

# MARTIN & MYRA AKEL

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December 13, 2013

Mrs. Caren Ray  
Fourth District Supervisor  
County of San Luis Obispo  
County Government Center  
San Luis Obispo, CA 93408

Mr. Murray Wilson  
Environmental Resource Specialist  
County of San Luis Obispo  
Department of Planning and Building  
976 Osos St., Room 300  
San Luis Obispo, CA 93408

Dear Supervisor Ray and Mr. Wilson:

Thank you and your colleagues for your presentation of the Draft EIR for the Phillips Rail Spur Extension Project. As you requested, here is a written summary of our thoughts that should be considered by your group in its final report, and by the Planning Commission in making its decision.

**1. Misleading “Positioning” Of The Project By Phillips:** The project is not a “rail spur” project. It is a method for delivering a different mixture of types of crude from new locations, offloading them at a new “railcar unloading facility” via a new pumping system, and then further transporting them via a new pipeline to storage tanks. It is an entirely new method of distribution coming into the facility, encompassing a potentially different level of (and perhaps more flammable) crude.

For Phillips to “position” the project as a “rail spur” is simply that -- a marketing technique to lull residents into thinking it is less invasive than it actually is. In fact, many residents are still uninformed of exactly what will occur ... that’s it’s not a simple, benign request.

“Rail spur” implies a few more tracks ... but those tracks are the least intrusive element. It’s all about what they will do with those tracks and the impact on our community. And respectfully, all information providers and decision makers must recognize what is truly intended.

AM-1

**2. A Potentially Dangerous New Type Of Crude Delivered To Our Community:** We've been told the Santa Maria Refinery is structured to handle the processing of heavy (less volatile) crude. However, it seems that one of the potential new sources of crude that could be shipped here is Bakken crude (such as that from North Dakota). This type of crude is said to be far more volatile and likely requires unique types of rail cars (and we assume far more delicate pumping and processing).

At the meeting we were told that Phillips has not announced the types of crude to be delivered, and that (despite the fact that the Santa Maria facility is not specifically designed to process light crude), Bakken crude could very well be part of the mix sent here. Yet, here's a report on a recent shipment of Bakken by rail (we know you're familiar with the incident mentioned, but kindly read this article excerpt) ...

**- As published in Canada's "Globe & Mail," August 30, 2013**

*"Rail safety officials in the United States had serious concerns about the safety of transporting crude oil from the Bakken region of North Dakota as far back as March, and were preparing to investigate the problem four months before the disaster in Lac-Mégantic, Que.*

*"On July 6, 2013 a train operated by Montreal, Maine & Atlantic Railway derailed in Lac-Mégantic and exploded, killing 47 people and ravaging the downtown. The train was carrying more than 70 tanker cars of crude from the Bakken oilfields in North Dakota. Investigators in Canada and the U.S. have said publicly they are concerned the Bakken oil was more volatile than believed. The probe into the derailment has focused on why the crash caused such an intense explosion and fire, which is not typical of most types of crude oil. In particular, the regulator said it "has specific safety concerns about the proper classification of crude oil being shipped by rail, the subsequent determination or selection of the proper tank car packaging used for transporting crude oil, and the corresponding tank car outage requirements.*

*"Investigators are focusing on whether Bakken crude is lighter than other forms of crude, such as oil drilled in Texas or Alberta, meaning it could have a lower flashpoint, making it more easily combustible. The Federal Railroad Administration is concerned that these aspects of the oil aren't being determined accurately before trains are loaded, and that the oil may require different kinds of tanker cars if they are indeed more hazardous.*

*"The flashpoint needs to be taken into account," Cynthia Quarterman, administrator of the Department of Transportation's Pipeline and Hazardous Materials Safety Administration, told reporters in Washington on Thursday, after a meeting between regulators to discuss rail safety. "We need to make sure that what is in those tankers is what they say it is."*

(continued)

At last night's meeting it was stated that the rail cars in which the crude is to be delivered will be owned and chosen by Union Pacific. Therefore, if Bakken crude is ultimately shipped here, the choice of cars is out of Phillips' hands ... yet the cars must have "special requirements." This is yet another serious concern.

All of this is obviously an issue that goes beyond "rail spur." It is a major safety issue. Therefore, please address the Bakken issue more specifically in the final EIR report if you can, or otherwise communicate this critical topic for the consideration of the Planning Commission.

AM-2

At the very least, the commission should seriously consider banning Bakken crude from delivery to the Santa Maria Refinery (which, after all, isn't designed to handle it).

**3. Appreciating The Expansion Of Rail Traffic At The Facility:** The Phillips plan calls for five trains to arrive per week at the refinery, each with 80 cars. On the surface that might not seem like a lot. But this needs to be put into better perspective.

The draft EIR states that currently only one train with only 18 - 20 cars arrives at the facility each week (on Wednesday). If five new trainloads are allowed, that's an increase of 500% and approximately 380 additional cars every week (19,760 more cars per year).

AM-3

Certainly, that's not to be taken lightly. And we suggest that the final EIR make distinctly clear what the expansion of traffic will be (and its impact).

**4. More Rail Shipments Than Actually Required:** Even if the commission ultimately approves the "rail spur" project, they should seriously consider implementing one of the major mitigation methods already developed by its Environmental Division.

Given that Phillips is seeking to "sell" the county on its project, it may very well be asking for more frequent rail shipments than it actually expects to be approved, and would be satisfied with fewer shipments.

The draft EIR report lists reducing the 80-car shipments from five times per week to three times per week. But the report does not expand upon the full, positive effects such a change would have. If shipments were limited to three per week, there would be ...

AM-4

- A 40% lower risk of rail car accidents/disasters occurring.
- A 40% reduction in potential leaks.
- A 40% reduction in toxic elements being released into the air.
- A 40% reduction in noise/vibrations/odors from railroad cars, whistles, pumping, etc.
- And a 40% reduction in intrusion on the quality of life in SLO county and elsewhere.

Indeed, perhaps only 80 or 160 cars of crude (i.e., one or two shipments per week) should be sufficient. After all, Phillips can continue receiving crude via pipeline, the way it's done since 1955. Balancing rail and pipeline shipments would be far less intrusive.

**5. Implementing The Air Quality Mitigation Methods:** While the draft EIR lists air quality mitigation methods, it clearly states that most or all of those approaches might be in conflict with Federal regulations, thus preventing them from being implemented. At the meeting, the Environmental Division mentioned this is something they only recently learned about.

Therefore, because air quality is already such a critical issue (especially here on the Nipomo Mesa), the commission should take a “go slow” approach to approving the project. Not until it can be confident that the air quality mitigation methods can actually be implemented, should project approval be granted.

