

MEMORANDUM

COPY

TO: The Honorable Edmund G. Brown Jr.
Governor of California

FROM: Benicians For A Safe And Healthy Community ("BSHC")

DATE: June 16, 2014

SUBJECT: **The oil industry's proposal to import by rail and process massive amounts of volatile new forms of crude oil without adequate safeguards endangers citizens throughout the state and mocks California's commitment to clean energy.**

This memorandum summarizes the concerns of BSHC as described in the attached letter addressed to the Governor:

- Numerous expansion projects have been proposed by the oil industry in the Bay Area as part of a statewide plan to move by rail enormous amounts of unusually volatile and dangerous fossil fuel products;
- Rail transport of Bakken and tar sands crude has already begun and continues even as plans for expansion of such imports are under CEQA review;
- The goal of the proposed projects is to allow exponentially increased transport by rail of dangerous forms of imported crude oil, as well as concomitant increases in shipments of other flammable products (such as LPG, propane and butane) around the state;
- The U.S. Department of Transportation (DOT) classifies transport of crude oil by rail as an "imminent hazard"; and it is undisputed that the 98,000 rail tank cars in service were not designed to carry tar sands and Bakken crude;
- Between July 2013 and May 2014 there were seven (7) train derailments involving Bakken crude, six of which were catastrophic with fiery explosions and environmental devastation; the best emergency response to such fires was to let them "burn out";
- Between 2010 and 2012 the EPA spent \$1 billion in an unsuccessful attempt to clean up a tar sands spill from a pipeline into the Kalamazoo River in Michigan; the routes at issue in California cross dozens of sensitive waterways, protected marshlands and vast agricultural areas;
- New guidelines for emergency response, protocols for selecting the safest routes, and safety standards for rail tank cars must be in place and enforced before trains of explosive materials are allowed to enter populated and environmentally sensitive areas of California;

The Governor is requested: to delay increases in such rail traffic until environmental impacts are assessed and adequate safety regulations are in place; and to establish an entity composed of stakeholders representing the impacted "fenceline" communities to oversee the movement of crude oil and other fossil fuels by rail and pipeline.

Enclosure

COPY



Benicians For A Safe and Healthy Community

////////////////////////////////////
P.O. Box 253 Benicia, CA 94510
(707) 742-3597 info@safebenicia.org SafeBenicia.org

June 16, 2014

The Honorable Edmund G. Brown Jr.
Governor of California
c/o State Capitol, Suite 1173
Sacramento, CA 95814

Subject: Benicians For A Safe And Healthy Community ("BSHC") concerns regarding significant threats posed by multiple oil industry expansion projects that propose increased transport and processing of dangerous unconventional crude and other fossil fuels.

Dear Governor Brown,

As proud Californians, we are grateful that the Golden State has strict policies with some of the highest standards in the nation to safeguard public health and safety, protect land, air and water, and drastically reduce greenhouse gases to ameliorate the accelerating rate of global warming. Our landmark visionary climate protection law AB32 (the California Global Warming Solutions Act of 2006), leads the nation forward towards the creation of a sustainable, resilient economy based on renewable energy. As Californians, are looking to you as Governor of this great state, for guidance, direction and protection. Your leadership is paramount in this unprecedented global climate challenge.

A significant impediment to this challenge is the oil majors' Klondike-like rush to import into California unconventional domestic oil. The types of materials coupled with the methods of importation sabotage our state's "clean energy" alternative to fully invest in and urgently implement clean fuels technologies – to meet 100% of the state's energy demands to power a new economy by 2050.¹

As residents of the greater Bay Area, we are highly alarmed by oil industries' proposed (and, in some instances implemented) expansion projects in our region and in Southern California² currently facing multiple CEQA reviews. These projects propose the import by rail and pipeline of unconventional "extreme crudes", which are the most dirty, dangerous, and carbon-intensive

crudes ever produced: heavy sulfur and metals-laden diluted bitumen ("dilbits") from Alberta, Canada's vast tar sands operations³ and highly volatile "Bakken" crude from the Williston Basin of the Bakken shale formation in North Dakota.⁴

We recognize that the oil majors' immediate motives are to acquire heavily discounted, "price-advantaged" North American-sourced crude to maintain and grow profit and business-as-usual's dependence on fossil fuels – while they last – for energy and transportation and to profit from exports to Asian markets.⁵ Yet, gross estimates for the total recoverable oil from North Dakota's Bakken are speculative. Even if exaggerated, the figure provided of 11 billion barrels of oil for those reserves would only supply the US for two years.⁶ The US government Energy Information Administration ("EIA") recently reported a 96% devaluation of the prior estimates of extractable tight oil from California's Monterey Shale. This significant devaluation, together with the Alberta's tar sands operations which represent the highest costs and investment risks in the industry,⁷ strongly suggests that California must redirect its priorities.

