

195. The State realleges and reaffirms each and every allegation set forth in all preceding paragraphs as if fully restated in this section.

196. In June 2008 the Legislature declared that “[i]s the policy of the state that the groundwater resources of the state are held in trust for the public.” 10 V.S.A. § 1390. It is also the policy of the State “that the state shall protect its groundwater resources to maintain high-quality drinking water” and “that the groundwater resources of the state shall be managed to minimize the risks of groundwater quality deterioration” *Id.*

197. In accordance with such policy, the State must manage its groundwater resources for the benefit of its citizens, “who hold and share rights in such waters.”

198. The State, as trustee, is authorized to bring a cause of action to recover damages to and restoration of natural resources held in trust by the State.

199. By engaging in the acts and omissions alleged in this Complaint, Defendants have altered the character and/or quality of the groundwater of the State of Vermont and unreasonably interfered with the use and enjoyment of trust rights.

200. The Defendants' conduct unreasonably interfered with trust rights by causing statewide contamination of groundwater.

201. Public and private drinking water supply wells draw their water from the groundwater held in trust for the public. The presence of MTBE has thus interfered with public and private drinking water supplies.

202. As a direct and proximate result of Defendants' acts and omissions as alleged in this Complaint, MTBE has unreasonably interfered with trust rights by causing contamination of groundwater, drinking water supplies, public drinking water supply wells, private wells, and other waters and property of the State.

203. As a further direct and proximate result of the acts and omissions of the Defendants alleged in this Complaint, the State has sustained and will sustain substantial expenses and damages, for which defendants are strictly, jointly, and severally liable.

204. The injuries to the State's property and waters caused and/or threatened by Defendants' acts and omissions as alleged in this Complaint are indivisible.

205. Defendants' reprehensible conduct promoting sales of MTBE and/or gasoline containing MTBE was undertaken with conscious, willful, and wanton disregard of the probable dangerous consequences of that conduct and its foreseeable impact upon the State of Vermont, and warrants punitive damages. Defendants' conduct was outrageously reprehensible and malicious. Defendants acted and/or failed to act with conscious and deliberate disregard for a known, substantial, and intolerable risk of harm, with the knowledge that their acts or omissions were

substantially certain to result in the threatened harm, and/or as a matter of free and intentional business choices. Therefore, the State requests an award of punitive damages in an amount reasonable, appropriate, and sufficient to punish Defendants and deter them from committing the same or similar acts in the future.

VIII. SECOND CAUSE OF ACTION

Groundwater Protection Act, 10 V.S.A. § 1410

(All Defendants)

206. This claim applies to site number 20124312 in Revised Appendix A and the sites and/or wells in Revised Appendices B, C-2, and F-2.

207. The State realleges and reaffirms each and every allegation set forth in all preceding paragraphs as if fully restated in this section.

208. The State of Vermont is a “person” as defined by 10 V.S.A. § 1410(b)(3).

209. By engaging in the acts and omissions alleged in this Complaint, Defendants have altered the character and/or quality of the groundwater of the State of Vermont. For example, as discussed above, MTBE is associated with significant adverse health effects in humans and animals and can impart a foul taste and odor to drinking water at low concentrations.

210. This alteration caused unreasonable harm in the form of contamination of groundwater, drinking water supplies, public drinking water supply wells, private wells, UST sites, public property, and/or other waters and property of the State.

211. MTBE has affected the waters of the State in a profound and unreasonable way, compromising their use for household purposes including drinking, cooking, and bathing, and risking public health via exposure to MTBE. In addition, the contamination poses an extraordinary and unjust financial burden on the State and its citizens, who bear the costs of

testing, monitoring, and remediation although Defendants profited from the sale of MTBE-containing gasoline.

212. The Act authorizes the State to seek equitable relief and/or damages for the unreasonable harm caused by MTBE contamination.

213. As a direct and proximate result of Defendants' acts and omissions as alleged in this Complaint, the State's property and waters were and are contaminated with MTBE. The State has incurred, is incurring, and will incur, investigation, remediation, cleanup, restoration, removal, treatment and monitoring costs and expenses related to contamination of the State's groundwater, including drinking water, for which defendants are strictly, jointly, and severally liable.