AM-5

Put another way -- if an endangered species was found to be in the way of the Phillips project, the project might be canceled or delayed for years. Well, our citizens’ air quality is endangered by the project, and a “go slow” approach is in order. A good deal of research is required on this topic by our officials.

**6. Implementing The Mitigation Measures:** The draft and final EIR contain a long list of well-thought-out mitigation measures ... regarding reducing the potential of fires/explosions, and so forth. Most or all make great sense ... especially the ones regarding noise reduction, odor reduction, and the protection of air quality ... i.e., quality of life issues.

If I’m not mistaken, at this point Phillips has not had to agree to any of these. Therefore, if the commission is seriously considering approval of the project at all, the approval should include a definitive agreement on the mitigation methods. Perhaps this thought is obvious and is a “no brainer” ... but it must be stated that without all or most of the mitigation methods, the project should be considered a dead issue.

AM-6

**7. Adding A New Access Route To The Dunes:** The project calls for adding a new route through the Phillips property to give public access to the dunes. Why and how this was included in the plan seems uncertain. Perhaps it was seen as a “give back” by Phillips ... that the county received something tangible in return.

Regardless - given the already very poor air quality in South County, and the heavy use/misuse and damage of the dunes by recreation and off-road vehicles - providing even easier access is a poor idea indeed. This should be excluded from any approval.

AM-7

Supervisor Ray and Mr. Wilson -- we truly appreciate your being advocates for the citizens of SLO County. Thank you for taking these extremely serious issues into consideration.

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December 31, 2013

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Dear Supervisor Ray and Mr. Wilson:

This is a followup to our email of December 13th, which outlined the very serious concerns we have in approving the new crude oil distribution/processing system proposed by Phillips 66 (i.e., the project that is disarmingly entitled "The Rail Spur Extension"). Our hope is that you will incorporate many of those points in the final Environmental Impact Report, and also communicate all of the information to the Planning Board, regardless of whether it's in the final EIR.

In addition, kindly also take into account the following.

**1. New Evidence Of Lack Of Rail Safety:** One of the core points in our email regarded the proposed extraordinary rise in the number of rail cars carrying crude into the Santa Maria facility. Specifically -- there would be an increase of 500%; i.e., approximately 380 additional cars every week (19,760 more cars per year!). And that would raise the risk of accidents and spills by exactly the same proportion.

Well now, just 17 days later, there is yet again concrete evidence of how real the danger is should the Phillips project is approved. You already know of the accident that occurred last summer in Canada - virtually wiping a town off the map. Then again, just yesterday, another major accident occurred. Please - read the article on the next page:

AM-8

I'm certain Phillips will provide statistics showing that rail shipments of crude oil are "safe." Regardless -- no matter what percentage of shipments explode, the reality is that they are exploding ... in Alberta, in Quebec, in North Dakota, and in Alabama just this year. And it's inevitable that an even higher number of shipments will explode in 2014, 2015 and beyond.

If Phillips is permitted to bring in rail shipments of crude to SLO county, the towns that could be added to the list of future "disasters" could one day include "Nipomo", "Arroyo Grande", "Grover Beach", "Pismo Beach", and others.

Certainly, we all want to avoid our towns being added to that list.

**2. The Impact On The Reputation & Financial Well Being Of SLO County:** If a crude oil rail "incident" occurred in one or more of our towns, imagine the depth of the impact on SLO county overall. For example ...

- Housing -- would you want to live in a county that sets itself up for such disasters?
- Tourism -- would you want to vacation in such a county?
- Employment -- would you want to work in such a county?
- Education -- would you want to send your children to school/college in such a county?

If even one such serious incident occurred here, the reputation of the entire county would likely suffer ... and with it would come severe economic and lifestyle consequences. No longer would San Luis Obispo be "*the happiest place to live.*"

Supervisor Ray and Mr. Wilson -- the above issues are all in addition to the ones outlined in our December 13th email. Based on all of these factors and their potentially very harmful outcomes, we respectfully suggest that the Phillips proposal either be rejected outright, or else delayed for an indefinite time until further study and improvements in rail safety can be made.

Again - we hope you will incorporate this information and these concepts into the final EIR, and also communicate them to the Planning Commission in whatever other way is appropriate.

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AM-8

AM-9

AM-10

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To: "[mwilson@co.slo.ca.us](mailto:mwilson@co.slo.ca.us)" <[mwilson@co.slo.ca.us](mailto:mwilson@co.slo.ca.us)>, Caren Ray  
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Cc: Myra Akel <[myra.akel@gmail.com](mailto:myra.akel@gmail.com)>  
Date: 01/02/2014 07:40 PM  
Subject: As Per U.S. Regulators ...

Dear Supervisor Ray; Mr. Wilson:

Yet even more evidence to include in your information-gathering and decision making process ...

As noted previously, Phillips 66 may indeed decide to ship some amount of Bakken crude to the Santa Maria refinery (regardless of how the facility is now structured for processing). They have not clearly stated their intentions. Please read this article dated 1/3/13 quoting the change in attitude among U.S. regulators. It indicates that this kind of crude puts communities at far greater risk than previously thought -- and that this issue is not based on projections or statistics, it is based on the reality of current disasters.

AM-11

In addition to the many, many other reasons to reject or indefinitely delay the Phillips proposal (regardless of "Bakken" crude), please add this factor into your information-gathering and decision making process.

<http://in.reuters.com/article/2014/01/03/us-usa-energy-bakken-idINBREA010ZI20140103>

Thank you,  
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Cc: Myra Akel <[myra.akel@gmail.com](mailto:myra.akel@gmail.com)>  
Date: 01/08/2014 04:38 PM  
Subject: Starting The New Year With Another Rail/Crude Disaster

Supervisor Ray, Mr. Wilson:

We're only one week into 2014, and it's started all over again -- we've begun the new year with yet another disaster tied to the rail shipment of crude oil. And it adds further evidence to the already substantial list of recent events which leads to the same conclusion -- that the Phillips 66 "rail spur" project should be denied.

This event took place in eastern Canada (New Brunswick). To quote the Huffington Post report ( [http://www.huffingtonpost.com/2014/01/08/new-brunswick-oil-train-derails\\_n\\_4558812.html](http://www.huffingtonpost.com/2014/01/08/new-brunswick-oil-train-derails_n_4558812.html) ) ...

"Officials in Canada said a derailed freight train carrying crude oil and propane continued to burn Wednesday, and about 150 residents remained evacuated from their homes. Of the 17 cars that derailed late Tuesday in New Brunswick province, five contain crude oil and four contain propane", said Claude Mongeau, the chief executive of CN Rail (i.e., a rail official ).