The number of oil industry projects now simultaneously proposed must be thoroughly vetted under CEQA for their foreseeable adverse, cumulatively considerable effects on California communities' safety, public health, lands, waters, and climate as well as the effects on our global climate.

WE RESPECTFULLY REQUEST that you exercise your executive authority and take decisive action to investigate these unsafe industry projects that, individually and cumulatively, envision transport of unprecedented volumes of dangerous crude and increasing amounts of propane that would exponentially increase the already numerous daily rail shipments throughout the state of flammable fossil fuel liquids and gases. These projects would send freight unit trains, up to 100 tank cars long, through our cities and surrounding environs, through light and heavily populated areas, fragile marshes and wetlands, major waterways, along San Francisco Bay and California's coastal communities, through agricultural lands and areas of incredibly treasured environmental beauty and on tracks shared with passenger rail commuters.

What is at stake for Bay Area and other California communities and the environment?

If permitted, the numerous, simultaneously proposed oil industry project involving increased rail and/or pipeline transport of Bakken and tar sands crude pose immediate daily risks to the North Bay Area communities – Richmond, Rodeo, Crockett, Benicia, Martinez and Pittsburg, as well as, So-Cal communities of Santa Maria and Bakersfield.⁸ *Our fenceline communities have already reached their carrying capacity for pollution, public health hazards and safety risks, including risks associated with possible terrorist attacks.*

Rail transport of tar sands and Bakken crude, as well as increased rail shipments of other flammable fossil fuels (LPG, propane, butane), through our cities and counties puts hundreds of communities and sensitive ecologies throughout the State in 'harm's way'. Exposure to these

risks not only emanates from the rails but additionally originates from refinery facilities, oil terminal operations and rail yards.

The proposed projects to import exponentially greater quantities of Bakken and tar sands into the Bay Area and So-Cal (Bakersfield, Santa Maria and Wilmington) terminals and refineries suggest plans are underway to process even greater amounts of unconventional crude as a percentage of refineries' total daily permitted throughput. Processing of these extreme crudes will increase fugitive toxic air emissions, produce more dirty by-products and inevitably result in more pollution, accidents, fires and explosions⁹ similar to the Chevron Richmond refinery's 'accident' which occurred on August 6, 2012, sending 15,000 residents to seek medical attention.

These projects will have considerable cumulative, direct and indirect impacts that would likely increase, not reduce, the state's total carbon footprint. With reference to Greenhouse Gas ("GHG") reductions under ICLEI (International Council for Local Environmental Initiatives – Local Governments for Sustainability) protocols,¹⁰ local communities cannot account for GHG contributions made by refineries and other large-scale energy industry facilities. There is no reason to expect that these projects can meet or support the targeted GHG reduction goals of AB32. (Trading carbon credits only sends pollution elsewhere).

Transporting huge quantities of crude oil across California is terribly dangerous. The U.S. Dept. of Transportation ("DOT"), which regulates US rail activity and train movement, has classified the shipment of crude oil by rail as an "imminent hazard."¹¹ According to the American Association of Railroads, there are about "98,000 DOT-111 tank cars in service carrying crude oil and ethanol in the United States and Canada, their design dates to the 1960's and the overwhelming majority were built before 2011."¹² It is conceded by federal regulators that DOT-111 tank cars were never designed nor engineered to carry crude oil.