214. As a further direct and proximate result of Defendants' acts and omissions alleged in this Complaint, the State has sustained and will sustain other substantial expenses and damages, for which Defendants are strictly, jointly, and severally liable.

215. The injuries to the State's property and waters caused and/or threatened by Defendants' acts and omissions as alleged in this Complaint are indivisible.

216. Defendants' reprehensible conduct to promote sales of MTBE and/or gasoline containing MTBE was undertaken with conscious, willful, and wanton disregard of the probable dangerous consequences of that conduct and its foreseeable impact upon the State of Vermont. Defendants' conduct was outrageously reprehensible and malicious. Defendants acted and/or failed to act with conscious and deliberate disregard for a known, substantial, and intolerable risk of harm, with the knowledge that their acts or omissions were substantially certain to result in the threatened harm, and/or as a matter of free and intentional business choices. Therefore, the State

requests an award of punitive damages in an amount reasonable, appropriate, and sufficient to punish Defendants and deter them from committing the same or similar acts in the future.

IX. THIRD CAUSE OF ACTION

Trespass

(All Defendants)

217. This claim applies to the sites in Revised Appendix A.

218. The State realleges and reaffirms each and every allegation set forth in all preceding paragraphs as if fully restated in this section.

219. The State owns in fee certain property within the State, including lands, water supplies, and water wells.

220. Defendants and their agents and employees knew, or in the exercise of reasonable care should have known, that MTBE is extremely hazardous to groundwater, surface water, and public water systems, including the property and interests of the State.

221. Defendants' acts and omissions, as alleged in this Complaint, directly and proximately caused and continue to cause MTBE to intrude onto State property, contaminate water systems, surface water, groundwater systems, and zones of influence of the areas that supply production wells within the State.

222. At the time of Defendants' acts and omissions, Defendants knew with substantial certainty that MTBE would reach onto State property, contaminate water systems, surface water, groundwater systems, and zones of influence of the areas that supply production wells within the State. Such knowledge was based on Defendants' knowledge of the properties of MTBE and their knowledge and experience regarding leaking gasoline delivery systems and releases of

MTBE to groundwater from those systems. Despite this knowledge, Defendants refined and marketed gasoline with MTBE with a profit motive in a way that has harmed the State.

223. As a direct and proximate result of the trespass, the State has been damaged and is entitled to compensatory damages for the costs of investigation, remediation, and treatment, damages for loss of use and enjoyment, diminution in property values, cost of restoring the properties to their original conditions, and/or other relief the State may elect at trial.

224. As a direct and proximate result of Defendants' acts and omissions as alleged in this Complaint, the State's property and waters were and are contaminated with MTBE. The State has incurred, is incurring, and will incur, investigation, remediation, cleanup, restoration, removal, treatment and monitoring costs and expenses related to contamination of the State's property, surface water, groundwater, drinking water supplies, and water wells, for which defendants are jointly and severally liable.

225. As a further direct and proximate result of Defendants' acts and omissions alleged in this Complaint, the State has sustained and will sustain other substantial expenses and damages, for which defendants are jointly and severally liable.

226. The injuries to the State's property and waters caused and/or threatened by Defendants' acts and omissions as alleged in this Complaint are indivisible.

227. Defendants' reprehensible conduct to promote sales of MTBE and/or gasoline containing MTBE was undertaken with conscious, willful, and wanton disregard of the probable dangerous consequences of that conduct and its foreseeable impact upon the State of Vermont. Defendants' conduct was outrageously reprehensible and malicious. Defendants acted and/or failed to act with conscious and deliberate disregard for a known, substantial, and intolerable risk of harm, with the knowledge that their acts or omissions were substantially certain to result in the

threatened harm, and/or as a matter of free and intentional business choices. Therefore, the State requests an award of punitive damages in an amount reasonable, appropriate, and sufficient to punish Defendants and deter them from committing the same or similar acts in the future.

X. FOURTH CAUSE OF ACTION

Negligence

(All Defendants)

228. This claim applies to site number 20124312 in Revised Appendix A and the sites and/or wells in Revised Appendices B, C-2, and F-2.