"Some of the propane cars are venting and some of the crude cars are burning", he said.

"It is contained, but it is evolving," Mongeau said. He said it was too early to say what caused the 122-car train to derail. He APOLOGIZED at a news conference and said he hoped families could return to their homes soon.

Supervisor Ray, Mr. Wilson -- please take this disaster into account as additional documentation of the immense dangers posed to the "environment" of SLO county. You can help prevent "apologies" from rail officials after the fact, by expanding the draft EIR to communicate how dramatic the impact of approval can be.

As always, thank you for being our advocates.

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AM-12

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Cc: Myra Akel <[myra.akel@gmail.com](mailto:myra.akel@gmail.com)>  
Date: 01/09/2014 05:40 PM  
Subject: What Is Phillips' Fundamental Motivation?

Supervisor Ray, Mr. Wilson:

A Jan. 7th article on Bloomberg.com is very telling as to why Phillips wishes to expand the capabilities of the Santa Maria Refinery.

Their official purpose for the "rail spur" (as stated in the Acadis "Applicants Reference CEQA IS", dated 4/27/13) is "to allow SMR to access a full range of competitively priced crude oil." This vague statement implies that Phillips requires new types of crude in order to stay competitive and might face hardships if the project is denied.

However, an independent report (<http://www.bloomberg.com/news/2014-01-08/unforseen-u-s-oil-boom-upends-world-markets-as-drilling-spreads.html>) shows that oil companies are experiencing an unprecedented, enormous increase in oil production due to fracking. A great deal of the output is the volatile "Bakken" crude, with "a record amount already riding the rails to California's fuel makers. Companies looking to ship even more include Tesoro Corp., Valero Energy and Plains All American Pipeline, which are planning to build train terminals in California."

Why are they doing this? It is not to remain competitive. It is not because they face potential hardships. It is not to provide the U.S. with "energy independence." Rather ...

"If the railway networks on the U.S. West Coast are completed, the region's refiners will be able to use domestic crude supplies to boost exports to meet rising needs in ASIA, where demand for new cars, electricity and air conditioning is boosting energy consumption."

This will be a repeat of what is happening on the U.S. east coast -- "New rail routes and pipelines are carrying increasing supplies of crude from North Dakota, Oklahoma and elsewhere to refiners in New Jersey, Louisiana, Texas and Pennsylvania. They are in turn sending cargoes of diesel to London, Rotterdam and Antwerp, Belgium."

Therefore, the request by Phillips to increase their rail operations in Santa Maria is directly motivated by the exceptional business opportunity to gain additional international market share, so they can vastly increase sales and profits. We have no problem with increased sales and profits. But SLO county (and most of California) should not be asked to shoulder the potentially disastrous consequences and environmental penalties that will flow from that self-serving corporate objective.

AM-13

Indeed, oil companies such as Phillips, should make the proper investment ... i.e., invest hundreds of millions or billions of dollars up front to build far safer and less invasive pipelines to ship their crude. Instead they are seeking to tap into the worldwide market with the least possible cost (using existing rails and rail cars), but with the greatest potential danger.

AM-13

Here too, as the EIR seeks to clearly explain the situation (i.e., why the proposal has been made), we hope you will provide the proper background information to all decision makers.

As always, thank you for being our advocates.

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Cc: Myra Akel <[myra.akel@gmail.com](mailto:myra.akel@gmail.com)>  
Date: 01/13/2014 03:22 PM  
Subject: The AFTERMATH

Dear Supervisor Ray & Mr. Wilson:

Regarding the Phillips rail project -- each day we come upon further evidence that requires us to communicate with the two of you, and which will hopefully prompt you to enhance the EIR and communicate with all county decision makers.

Today I submit evidence from page 1 of the Jan. 8, 2014 issue of the Wall St. Journal, the most credible of reporters.

Please -- take time to not only read the article, but watch the video. It brings to life the long-term impact these rail intrusions have on local communities. It describes the AFTERMATH, months and months later, on a county whose officials did nothing to prevent rail cars filled with crude from gaining access to their communities.

It shows how, long after the smoke has cleared and the media has departed, a county is left broken and scarred.

AM-14

The aftermath now includes ...

- Enormous oil spills.
- Lack of funds to deal with the aftermath.
- And not the least of the issues, the death and destruction it all caused.

[http://online.wsj.com/news/article\\_email/SB10001424052702304773104579268871635384130-1MyQjAxMTA0MDEwMDExNDAYWj](http://online.wsj.com/news/article_email/SB10001424052702304773104579268871635384130-1MyQjAxMTA0MDEwMDExNDAYWj)

As always Supervisor Ray and Mr. Wilson, thank you for being our advocates.

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To: Caren Ray <[cray@co.slo.ca.us](mailto:cray@co.slo.ca.us)>, [mwilson@co.slo.ca.us](mailto:mwilson@co.slo.ca.us)  
Cc: Myra Akel <[myra.akel@gmail.com](mailto:myra.akel@gmail.com)>  
Date: 01/17/2014 12:09 PM  
Subject: What Officials & Oil Execs Are Saying About Rail Deliveries Of  
Crude

Dear Supervisor Ray & Mr. Wilson:

Please pardon the length of this email, but there are critical new points to be made, and we've tried to be as succinct as possible.

It's one thing for our citizens to alert you to the dangers of rail delivery of crude. But I'm sure you'd also like to hear from your peers -- i.e., government officials who have been on-site when the reality of the disaster hit home. And of course, it's enlightening to see how oil executives are dancing to address the issues.

AM-15

As per the New York Times (1/11/14) (  
<http://www.nytimes.com/2014/01/11/business/energy-environment/north-dakota-senators-want-stronger-rail-safety-rules.html? r=0>  
) ...

1. A Change Of Heart: Elected officials who have been supporters of the oil industry have suddenly found "religion"; they now realize the horrific impact of shipping crude by rail ...

- "After train accidents involving North Dakotan crude oil, political leaders are putting pressure on the Obama administration to improve railroad safety regulations, with some even urging a slowdown in drilling until safety solutions are found."
- Senator Heidi Heitkamp, a North Dakota Democrat said "Today we put pressure on D.O.T. and the Pipeline and Hazardous Materials Safety Administration to step up and move forward with safety provisions, which have not been handled with the necessary urgency."
- "We need to manage the growth," Senator John Hoeven, a Republican of North Dakota, said. "We want to make sure we maintain our quality of life and safety."
- "Robert W. Harms, chairman of North Dakota's Republican Party, called the accident in Casselton 'a wake-up call,' and suggested that even people in the oil industry thought production was being driven up too fast."
- Grady C. Cothen Jr., a transportation policy consultant said Bakken crude was "not what any of us expected, with a far higher tendency to explode or burn. The D.O.T. didn't know what they had on their hands."