The following points illuminate the perils of permitting crude by rail in California and BSHC's primary concerns:

- There is no conclusive evidence that the Federal Transportation Safety Board's ("FTSB") recommended interim design upgrades for tank car safety will serve to prevent future catastrophic fires and explosions of Bakken crude during a derailment.¹³
- Since July 6, 2013, there have been seven (7) train derailments involving Bakken crude, six of which were catastrophic, with fiery explosions.¹⁴ Investigations are ongoing as to particular causes. Bakken-loaded DOT-111's have earned their moniker, "Bakken Bombs".
- Railroad ("RR") companies are eager to profit from the oil industry expansion projects which aim to access greater amounts of North American-sourced crude. RR companies lobbied DOT to delay implementation of required phase-out of DOT-111's until 2017.¹⁵
- Oil shippers and rail carriers dispute the reasons for the increased number of derailments involving Bakken crude with oil shippers and refiners lobbying that the focus of safety improvements should be on "mechanical and track integrity," not the Bakken

oil's dangerous volatility or the inadequate design of the DOT-111 tank cars. Delaying review of newer CPC-1232 tank cars' performance is recommended by the American Fuel & Petrochemical Manufacturers ("AFPM") until "comprehensive derailment data has been collected and analyzed."¹⁶

- Although DOT has issued new guidelines for 'Emergency Response and Spill Prevention' suggesting protocols for re-routing crude trains around cities and tank car safety standards, this work has not been completed. For fenceline communities and the environment and for those cities along rail routes, the status quo is already perilous and threatens disaster.¹⁷

- These proposed crude oil expansion projects are currently undergoing CEQA reviews. However, any final DOT promulgated-rules and safety standards cannot be expected soon enough and once effective, would still require substantial additional time for the DOT-111 tank cars to be phased out and replaced.

- There is no current level of local and regional Emergency Response and Spill Prevention adequate to the challenges posed by exploding "Bakken Bomb trains" and/or massive spill of tar sands. Local emergency responders lack sufficient personnel, special equipment, compatible communications and training to handle fiery explosions and spills that will occur in populated areas and difficult terrain (marsh or wetlands) including rivers and over gorges.

- The only practical emergency response by local and regional fire crews during the six catastrophic train derailments involving Bakken crude that occurred between July 6, 2013 and May 20, 2014 was to let the fires burn out. Toxic emissions emanating from the fire and toxic smoke cloud resulting from the catastrophic unit train derailment and explosion of Bakken crude near Casselton, North Dakota caused officials to warn its 2,300 residents to evacuate their city.¹⁸ It took 36 hours for the fire to burn itself out.

- Spills of tar sands dilbits cause irreversible damage to land and waters. In Michigan in 2010, an Enbridge Energy pipeline rupture fouled 35 miles of the Kalamazoo River and coated the river bottom and its shoreline with asphalt-like bitumen. The Environmental Protection Agency's ("EPA") cleanup attempt cost \$1 billion by 2012 and there still has been no satisfactory ecological resolution.¹⁹

- Local governments have little authority to protect their communities and environs from the terrible hazards posed by rail transport of crude and other dangerous fossil fuels.

- Properties of Bakken tight oil have been debated, as have the results of official testing of the oil by industry and regulators, but Bakken has proven to be highly volatile. On July 6, 2013, in Lac Megantic, Quebec, a catastrophic runaway derailment of a 72-car unit train filled with Bakken resulted in a fiery inferno that incinerated the town's center, instantly killing 47 people and spilling 1.6 million gallons of oil throughout the area and in the Chaudiere River.²⁰ Subsequent investigations pointed to variables: on a warm summer night, Bakken's vaporizing gases (found to have elevated levels of highly

flammable methane, propane, benzene and hydrogen sulfide vapors at 24 times permitted limits) self-ignited under pressure and exploded the DOT-111's. To date, since the Lac Megantic tragedy, six more train derailments, explosions, fires and spills involving Bakken have happened, four of which occurred during the late fall, winter and early spring months.

- Displacement of one rail or a misaligned tank car wheel can cause a train's derailment. The proposed projects involving crude-by-rail would increase the number of 100-car unit trains loaded with tar sands, Bakken oil, propane and other flammable fossil fuels traveling through seismically vulnerable areas and liquefaction zones, including through and along protected marshes (Suisun Marsh) and shorelines.

- BNSF and Union Pacific train routes use old trestle bridges that span deep mountain gorges (Dunsmuir, Donner Summit) and rivers (Carquinez Strait). Old rail bridges and "at grade" rail crossings were never designed to accommodate 100-car unit trains carrying crude oil and other fossil fuels.