229. The State realleges and reaffirms each and every allegation set forth in all preceding paragraphs as if fully restated in this section.

230. As manufacturers, refiners, formulators, distributors, suppliers, sellers, marketers, shippers and handlers of petroleum products, including gasoline containing MTBE, Defendants owed a duty to the State as well as to all persons whom Defendants' petroleum products might foreseeably harm to exercise due care in the design, manufacturing, formulation, handling, control, disposal, promotion, marketing, sale, distribution, testing, labeling, use, warning, and instructing for use of MTBE and/or gasoline containing MTBE.

231. Defendants had a duty and the financial and technical means to test MTBE and gasoline containing MTBE, and to warn public officials, downstream handlers, and the general public of the hazardous characteristics of MTBE.

232. Defendants had a duty not to contaminate the environment.

233. At times relevant to this litigation, Defendants knew or should have known that:

- a. Unintended discharges of gasoline are commonplace;
- b. When gasoline containing MTBE is released into the environment, MTBE has a tendency to mix with groundwater and migrate great distances;

- c. MTBE is highly soluble in water and many times more soluble in water than the other organic (BTEX) components of gasoline;
- d. When gasoline containing MTBE is released into the environment, MTBE persists over long periods of time because MTBE is recalcitrant to biodegradation and bioremediation;
- e. Very low concentrations of MTBE can ruin the taste and smell of water;
- f. MTBE is a known animal carcinogen and a possible human carcinogen;
- g. MTBE greatly increases the importance of preventing leaks of gasoline;
- h. MTBE increases the need to maintain underground storage tanks, prevent overfills, and respond immediately to the loss of any gasoline containing MTBE;
- i. MTBE creates the need to issue warnings to all groundwater users in the area of any spill of gasoline containing MTBE; and
- j. MTBE creates a need for more regular testing and monitoring of wells for early detection of MTBE.

234. The foregoing facts relating to the hazards which MTBE poses to groundwater are not the sort of facts which the State, downstream handlers, and the general public could ordinarily discover or protect themselves against absent sufficient warnings.

235. Defendants have negligently breached their duties of due care to the State, downstream handlers, and the general public by, among other things:

- a. failing to adequately test, identify and remediate wells that are contaminated with MTBE;
- b. forming joint committees and task-forces to promote and defend MTBE while concealing the threat MTBE poses to groundwater;
- c. voluntarily undertaking to conduct and report research related to the environmental hazards and purported benefits of gasoline containing MTBE and not conducting and reporting that research in a truthful manner;
- d. marketing, touting, and otherwise promoting the benefits of gasoline mixed with MTBE without disclosing the truth about the environmental and potential health hazards posed by MTBE;

- e. failing to eliminate or minimize the harmful impacts and risks posed by gasoline containing MTBE;
- f. failing to curtail or reduce MTBE's distribution;
- g. failing to instruct downstream handlers and the general public about the safe handling and use of gasoline containing MTBE;
- h. failing to inspect, test, and take the necessary steps to prevent their gasoline distribution and storage system from releasing MTBE to groundwater or threatening such release;
- i. negligently releasing MTBE into the environment; and/or
- j. failing to warn and instruct downstream handlers and the general public about the risks to groundwater posed by gasoline containing MTBE, about the necessary precautions and steps to prevent or minimize spills and leaks of gasoline in distribution, storage and use, and about how to remediate such spills and leaks promptly.

236. As a direct and proximate result of Defendants' acts and omissions as alleged in this Complaint, the State's property and waters were and are contaminated with MTBE. The State has incurred, is incurring, and will incur, investigation, remediation, cleanup, restoration, removal, treatment, and monitoring costs and expenses related to contamination of the State's property, surface water, groundwater, drinking water supplies, and water wells, for which defendants are jointly and severally liable.

237. As a further direct and proximate result of the acts and omissions of the Defendants alleged in this Complaint, the State has sustained and will sustain other substantial expenses and damages, for which defendants are jointly and severally liable.

238. The injuries to the State's property and waters caused and/or threatened by Defendants' acts and omissions as alleged in this Complaint are indivisible.