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[mwilson@co.slo.ca.us](mailto:mwilson@co.slo.ca.us)  
Date: 01/24/2014 06:48 AM  
Subject: WHY Are Crude Oil Rail Cars Crashing?

Dear SLO County Supervisors; Mr. Murray Wilson:

Our citizens have been writing to you of the unacceptable risks of permitting 20,800 tanker cars loaded with crude oil to be shipped through and unloaded in SLO County each year.

But what causes the rail accidents that keep occurring?

Is it the fault of the weak structure of existing rail cars which puncture more easily ... i.e., that they're not built to safely transport contemporary grades of crude? Actually, rail car structure comes into play only after trains go off their tracks. And regardless of whether "safer" tanker cars are designed and implemented in the future, they'll continue derailing, with disasters assured.

The actual causes of derailments are many, and the list grows longer with each event. The reality is, SLO County cannot prevent or mitigate the causes!

Here are the causes of derailments in 2013-14 alone:

1. Mechanical Failure: Wheels or axles on the rail cars simply break, causing cars to derail and split open.1, 12, 13
2. Brake Malfunction: Emergency brakes engage causing the trains to stop too sharply then derail.3, 4
3. Broken Rails: Aging, damaged rails cause trains to jump their tracks.14, 16
4. Improper Track Design: Tracks are "not up to standard" for contemporary trains, leading to derailments.5
5. Theft: Parts of rails are stolen (or vandalized). Trains come through and derail.10
6. Terrorism: Terrorists plot to derail trains (e.g., al-Qaeda).15
7. Other Trains Derail: A train other than the crude oil carrier derails, and the crude oil train crashes into it and derails as well.2
8. Unattended, Runaway Rail Cars: Either engineers fail to set brakes properly or brakes malfunction on their own, causing runaway trains to head down inclines and ultimately derail and explode.6

AM-16

9. Rain/Flooding Causes Derailments: Heavy rains or blocked waterways flood across tracks, causing the connection with trains to be unstable, and trains derail.<sup>7</sup>

10. Heavy Winds: Wind gusts of 60 mph or higher sweep trains off their tracks.<sup>11</sup>

11. Human Error: In addition to the "human error" causes listed above, there are additional human failures ... such as the commuter train that derailed outside New York City in late 2013. The cause -- according to the engineer's representatives "He may have lost focus at the controls in a momentary daze before the crash." That engineer could have very well been driving a train of crude oil tankers.<sup>8</sup>

AM-16

12. The Volatility Of Bakken Crude: And of course, there's the extensive, convincing evidence that Bakken crude is far more flammable than assumed or promoted. And given all the "opportunities" such as those listed above, when trains derail Bakken will explode with dreadful, long-term damage.<sup>9</sup>

Ladies and gentlemen -- the EIR based on the the Phillips "rail spur" proposal cannot take the above causations into account. SLO County cannot "mitigate" or lessen the causes of these ever-increasing rail disasters. Therefore, we urge you to reject putting our citizens in harm's way. Please -- reject allowing SLO County to be the recipient of 20,800 rail cars of crude oil each year.

AM-17

Thank you for being our advocates.

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1

<http://abcnews.go.com/International/wireStory/wheel-axle-failure-canada-train-derailment-21473121>

(New Brunswick, Canada)

2

<http://online.wsj.com/news/articles/SB10001424052702303640604579294794222692778>

(Casselton, N.D.)

3

<http://www.theglobeandmail.com/news/national/train-carrying-oil-and-gas-derails-blaze-prompts-evacuation-of-new-brunswick-town/article16240968/>

(New Brunswick, Canada)

4[http://](http://www.edmontonsun.com/2013/10/23/evacuation-lifted-after-train-derailment-in-gainford-alberta)

[www.edmontonsun.com/2013/10/23/evacuation-lifted-after-train-derailment-in-gainford-alberta](http://www.edmontonsun.com/2013/10/23/evacuation-lifted-after-train-derailment-in-gainford-alberta)

(Alberta, Canada)

5[http://](http://www.reuters.com/article/2013/11/13/us-oil-train-risks-analysis-idUSBRE9AC02U20131113)

[www.reuters.com/article/2013/11/13/us-oil-train-risks-analysis-idUSBRE9AC02U20131113](http://www.reuters.com/article/2013/11/13/us-oil-train-risks-analysis-idUSBRE9AC02U20131113)

(Alabama)

6

<http://bangordailynews.com/2013/07/10/news/state/montreal-maine-and-atlantic-railways-chairman-says-brakes-on-train-in-lac-magantic-quebec-may-not-have-been-set-properly/>

(Quebec)

7

<http://metronews.ca/news/vancouver/906627/cn-rail-says-heavy-rain-caused-train-derailment-in-vancouver-area/>

(Vancouver)

8[http://](http://www.kansascity.com/2014/01/14/4750950/no-conclusions-yet-in-ntsb-report.html)

[www.kansascity.com/2014/01/14/4750950/no-conclusions-yet-in-ntsb-report.html](http://www.kansascity.com/2014/01/14/4750950/no-conclusions-yet-in-ntsb-report.html)

(New York City)

9[http://](http://www.tulsaworld.com/business/oilandgasactivity/feds-issue-warning-on-volatile-bakken-crude/article_db141a7e-34b0-51c1-a858-bab4cca405ee.html)

[www.tulsaworld.com/business/oilandgasactivity/feds-issue-warning-on-volatile-bakken-crude/article\\_db141a7e-34b0-51c1-a858-bab4cca405ee.html](http://www.tulsaworld.com/business/oilandgasactivity/feds-issue-warning-on-volatile-bakken-crude/article_db141a7e-34b0-51c1-a858-bab4cca405ee.html)

10

<http://www.focus-fen.net/news/2014/01/19/324485/theft-causes-train-crash-in-west-bulgaria-roundup.html>

(Bulgaria)

11

[http://mtstandard.com/news/state-and-regional/wind-causes--car-train-derailment-near-helena--/article\\_9850548e-7cf0-11e3-b17c-0019bb2963f4.html](http://mtstandard.com/news/state-and-regional/wind-causes--car-train-derailment-near-helena--/article_9850548e-7cf0-11e3-b17c-0019bb2963f4.html)

(Helena, Montana)