- Valero Benicia Refinery's proposed 'Crude By Rail Project' would allow daily import of 70,000 barrels of Bakken and/or tar sands by two 50-car Union Pacific trains each day, exponentially increasing risks to the community and local environs, including: the Benicia Industrial Park; the Port of Benicia; Cal-Trans I-680 freeway exits; local roadways; Suisun Marsh and Suisun Bay; the Strait and shorelines; and three bridges including a Union Pacific-owned trestle bridge built nearly 100 years ago. Communities and sensitive landscapes (public and private) are threatened along hundreds of miles of rail lines throughout the state.

- Phillips 66's proposed 'Propane Recovery Project' for their Rodeo refinery, coupled with their 'Rail Spur Extension Project' for their Santa Maria refinery, would export increasing amounts of propane out of Rodeo by BNSF rail and deliver increasing amounts of Bakken crude by 100-car BNSF unit trains coming from the north and continuing down the state along the coast into Santa Maria. These linked projects will send volatile fossil fuels through heavily populated areas and through fragile delta wetlands, over and near high density commercial waterways, over the Carquinez Strait, through vital agricultural lands and across the most scenic areas of California's beautiful landscape.

- The massive oil terminal operation proposed by WesPac-Pittsburg LLC, the lynchpin project of the oil industry's plan for the Bay Area, would import 242,000 barrels of oil each day by BNSF rail and/or ship into the terminal for storage and export. The project's stated aim is to supply domestically-sourced crude to regional refineries by pipeline; oil would likely be exported by ship to Asia as well. Adjacent family neighborhoods with homes, schools, churches and day care centers lie within stone's throw of the giant oil tanks and very near the rail offloading terminal.

What can be done to protect our communities and the environment from the added threats posed by multiple plans by Big Oil and Big Rail for increased transport and processing of dirty tar sands and volatile Bakken crude and other flammable fossil fuels?

As Bay Area residents and voters, we are extremely concerned about the safety of our communities – for our lives, homes, businesses, the lands and waters we love – and the peril of global warming caused in great measure by the burning of fossil fuels.

We need your leadership to address the threats posed by multiple projects proposed as part of a plan to bring more fossil fuels to California. The oil and rail industries' plans pose unprecedented and unacceptable risks to local communities and the environment. Allowing these plans to proceed absent adequate safeguards undermines California's transition to renewable energy and raises questions about our commitment to preserve the environment. As Governor you can take swift action and implement prudent standards to protect our State. We believe the nation is watching California and will again be guided by the example of this great State.

As Governor, we recommend your executive action through the following Initiatives:

A. Direct all permitting agencies to:

(1) Delay or withhold permitting for projects proposing crude-by-rail import or export of tar sands and Bakken crude until all new DOT safety policies, orders and guidelines are formalized, applied and enforceable and ensure the DOT-111s are taken out of service and prohibited from carrying crude oil or other flammable fossil fuels in California;

(2) Require that regional air districts provide statistical analyses to communities during public CEQA review periods on foreseeable, cumulatively considerable adverse and significant emissions impacts on air quality, public health, public safety and the climate from all existing large-scale facilities evaluated together with the multiple projects they now propose for the shipping, handling, and storage of Bakken and tar sands crude and the increased production, storage and shipment of propane;

(3) Require specific detailed information to support any and all proposed mitigation and monitoring measures and conditions proposed under CEQA to address existing and added threats posed to air quality, public health and public safety in local fence-line communities;

(4) Require that threshold standards for toxic emission limits and current emissions "caps" or "ceilings" be kept and enforced at refineries and oil terminal operations such that permitting would not allow increased emissions; and

(5) Issue direction to suspend or revoke permits for rail transport of fossil fuels if there is an incident, episode or major rail accident that would suggest that continued operations

would further threaten public safety and public health and put communities at further risk of devaluation and loss.

B. Appoint a Select Oversight Committee with representatives from fenceline communities, charged with receiving and coordinating timely assessments and recommendations from regulators, responsible agencies and the legislature to improve rail and pipeline transport safety in California of shipments of hazmat, crude oil and other fossil fuels and to provide oversight of the regulatory review process, consulting with the Dept. of Justice, to better protect the health and safety of communities, regional air quality, surrounding lands and waters from the risks posed by increased processing of unconventional crude oil.