239. Defendants knew that it was substantially certain that their acts and omissions described above would threaten public health and cause extensive contamination of public drinking water supplies. Defendants' conduct in continuing to promote MTBE was outrageously reprehensible.

240. Defendants' reprehensible conduct to promote sales of MTBE and/or gasoline containing MTBE was undertaken with conscious, willful, and wanton disregard of the probable dangerous consequences of that conduct and its foreseeable impact upon the State of Vermont. Defendants' conduct was outrageously reprehensible and malicious. Defendants acted and/or failed to act with conscious and deliberate disregard for a known, substantial, and intolerable risk of harm, with the knowledge that their acts or omissions were substantially certain to result in the threatened harm, and/or as a matter of free and intentional business choices. Therefore, the State requests an award of punitive damages in an amount reasonable, appropriate, and sufficient to punish Defendants and deter them from committing the same or similar acts in the future.

XI. FIFTH CAUSE OF ACTION

Strict Liability for Design Defect and/or Defective Product

(All Defendants)

241. This claim applies to site number 20124312 in Revised Appendix A and the sites and/or wells in Revised Appendices B, C-2, and F-2.

242. The State realleges and reaffirms each and every allegation set forth in all preceding paragraphs as if fully restated in this section.

243. Defendants during the relevant time period were designers, manufacturers, refiners, formulators, distributors, sellers, marketers and suppliers of petroleum products, including gasoline containing MTBE.

244. As manufacturers, designers, refiners, formulators, distributors, suppliers, sellers and marketers of petroleum products, including gasoline containing MTBE, Defendants owed a duty to all persons whom Defendants' petroleum products might foreseeably harm, including the State and its citizens, not to market any product which is unreasonably dangerous for its intended and foreseeable uses.

245. Defendants represented, asserted, claimed, and warranted that gasoline containing MTBE could be used in the same manner as gasoline not containing MTBE, or otherwise did not require any different or special handling or precautions.

246. When Defendants placed gasoline containing MTBE into the stream of commerce, it was defective, unreasonably dangerous, and not reasonably suited for its intended, foreseeable and ordinary transportation, storage, handling, and uses for the following reasons:

- a. Unintended discharges of gasoline are commonplace throughout Vermont;
- b. When gasoline containing MTBE is released into the environment, MTBE has a tendency to mix with groundwater and migrate great distances;
- c. MTBE is highly soluble in water and many times more soluble in water than the other organic (BTEX) components of gasoline;
- d. When gasoline containing MTBE is released into the environment, MTBE persists much longer than the other organic (BTEX) components of gasoline, because MTBE is recalcitrant to biodegradation and bioremediation;
- e. Very low concentrations of MTBE will ruin the taste and smell of water;
- f. MTBE is a known animal carcinogen and a possible human carcinogen and otherwise unhealthy to ingest;
- g. Defendants with knowledge of the risks failed to use reasonable care in the design of gasoline containing MTBE;
- h. Gasoline containing MTBE poses greater dangers to groundwater than would be expected by ordinary persons such as the State, downstream handlers and the general public exercising reasonable care;

- i. The risks which gasoline containing MTBE poses to groundwater outweigh MTBE's utility in boosting the octane level of gasoline and/or supposedly reducing air pollution by increasing the oxygen content of gasoline; and
- j. Safer alternatives to MTBE have existed and been available to Defendants at all times relevant to this litigation, for the purposes of increasing both the octane level and oxygen content of gasoline. Such sensible alternatives to MTBE included, but are not limited to, ethanol and other "oxygenates" and "octane enhancers."

247. The above-described defects exceeded the knowledge of the ordinary person and by the exercise of reasonable care the State would not be able to avoid the harm caused by gasoline with MTBE.

248. Gasoline containing MTBE was distributed and sold in the manner intended or reasonably foreseen by the Defendants, or as should have been reasonably foreseen by Defendants.

249. Gasoline containing MTBE reached consumers and the environment in a condition substantially unchanged from that in which it left Defendants' control.

250. Gasoline containing MTBE failed to perform as safely as an ordinary consumer would expect when used in its intended and reasonably foreseeable manner.