12[http://](http://www.sunjournal.com/news/maine/2014/01/09/cracked-wheel-may-have-caused-new-brunswick-train/1476118)

[www.sunjournal.com/news/maine/2014/01/09/cracked-wheel-may-have-caused-new-brunswick-train/1476118](http://www.sunjournal.com/news/maine/2014/01/09/cracked-wheel-may-have-caused-new-brunswick-train/1476118)

(New Brunswick, Canada)

13<http://www.startribune.com/local/238370801.html> (Casselton, North Dakota)

14

<http://www.kpax.com/news/cause-of-superior-train-derailment-determined/#>

(Superior, Montana)

15

<http://news.nationalpost.com/2014/01/11/massive-rcmp-probe-stopped-al-qaeda-linked-conspiracy-to-derail-passenger-train-newly-released-documents/>

(Ontario, Canada)

16

[http://journaltimes.com/news/local/coal-train-derails-in-caledonia/article\\_cf7ec014-8121-11e3-81ce-001a4bcf887a.html?comment\\_form=true](http://journaltimes.com/news/local/coal-train-derails-in-caledonia/article_cf7ec014-8121-11e3-81ce-001a4bcf887a.html?comment_form=true)

(Calendonia, WI)

# MARTIN & MYRA AKEL

968 Jacqueline Place, Nipomo, CA 93444 • 805-219-0295 • [akelassoc@earthlink.net](mailto:akelassoc@earthlink.net)

January 13, 2014

Supervisor Ray, Mr. Wilson:

Regarding the Phillips rail project -- each day we come upon further evidence that requires us to communicate with the two of you, and which will hopefully prompt you to enhance the EIR and communicate with all county decision makers.

Today I submit evidence from **page 1** of the Jan. 8, 2014 issue of the **Wall St. Journal**, the most credible of reporters.

**Please** -- take time to not only read the article, but watch the video. It brings to life the long-term impact these rail intrusions have on local communities. It describes the **AFTERMATH**, months and months later, on a county **whose officials did nothing** to prevent rail cars filled with crude from gaining access to their communities.

It shows how, long after the smoke has cleared and the media has departed, **a county is left broken and scarred**.

The **aftermath** now includes ...

- Enormous oil spills.
- Lack of funds to deal with the aftermath.
- And not the least of the issues, the death and destruction it all caused.

[http://online.wsj.com/news/article\\_email/SB10001424052702304773104579268871635384130-1MyQjAxMTA0MDEwMDExNDAYWj](http://online.wsj.com/news/article_email/SB10001424052702304773104579268871635384130-1MyQjAxMTA0MDEwMDExNDAYWj)

Sincerely,  
Martin & Myra Akel  
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AM-18

# MARTIN & MYRA AKEL

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January 8, 2014

Supervisor Ray, Mr. Wilson:

We're only one week into 2014, and it's started all over again -- we've begun the new year with yet another disaster tied to the rail shipment of crude oil. And it adds further evidence to the already substantial list of recent events which leads to the same conclusion -- that the Phillips 66

"rail spur" project should be denied.

This event took place in eastern Canada (New Brunswick). To quote the Huffington Post report ([http://www.huffingtonpost.com/2014/01/08/new-brunswick-oil-train-derails\\_n\\_4558812.html](http://www.huffingtonpost.com/2014/01/08/new-brunswick-oil-train-derails_n_4558812.html)) ...

*"Officials in Canada said a derailed freight train carrying crude oil and propane continued to burn Wednesday, and about 150 residents remained evacuated from their homes. Of the 17 cars that derailed late Tuesday in New Brunswick province, five contain crude oil and four contain propane",* said Claude Mongeau, the chief executive of CN Rail (i.e., a rail official).

*"Some of the propane cars are venting and some of the crude cars are burning",* he said.

*"It is contained, but it is evolving,"* Mongeau said. He said it was too early to say what caused the 122-car train to derail. He APOLOGIZED at a news conference and said he hoped families could return to their homes soon.

Supervisor Ray, Mr. Wilson -- please take this disaster into account as additional documentation of the immense dangers posed to the "environment" of SLO county. You can help prevent "apologies" from rail officials after the fact, by expanding the draft EIR to communicate how dramatic the impact of approval can be.

As always, thank you for being our advocates.

Sincerely,  
Martin & Myra Akel

AM-19

- The following are excerpts from two articles published on 12/30/13, in The Huffington Post and Time magazine.

## **Train Derailment Causes Fiery Destruction In Casselton, ND**

(see video - <http://www.youtube.com/watch?v=CxkUhVswF5U>)



**Above:** A fireball at site of train derailment near North Dakota town of Casselton, 12/30/13.

CASSELTON, N.D. (AP) Authorities urged residents to evacuate a small North Dakota town Monday night after a mile-long train carrying crude oil derailed outside of town, shaking residents with a series of explosions that sent flames and black smoke skyward. Mayor Ed McConnell said - "All the experts say it can be a hazardous situation to their health. We're going to try to get everybody out of the town."

The Cass County sheriff's office said it was "strongly recommending" that people in the town of Casselton and anyone living 5 miles to the south and east evacuate. Sheriff's Sgt. Tara Morris said it could take up to 12 hours before authorities could get close to the fire.

Here's the good news: it looks like no one was hurt. That might seem amazing after seeing video, which saw a freight train carrying crude oil collide with a train carrying grain. The collision sent fireballs up more than 100 feet, and left the oil train in flames. The cars burned through the night, and officials called on the 2,400 residents to leave their homes as the winds shifted overnight, blowing black soot toward the town.

Terry Johnson, manager of a grain dealer less than a mile from the derailment, said he heard at least six explosions in the two hours following the incident. "It shook our building and there was a huge fireball."

The fact that no one was injured is a matter of luck. Had the accident occurred near a more populated town, we might have seen something closer to the catastrophe that struck the Quebec town of Lac-Megantic, where a runaway train of crude oil derailed, triggering an explosion that killed 47 people and destroyed 30 buildings. Nor are these two the only recent accidents involving freight trains carrying crude oil. In November (2013), a train hauling oil to the Gulf Coast from North Dakota derailed in Alabama, setting off more fires, and in October (2013), a train carrying crude derailed in Alberta, igniting a blaze and causing the evacuation of nearby residents.

These accidents came at the end of the year in which shipments of oil by rail boomed, increasing 17 times faster last year than domestic production of oil – which is itself booming. All of which raises the question: Is all this safe? Compared to moving oil by pipeline, shipping it by rail carries a greater risk of catastrophic accidents and death, for the simple reason that trains, more than pipelines, travel through populated areas. Should something go wrong the consequences can be horrendous.