The Select Oversight Committee would:

(1) Coordinate research and current data on rail safety with DOT regulators, specifically, with regard to particular dangers associated with the transport of Bakken and tar sands crude;

(2) Closely consult with RR companies to assess current RR operations, rail route conditions and safety of rail bridges and above grade crossings;

(3) Perform "credible worst case" scenarios with emergency responders involving existing regional "Emergency Response and Spill Preventions" organizations for pipeline and ship accidents and recommend appropriate organizational structure to address and respond to emergencies involving rail transport of hazmat, crude oil and other fossil fuels;

(4) Assess vulnerabilities of rail, pipeline and other infrastructure with regard to terrorism (e.g., where and how facilities, terminals, transport infrastructure are inordinately exposed to random vandalism and planned attack) and recommend protective/safety upgrades to protect communities and high value assets, both private and public;

(5) Closely monitor and ensure that appropriate regulatory agencies make timely comment on all local/county CEQA reviews of projects involving rail transport of fossil fuels and that such comments are provided for public benefit during the official public comment period;

(6) Coordinate with emergency responders to determine their capabilities and shortfalls with regard to handling accidents and incidents involving transport and processing of unconventional crude and other fossil fuels;

(7) Ensure that regional and county transportation plans focus on the problems of rail transport of crude oil and other fossil fuels while advocating and promoting increasing use of rail for other freight and passenger service. (For example, Solano Transportation Authority 2012 Report did not identify proposed transport of crude oil by rail as part of the mix of increased freight transport by RR companies);

(8) Make assessments and recommendations for policy changes to the appropriate legislative bodies and DOT as necessary; and

(9) Report finding of the Select Oversight Committee on a regular basis to the state legislature, appropriate agencies, state and county officials and the public.

We have provided our primary concerns, requests and recommendations in the spirit of "good government for all," with a vote of confidence in your understanding of the enormous challenges that our California communities face immediately and in the future with respect to our State's continuing dependence on fossil fuels and the urgent need to resolve the issues for the health and safety of the people and for the sake of all life on earth.

Respectfully submitted for your consideration,

BENICIANS FOR A SAFE AND HEALTHY COMMUNITY

By: 

Name: Marilyn J. Bardet

cc

Martinez Environmental Group
Crockett-Rodeo United to Defend the Environment
Richmond Progressive Alliance
Richmond Environmental Justice Coalition
Pittsburg Defense Council
Pittsburg Ethics Council
Sunflower Alliance
350 Bay Area
Natural Resources Defense Council
Sierra Club
Communities for a Better Environment
ForestEthics
Idle No More
Asia Pacific Environmental Network

US Congress: Hon. Diane Feinstein, Senate
Hon. Barbara Boxer, Senate
House of Representatives, All members of the California Delegation
California Legislature: All members of the California Senate and Assembly
County Boards of Supervisors: Contra Costa, Alameda, Solano, Yolo, Sacramento, Placer
Jack Broadbent, Director, Bay Area Air Quality Management District
John Gioia, BAAQMD Board member & Chair, Stationary Source Committee;
Board member, California Air Resources Board (CARB)
Mayors of: Benicia, Pittsburg, Martinez, Richmond, Berkeley, Oakland,
Davis, Sacramento, Roseville.

NOTES:

¹ Mark Schwartz, Stanford News. (Feb, 26, 2014), Stanford scientist unveils 50-state plan to transform U.S. to renewable energy. (Mark Jacobson, professor of civil and environmental engineering)

² Chevron Refinery (Richmond) "Modernization Project", Valero Refinery (Benicia) "Crude By Rail Project", Phillips 66 Refinery (Rodeo) "Propane Recovery Project", Shell Refinery (Martinez) "GHG Reduction Project", Wespac LLC "Pittsburg Energy Infrastructure Project", Kinder Morgan (Richmond) "Oil Rail Terminal Expansion", Tesoro Golden Eagle Refinery "Oil Terminal Expansion", Phillips 66 (Santa Maria) "Rail Spur Expansion Project", Plains All American (Bakersfield) "Crude By Rail Terminal Plan".

³ Andrew Nikiforuk, "Tar Sands: Dirty Oil and the Future of a Continent", 2009; David Suzuki Foundation, "bitumen is one of the most water-intensive hydrocarbons on the planet...On average, the open-pit mines require twelve barrels of water to make one barrel of molasses-like bitumen.", p. 63. "Planned expansions could bring the total to 3.3 barrels [of fresh water] per year, a volume that Natural Resources Canada website admits 'would not be sustainable because the Athabasca River does not have sufficient flows.', p. 65. "... every barrel of bitumen produced from the tar sands creates, on average, three times more carbon dioxide emissions (187 lbs.) than a barrel of normal [conventional] crude (62 lbs.)." p. 129. Various methods are used for upgrading bitumen to allow it to flow in pipelines and be transported by rail. Alberta tar sands vast network of mining operations are the largest industrial project in the world, encompassing 125,000 - 250,000 sq. miles of once pristine boreal forest and the watersheds of three mighty rivers that flow to the Arctic.