251. As a direct and proximate result of Defendants' acts and omissions as alleged in this Complaint, the State's property and waters were and are contaminated with MTBE. The State has incurred, is incurring, and will incur, investigation, remediation, cleanup, restoration, removal, treatment, and monitoring costs and expenses related to MTBE contamination of surface water, groundwater, drinking water supplies, and water wells, for which defendants are strictly, jointly, and severally liable.

252. As a further direct and proximate result of the acts and omissions of the Defendants alleged in this Complaint, the State has sustained and will sustain other substantial expenses and damages, for which defendants are strictly, jointly, and severally liable.

253. The injuries to the State's property and waters caused and/or threatened by Defendants' acts and omissions as alleged in this Complaint are indivisible.

254. Defendants' reprehensible conduct to promote sales of MTBE and/or gasoline containing MTBE was undertaken with conscious, willful, and wanton disregard of the probable dangerous consequences of that conduct and its foreseeable impact upon the State of Vermont. Defendants' conduct was outrageously reprehensible and malicious. Defendants acted and/or failed to act with conscious and deliberate disregard for a known, substantial, and intolerable risk of harm, with the knowledge that their acts or omissions were substantially certain to result in the threatened harm, and/or as a matter of free and intentional business choices. Therefore, the State requests an award of punitive damages in an amount reasonable, appropriate, and sufficient to punish Defendants and deter them from committing the same or similar acts in the future.

XII. SIXTH CAUSE OF ACTION

Strict Liability for Failure to Warn

(All Defendants)

255. This claim applies to site number 20124312 in Revised Appendix A and the sites and/or wells in Revised Appendices B, C-2, and F-2.

256. The State realleges and reaffirms each and every allegation set forth in all preceding paragraphs as if fully restated in this section.

257. As manufacturers, distributors, suppliers, sellers, and marketers of gasoline containing MTBE, Defendants had a duty to issue warnings to the State, the public, public officials, and downstream handlers of the risk posed by MTBE.

258. Defendants knew that gasoline mixed with MTBE would be purchased, transported, stored, handled, and used without notice of the hazards which MTBE poses to groundwater and wells.

259. Defendants' failure to warn of these hazards made gasoline containing MTBE unreasonably dangerous.

260. At all times relevant to this litigation, Defendants have had actual and/or constructive knowledge of the following facts which rendered MTBE hazardous to groundwater and production wells:

- a. Unintended discharges of gasoline with MTBE are commonplace;
- b. When gasoline containing MTBE is released into the environment, MTBE has a tendency to mix with groundwater and migrate great distances;
- c. MTBE is highly soluble in water and many times more soluble in water than the other organic (BTEX) components of gasoline;
- d. When gasoline containing MTBE is released into the environment, MTBE persists much longer than the other organic (BTEX) components of gasoline, because MTBE is recalcitrant to biodegradation and bioremediation;
- e. At extremely low concentrations, MTBE can have a distressing and objectionable taste and odor that renders water unusable;
- f. MTBE is a known animal carcinogen and a possible human carcinogen and is otherwise unhealthful when ingested;
- g. MTBE greatly increases the importance of preventing leaks of gasoline, and for the first time makes it necessary to prevent very small quantities of gasoline from escaping containment to avoid groundwater contamination;
- h. MTBE increases the need to maintain underground storage tanks, prevent overfills, and respond immediately to the loss of any gasoline containing MTBE;

- i. MTBE creates the need to issue warnings to all groundwater users in the area of any spill of gasoline containing MTBE; and
- j. MTBE creates the need for more regular testing and monitoring of wells for early detection of MTBE.

261. The foregoing facts relating to the hazards that MTBE poses to groundwater are not the sort of facts that, at the relevant times, the State, downstream handlers, or the general public could ordinarily discover or protect themselves against absent sufficient warnings.

262. Defendants breached their duty to warn by unreasonably failing to provide warnings concerning any of the facts alleged here to the State, public officials, downstream handlers, and/or the general public.