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THOMSON REUTERS

# Bakken crude may be more flammable than previously thought: U.S. regulator

BY PATRICK RUCKER

WASHINGTON Fri Jan 3, 2014 6:08am IST

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National Transportation and Safety Board (NTSB) member Robert Sunwalt (R) views damaged rail cars at the scene of the BNSF train accident in Casselton, North Dakota January 1, 2014 in this handout provided by NTSB. CREDIT: REUTERS/NTSB/HANDOUT VIA REUTERS

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### PICTURE GALLERY



Foggy Winter

(Reuters) - Crude oil produced in North Dakota may be more flammable and prone to explosions than earlier thought, U.S. officials said on Thursday as they examine whether gas trapped in crude-by-rail shipments could explain a spate of fiery accidents.

In the latest crash involving fuel produced in an oil patch known as the Bakken, several tank cars exploded after a collision on a desolate stretch of North Dakota track on Monday.

In that case, as with several other accidents in recent months, tank cars exploded with a force that surprised investigators.

The incidents "indicate that the type of crude being transported from the Bakken region may be more flammable than traditional heavy crude oil," the U.S. Pipeline and Hazardous Materials Safety Administration (PHMSA) said on Thursday.

New drilling methods like hydraulic fracturing, or fracking, have unlocked vast oil deposits and producers eager to maximize profits often try to supply refiners off the national pipeline grid who are willing to pay more for the fuel.

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### Financial Regulation

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That market pull is one reason over two-thirds of North Dakota's oil production is currently shipped by rail.

Northern Oil & Gas Inc, Oasis Petroleum Inc and Continental Resources are among the Bakken producers whose shares dipped on Thursday.

Regulators are working to tighten train transport safety and if those rules are costly to enforce, analysts say, it could cut into crude-by-rail profits.

"Depending on what it costs to fix this problem, you could be eating into the dynamics that have put so much crude oil on the tracks in the first place," said David Vernon, a transportation analyst with research firm Sanford C. Bernstein & Co.

#### CORROSIVE, SULFUROUS OR EXPLOSIVE?

Crude-by-rail safety has been closely scrutinized since July when a runaway oil train carrying light crude from the Bakken derailed and exploded in the center of the Quebec town of Lac-Mégantic, killing 47 people.

The devastation caused by that accident and fireballs that have followed other derailments prompted regulators to scrutinize the contents of tank cars.

PHMSA officials have examined whether Bakken crude is unduly corrosive, more sulfurous or loaded with explosive gas as it moves on the tracks from oil fields to distant refineries.

On Thursday, Bakken producers were warned to "sufficiently degasify" crude oil being loaded onto tank cars, and officials said they will examine the "dissolved gas content" of crude oil shipments.

Packing gas onto tank cars meant to carry liquid fuels can push the pressure to dangerous levels and provoke explosions, industry officials have said.

"Large amounts of vapor pressure can split the tank, sink the roof and emit (a) flammable gas cloud," the Canadian Crude Quality Technical Association, an industry-sponsored research group, concluded in March.

Bakken producers have recently reported a large amount of corrosion in tank cars and "high vapor pressure causing bubbling crude," the trade group said.

Tesoro Logistics LP reported in March that pressure on Bakken crude shipments was likely to exceed federal safety standards.

U.S. railroads want tank car manufactures to upgrade the national fleet with new safety standards that could cost the industry more than \$3 billion, according to a Reuters estimate.

If regulators opt for such standards and give the tank car industry a short time to comply, the hit to the Bakken energy sector could be severe at a time when crude-by-rail traffic is climbing.

Trains carried nearly 700,000 barrels a day of North Dakota oil to market in October, a 67 percent jump from a year earlier, according to the state pipeline authority.

Most of those deliveries are in 100-car 'unit trains' that can move huge crude volumes in unbroken shipments but that can intensify dangerous spills and derailments.

If regulators deem unit trains dangerous - as some in the rail industry have conceded - then oil producers might also lose an efficiency that has made rail shipments an attractive alternative to pipelines.



#### JPMorgan Chase & Co to pay over \$2 billion to settle Madoff case

JPMorgan Chase & Co will pay more than \$2 billion of penalties to settle charges by U.S. federal authorities that it failed to report suspicious activity involving Bernard Madoff's Ponzi scheme. [Full Article](#)

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January 9, 2014

HUFF POST GREEN

## New Brunswick Oil Train Derails, Forcing Dozens Of Evacuations

AP | Posted: 01/07/2014 11:21 pm EST | Updated: 01/08/2014 1:15 pm EST

PLASTER ROCK, New Brunswick (AP) — Officials in Canada said a derailed freight train carrying crude oil and propane continued to burn Wednesday, and about 150 residents remained evacuated from their homes. There were no deaths or injuries.

Of the 17 cars that derailed late Tuesday in New Brunswick province, five contain crude oil and four contain propane, said Claude Mongeau, the chief executive of CN Rail.

Some of the propane cars are venting and some of the crude cars are burning, he said.

"It is contained, but it is evolving," Mongeau said. He said it was too early to say what caused the 122-car train to derail. He apologized at a news conference and said he hoped families could return to their homes soon.

The derailment in a sparsely populated region, roughly 20 miles (32 kilometers) from the U.S. border and northern Maine, again raised concerns about the increasing use of rail to transport oil throughout North America. In July, 47 people were killed in Lac-Megantic, Quebec, when a train carrying crude oil derailed.

Andrew Simpson, 30, was playing cards with his uncle Tuesday evening when the train went off the tracks less than a mile (1.6 kilometer) away. "The table just kind of rumbled, and out the window went a real bright orange," he said. "We looked out and the whole train yard was on fire. We panicked and called (emergency services)."

New Brunswick Premier David Alward said there was minimal impact on the environment.

Sharon DeWitt, emergency measures coordinator for the nearby community of Plaster Rock, said no one was killed or injured. She said people were evacuated within a two-kilometer (1.24-mile) radius of the fire.

Officials said the regularly scheduled freight train ran into trouble around 7 p.m. Tuesday about 150 kilometers (93 miles) northwest of Fredericton. Mongeau said the crude oil was from western Canada and was destined for an Irving Oil refinery in Saint John, New Brunswick.

DeWitt said the train left the tracks about five kilometers (3 miles) from the village in a wooded area. She said there is one road near the site, which includes a number of homes.

The train's engineer and conductor, the only people on the train, were not hurt, Canadian National Railway spokesman Jim Feeny said. Both have provided statements, but he would not give details.

A series of recent derailments in North America have worried both officials and residents close to rail lines. On Dec. 30, an oil train derailed and exploded in North Dakota, causing the evacuation of a nearby town but no injuries.