⁴ Fracking chemicals in spotlight as regulators investigate rail car corrosion and flammability of North Dakota crude | Financial Post. Bloomberg News. Aug. 12, 2013.

⁵ For information on the economic prospects and environmental impacts of extracting and processing unconventional crude types found in the U.S. see Richard Heinberg, *Snake Oil: How Fracking's False Promise of Plenty Imperils Our Future* (Post Carbon Institute, 2013). This thorough investigative analysis refutes industry hype, using statistics from the US Energy Administration (EIA) including the EIA's recent prediction that unconventional oil supply will experience historic decline within this decade. This prediction, based on current production levels for existing shale and gas in the U.S., raises the question of the actual economic reality of the "boom" that current oil industry promotion campaigns describe for "inexhaustible oil reserves" found in extensive, often very deep, shale formations of the Midwest, Texas, New York and California. The real test of this claim is how much supply of tight oil can be extracted at what cost, and thus, the "energy return on energy invested" or "EROEI". The overall high costs of energy and resources for the extraction processes are huge and are offset now by favorable pricing discounts such as offered by the Canadian government for "upgraded" tar sands bitumen.

⁶ Eric Konigsberg, "Kuwait on the Prairie", The New Yorker, April 25, 2011 North Dakota, Oil, and the Energy Crisis : The New Yorker.

⁷ Carol Linnitt, New Report Names Alberta Oilsands as Highest Cost, Highest Risk Investment in Oil Sector DeSmogCanada, May 8, 2014; see also: Financial specialists making carbon investment risk real today in the capital market | Carbon Tracker Initiative, Carbon Supply Cost Curves: Evaluating financial risk to oil capital expenditures; Louis Sahagun, LA Times - U.S. officials cut estimate of recoverable Monterey Shale oil by 96%, Los Angeles Times, May 20, 2014.

⁸ John Cox, "Increased Oil Train Traffic Raises Potential For Safety Challenges", Bakersfield Californian", May 26, 2014. Bakersfield High School.

⁹ Natural Resources Defensive Council, Fact Sheet on Valero Crude By Rail Project, July 19, 2013 (Appendix)

¹⁰ Greenhouse Gas Accounting Protocols — ICLEI Local Governments for Sustainability USA

¹¹ US Dept. of Transportation Emergency Order, Docket No. DOT-OST-2014-0067, May 7, 2014. Also DOT: Safety Action Plan for Hazardous Materials Safety | Federal Railroad Administration, May 20, 2014.

¹² Jay Mouawad, Despite Orders, Federal Tank-Car Safety Measures Are Slow in Coming - NYTimes.com, The New York Times, May 8, 2014.

¹³ Ibid. "...railroad officials, point out that these newer cars - known as CPC 1232s -. have also failed in recent crashes."

¹⁴ Lac Megantic, Quebec, July 6, 2013; Aliceville, AL, November 8, 2013; Casselton, ND, December 31, 2013; Plaster Rock, New Brunswick, January 7, 2014; Philadelphia, PA, January 20, 2014; Lynchburg, VA, April 30, 2014; LaSalle, CO, May 6, 2014.

¹⁵ David Thomas, Refiners' lobby says DOT-111 is "fine" for shipping Bakken crude | Railway Age. Railway Age, May 19, 2014.

¹⁶ Ibid.

¹⁷ US Dept. Of Transportation Emergency Order, Docket No. DOOST-2014-0067, May 7, 2014. Also DOT: Safety Action Plan for Hazardous Materials Safety | Federal Railroad Administration. May 20, 2014.

¹⁸ David Shaffer and Susan Hogan, Casselton, N.D. residents flee town after oil train explosion | StarTribune. StarTribune, December 31, 2013, updated.

¹⁹ The Environmental Protection Agency, EPA Response to Enbridge Spill in Michigan | US EPA

²⁰ Jaquie McNish and Grant Robertson, The deadly secret behind the Lac-Mégantic inferno - The Globe and Mail, The Globe and Mail, January 16, 2014.