263. Defendants' failure to warn proximately caused reasonably foreseeable injuries to the State. The State and others would have heeded legally adequate warnings and MTBE would not have gained approval in the marketplace for use in gasoline, and/or gasoline containing MTBE would have been treated differently in terms of procedures for handling, storage, emergency response and/or environmental clean-up. Since the source of MTBE in all contaminated wells and groundwater is gasoline, the absence of warnings was the proximate cause of such contamination.

264. As a direct and proximate result of Defendants' acts and omissions as alleged in this Complaint, the State's property and waters were and are contaminated with MTBE. The State has incurred, is incurring, and will incur, investigation, remediation, cleanup, restoration, removal, treatment and monitoring costs and expenses related to contamination of the State's property, surface water, groundwater, drinking water supplies, and water wells, for which defendants are strictly, jointly, and severally liable.

265. As a further direct and proximate result of the acts and omissions of the Defendants alleged in this Complaint, the State has sustained and will sustain other substantial expenses and damages, for which defendants are strictly, jointly, and severally liable.

266. The injuries to the State's property and waters caused and/or threatened by Defendants' acts and omissions as alleged in this Complaint are indivisible.

267. Defendants' reprehensible conduct to promote sales of MTBE and/or gasoline containing MTBE was undertaken with conscious, willful, and wanton disregard of the probable dangerous consequences of that conduct and its foreseeable impact upon the State of Vermont. Defendants' conduct was outrageously reprehensible and malicious. Defendants acted and/or failed to act with conscious and deliberate disregard for a known, substantial, and intolerable risk of harm, with the knowledge that their acts or omissions were substantially certain to result in the threatened harm, and/or as a matter of free and intentional business choices. Therefore, the State requests an award of punitive damages in an amount reasonable, appropriate, and sufficient to punish Defendants and deter them from committing the same or similar acts in the future.

XIII. SEVENTH CAUSE OF ACTION

Civil Conspiracy

(Against Defendants Exxon Mobil Corporation, ExxonMobil Oil Corporation, Shell Oil Company, Shell Oil Products Company LLC, Shell Petroleum Inc., Shell Trading (US) Company, Equilon Enterprises LLC, Atlantic Richfield Company, Chevron U.S.A. Inc., TMR Company, TRMI-H LLC, BP Products North America Inc., Mobil Corporation, CITGO Petroleum Corporation, CITGO Refining and Chemicals Company L.P., Sunoco Inc. (R&M))

268. This claim applies to the sites and wells in Revised Appendices A, B, C-2, and F-2.

269. The State realleges and reaffirms each and every allegation set forth in all preceding paragraphs as if fully restated in this section.

270. As described earlier in this Complaint, the above listed Defendants (“Conspiracy Defendants”) knowingly and voluntarily engaged in a common plan and concerted action to commit, assist, and/or encourage an illegal or tortious act among themselves. Specifically, these Defendants formed joint task forces and committees and otherwise colluded for the avowed purpose of providing information about MTBE to the public and to government agencies, but with the true, unlawful purposes of:

- a. creating a market for MTBE with full knowledge of the hazards which MTBE poses to groundwater throughout the State of Vermont;
- b. concealing the nature of MTBE and its harmful impact on the State and the environment; and
- c. maximizing profits in a way Conspiracy Defendants knew would require them to contaminate waters, including groundwater, in the state.

271. These actions were not undertaken by each such Defendant acting individually; rather, the Conspiracy Defendants in many instances joined together and agreed to so act.

272. As a direct result of these concerted actions on behalf of the Oil Industry and the Conspiracy Defendants to protect MTBE, MTBE use increased dramatically in the 1990s and, as a result, MTBE has contaminated the nation’s groundwater in general and water resources in Vermont in particular.

273. The Conspiracy Defendants carried out their conspiracy by one or more of the following wrongful overt acts or omissions:

- a. Intentionally misrepresenting to the EPA and the public that MTBE was safe and did not pose a risk to groundwater;
- b. Concealing MTBE’s dangers (including MTBE’s adverse fate-and-transport characteristics and its propensity to contaminate groundwater) from the government and the public by, among other means, repeatedly requesting that information about the dangers and health effects of MTBE be suppressed and not otherwise published by third parties and by downplaying any adverse findings related to MTBE;

- c. Concealing MTBE's dangers from downstream handlers and consumers; and
- d. Collectively deciding to use MTBE rather than other, safer oxygenates to satisfy the requirements of the RFG program because MTBE was the most profitable option.