In 2011, around 68,000 carloads of fuel oils and crude petroleum moved along Canadian rail lines, according to Statistics Canada. In 2012, that rose to nearly 113,000. Between January and September of 2013 — the most recent data available — some 118,000 carloads had been shipped via rail.

In November, the federal government required rail companies to tell municipalities when they transport dangerous goods through their communities, after provinces and the Federation of Canadian Municipalities demanded more transparency.

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Associated Press writer Rob Gillies in Toronto contributed to this report.

*Filed by Nick Visser |*

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# Bloomberg

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## Unforeseen U.S. Oil Boom Upends Markets as Drilling Spreads

By Asjylyn Loder - Jan 8, 2014

The U.S. oil boom has put European refineries out of business and undercut West African crude suppliers. Now domestic drillers threaten to roil Asian markets and challenge producers in the Middle East and South America.

Fifteen European refineries have closed in the past five years, with a 16th due to shut this year, the [International Energy Agency](#) said, as the U.S. went from depending on fuel from Europe to being a major exporter to the region. Nigeria, which used to send the equivalent of a dozen supertankers of crude a month to the U.S., now ships fewer than three, according to the U.S. Energy Information Administration. And cheap oil from the Rocky Mountains, where output has grown 31 percent since 2011, will soon allow West Coast companies to cut back on imports of pricier grades from Saudi Arabia and [Venezuela](#) that they process for customers in Asia, the world's fastest-growing market.

### Related:

- [Calls to Drop 1970s-Era U.S. Oil Export Ban Stir Fight](#)
- [BP to Conoco Seek Alaskan Oil Comeback as Palin Tax Dies](#)
- [Arctic Cold Cuts U.S. Fuel Supply as Processing Freezes](#)

“I don't really think anyone saw this coming,” said [Steve Sawyer](#), an analyst with [FACTS Global Energy](#) in [London](#). “The U.S. shale boom happened much faster than people thought. We're in the middle of a new game. There's nothing in the past that predicts what the future will be.”

Advances in extracting oil from shale rock drove a 39 percent jump in U.S. production since 2011, the steepest rise in history, and will boost output to a 28-year high this year, according to the EIA. While drilling in shale is more expensive than other methods and poses environmental challenges, the prospect of a growing supply is encouraging analysts to predict a more energy-independent nation.

### Crude Exports

## [Crude on the Move](#)

With U.S. [exports](#) of gasoline and other refined products hitting a record last month and the country on pace to become the world's largest oil producer by 2015, five years faster than the IEA's earlier predictions, industry advocates such as Senator [Lisa Murkowski](#) of Alaska are calling for an end to 39-year-old restrictions on U.S. crude exports.

In a measure of just how quickly the oil market has changed, President [Barack Obama](#) unveiled in March 2011 a goal considered so outrageous that correspondent Christopher Mims wrote on the environmental news website [Grist](#) that it could be accomplished only by "an economic crash bigger than any ever seen in U.S. history, or perhaps an alien race forcing all of us to take to our bicycles." Obama said that by 2025 the U.S. would cut crude imports by one-third.

It didn't take 14 years. It took less than three.

## **End Restrictions**

The country is so flush with crude that imports are plunging and drillers are challenging export limits imposed after the 1973 Arab oil embargo. Murkowski, the top Republican on the Senate Energy Committee, called on Obama yesterday to end restrictions and vowed to introduce legislation if he doesn't.

Easing controls would have been unthinkable just three years ago, when uprisings in Arab countries such as Libya pushed crude prices over \$100, said [Philip Verleger](#), a former director of the office of [energy policy](#) at the Treasury Department and founder of the Aspen, Colorado-based consultant PKVerleger LLC.

The boom has been led by [drilling](#) in the Permian Basin in West Texas and the oil-rich Bakken shale, which stretches from North Dakota into Montana and Canada.

North Dakota and Texas have more than doubled crude output since Obama's 2011 speech, with Texas pumping more than [Iran](#), according to the EIA, the statistical arm of the U.S. Energy Department, and a Bloomberg survey of producers, [oil companies](#) and analysts.

## **Bone Springs**

Drilling is spreading in emerging [oil fields](#) in the Rocky Mountain region such as the Niobrara in [Colorado](#) and the Bone Springs in [New Mexico](#) and spurring a revival of crude extraction around [Wyoming's](#) Teapot Dome formation, home of the first U.S. reserves and the namesake of a 20th

century political scandal. Colorado's production jumped 17 percent in the first 10 months of 2013, Wyoming rose 16 percent and New Mexico added 10 percent, according to the EIA.

A record amount of crude is already riding the rails from oil fields in North Dakota, Colorado and New Mexico to California's fuel makers, according to the [California Energy Commission](#). Companies looking to ship even more include Tesoro Corp., [Valero Energy Corp. \(VLO\)](#) and [Plains All American Pipeline LP \(PAA\)](#), which are planning to build train terminals in California and Washington state, according to company statements and regulatory filings. Plans are awaiting permits or in the planning stages to handle capacity roughly equal to the amount of crude sent to the region by Saudi Arabia.

## Asia Demand

If the railway networks on the U.S. West Coast are completed, the region's refiners will be able to use domestic crude supplies to boost exports to meet rising needs in Asia, where demand for new cars, electricity and air conditioning is boosting energy consumption. China, already the world's largest importer, will rely increasingly on crude from the Middle East and refined fuels from the U.S. to meet its consumers' growing demand.

An increase in the number of U.S. cargoes to Asia might force Saudi Arabia to cut its output to head off a worldwide glut, Verleger said. As the de facto leader of the Organization of Petroleum Exporting Countries, the kingdom is monitoring signs of potential oversupply as Iraq and Libya try to boost output and Iran increases exports as international sanctions are loosened, he said.

"It's another outlet for North American oil products and means more supply for the rest of the world," said [Andy Lipow](#), president of Lipow Oil Associates LLC, an energy consultant in Houston. "The West Coast is behind the rest of America as far as getting crude by rail. It will increase supply and help the consumer."

## Hydraulic Fracturing

The U.S. gains were made possible by innovations in horizontal drilling and hydraulic fracturing, or fracking, that have unlocked fuel trapped in underground rock. The technology allows producers to bore horizontally, then use explosives and a high-pressure stream of water, sand and chemicals to blast open fractures that free the oil.

The process comes with environmental risks. A 2011 U.S. government [report](#) found fracking chemicals in groundwater in Pavillion, Wyoming, and in June, 47 people died when an unmanned train carrying Bakken crude derailed and exploded in Lac Megantic, Quebec. Crude from the

Bakken may be more flammable and more dangerous to ship than other types of oil, the U.S. Transportation Department said Jan. 2.