274. As a result of the Conspiracy Defendants' continued and ongoing pattern and practice of intentionally failing to warn, intentionally failing to provide information, and being dishonest when asked, information about MTBE's risk to human health and the environment that was within Conspiracy Defendants' possession was withheld from the public and governmental regulators during the time when the releases of gasoline with MTBE occurred in the state.

275. As a direct and proximate result of the Conspiracy Defendants' acts and omissions as alleged in this Complaint, the State's property and waters were and are contaminated with MTBE. The State has incurred, is incurring, and will incur, investigation, remediation, cleanup, restoration, removal, treatment, and monitoring costs and expenses related to contamination of the State's property, surface water, groundwater, drinking water supplies, and water wells for which the Conspiracy Defendants are jointly and severally liable.

276. The injuries to the State's property and waters caused and/or threatened by the Conspiracy Defendants' acts and omissions as alleged in this Complaint are indivisible.

277. Further, as discussed above, it is impossible to identify, based on physical characteristics, the manufacturer or refiner of any given quantity of gasoline that was the source of MTBE found in surface water, groundwater, or water wells. The State must therefore pursue the Conspiracy Defendants, jointly and severally, for those injuries that they have collectively visited upon the State. The Conspiracy Defendants are collectively liable under traditional causation theories as well as theories of market share liability, alternative liability, concert of action liability, commingled product liability, and/or enterprise liability for injuries caused by these Defendants.

278. The Conspiracy Defendants' reprehensible conduct, including their misrepresentations and withholding of information, to promote sales of MTBE and/or gasoline containing MTBE was undertaken with conscious, willful, and wanton disregard of the probable dangerous consequences of that conduct and its foreseeable impact upon the State of Vermont. These Defendants' conduct was outrageously reprehensible and malicious. They acted and/or failed to act with conscious and deliberate disregard for a known, substantial, and intolerable risk of harm, with the knowledge that their acts or omissions were substantially certain to result in the threatened harm, and/or as a matter of free and intentional business choices. Therefore, the State requests an award of punitive damages in an amount reasonable, appropriate, and sufficient to punish these Defendants and deter them from committing the same or similar acts in the future.

PRAYER FOR RELIEF

The State of Vermont seeks judgment against all Defendants for:

1. Compensatory damages arising from MTBE contamination of natural resources, groundwater, release sites, public drinking water supply wells, private drinking water supply wells, and other State and public properties and waters, according to proof, including, but not limited to:
 - (i) natural resources damages;
 - (ii) costs of investigation;
 - (iii) costs of testing and monitoring;
 - (iv) costs of providing water from an alternate source;
 - (v) costs of installing and maintaining wellhead treatment;
 - (vi) costs of installing and maintaining a wellhead protection program;

- (vii) costs of installing and maintaining an early warning system to detect MTBE and/or TBA before it reaches wells;
 - (viii) costs of remediating MTBE and/or TBA from natural resources including groundwater;
 - (ix) costs of remediating MTBE and/or TBA contamination at release sites;
 - (x) any other response costs or other expenditures incurred to address MTBE and/or TBA contamination;
 - (xi) interest on the damages according to law;
2. Injunctive and equitable relief to compel Defendants to abate the continuing trespass by removing MTBE and TBA from soil and groundwater;
 3. Punitive damages;
 4. Costs (including reasonable attorney fees, court costs, and other expenses of litigation);
 5. Prejudgment interest;
 6. Any other and further relief as the Court deems just, proper, and equitable.

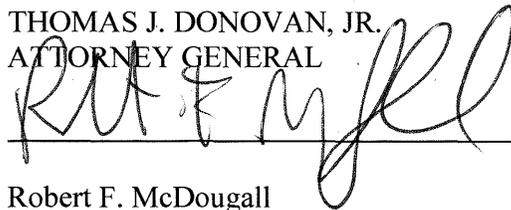
JURY TRIAL DEMANDED

The State demands a trial by jury.

Dated: August 15, 2018

STATE OF VERMONT

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