Fracking is also more expensive than traditional extraction. Drilling a horizontal shale well in the Bakken can cost 10 to 20 times what a vertical well might cost, according to Austin, Texas-based Drillinginfo Inc. Production from shale wells declines by 60 percent to 70 percent in the first year, while output from traditional wells diminishes by as much as 55 percent in two years before flattening out, according to Drillinginfo.

## Import Need

One reason the U.S. still depends so much on imports is that demand continues to outstrip domestic supply. Another reason is the quality of crude its refineries can handle. Many of them performed expensive upgrades in the past decade so they could process oil from overseas that was more difficult to turn into transportation fuel.

Gasoline users and diplomats benefit from the surge in U.S. production. While the 2011 Libyan uprising had U.S. consumers paying almost \$4 a gallon for gasoline, pump prices declined 1.3 percent last year and averaged \$3.31 a gallon yesterday, according to AAA, the largest U.S. motoring organization. That was even after sanctions cut off more than 1 million barrels a day of Iranian oil exports. Starved of their primary source of cash, the Islamic republic's leaders in November reached an agreement to curb its nuclear program.

"It took time to realize how significant this transformation was going to be," said Jason Bordoff, who was an energy adviser to the National Security Council and helped draft Obama's 2011 speech. "We were able to impose pain on Iran without imposing pain on ourselves."

## Rail Routes

New rail routes and pipelines are carrying increasing supplies of crude from North Dakota, Oklahoma and elsewhere to refiners in New Jersey, Louisiana, Texas and Pennsylvania. They are in turn sending cargoes of diesel to London, Rotterdam and Antwerp, [Belgium](#). U.S. fuel exports to the Netherlands, a major import hub for the region, reached a record in September, according to the EIA.

The one-two punch of declining crude imports followed by rising fuel exports hit the refining industry in Europe and the U.K. particularly hard. That's because refiners outside North America typically buy oil based on the price of [Brent crude](#), a North Sea grade that last year cost an average of almost \$11 a barrel more than West Texas Intermediate, the U.S. benchmark.

WTI futures on the [New York](#) Mercantile Exchange settled at \$92.33 a barrel today, \$14.82 below the Brent price of \$107.15 on ICE Futures Europe in London. It was the widest spread at the close since Dec. 3. The spread widened to a record \$27.88 a barrel in October 2011.

“When historians write this story 10 or 20 years from now, they are going to look at a very different U.S.,” said Verleger, the former Treasury Department official. “Everything has changed.”

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U.S. NEWS

# Fiery Oil-Train Accidents Raise Railroad Insurance Worries

*July's Disaster in Lac-Mégantic, Quebec, Killed 47 and Has Cost Millions in Cleanup*

By BETSY MORRIS

Jan. 8, 2014 11:00 p.m. ET

Canadian officials are sorting out liability for the devastating train disaster in Lac-Mégantic seven months ago that left 47 people dead and a cleanup that is costing millions of dollars. Photo: Ap/The Canadian Press

LAC-MÉGANTIC, Quebec—Trains have resumed rolling through this small community again, past 47 Christmas trees in front of St. Agnes Church that honor the townspeople killed last July when a runaway oil train left their downtown in an inferno. The 1 a.m. crash of a driverless train that had broken free from its moorings and barreled downhill before derailling sent waves of flame coursing through town.

"The downtown vanished," says Roger Garant, a retiree and city councilman.

That raises the question, beyond still-unhealed psychic wounds from the tragedy, of where the money will come from to rebuild. This, in turn, leads unavoidably to a commercial issue in the midst of the human ones: insurance.

The cleanup cost alone at Lac-Mégantic is running about \$4 million a week, according to Mr. Garant. It may total \$200 million, the Canadian government has said. Beyond that comes the expenses for rebuilding the library and more than 100 destroyed homes and businesses, and settling lawsuits being filed by survivors.



Workers in December built Lac-Mégantic's new shopping area. *Alexi Hobbs for The Wall Street Journal*

The train's operator, the Montreal, Maine & Atlantic Railway Ltd., had liability insurance of \$25 million. That is about standard for a line of its size. The railroad has filed for bankruptcy protection. So far, the Canadian and provincial governments are picking up the steadily growing tab.

The MM&A is a small line, little resembling the major, household-name railroads. But they, too, carry far less insurance than would be needed to pay for a truly catastrophic accident. The reason: They can't find it.

"There is not currently enough available coverage in the commercial insurance market anywhere in the world to cover the worst-case scenario," says James Beardsley, global rail practice leader for Marsh & McLennan Cos.' Marsh Inc. insurance brokerage unit.

**Related**

- [Cracked Wheel Found on Derailed Train](#)
- [Tankers Burn a Day After Derailment](#)

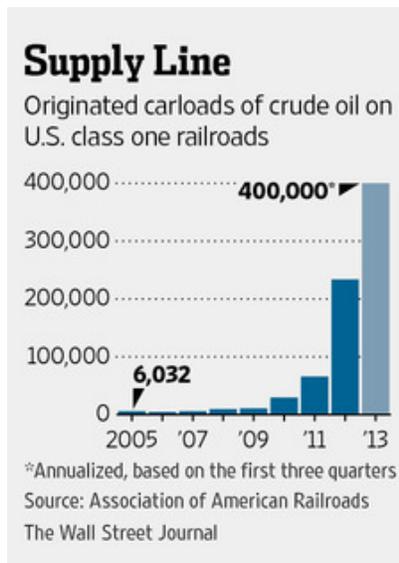
Currently, there is about \$1.5 billion liability insurance available for a big North American railroad, Mr. Beardsley says. The worst-case accident scenario "is multiples of that," he says.

Railroads are required by law to transport hazardous materials, which include crude oil. And when they haul it, they are liable for it.

Recent events underscore the perils. In the past two months, there have been three fiery oil-train derailments besides that in Lac-Mégantic: one in Alabama in November, one in North Dakota at the end of December and one just Tuesday at Plaster Rock, New Brunswick, near Maine.

Though these didn't involve injuries, they showed another peril, an unexpected volatility in crude-oil cargoes. And two of the three involved not small railroads like the one that derailed in Lac-Mégantic but major railroads.

Says E. Hunter Harrison, chief executive of Canadian Pacific Railway: "I've been through this for 50 years. When the phone rings at 3 o'clock in the morning, I get jumpy. Even when I get calls after hours on the weekends, I say, 'Don't tell me.' "



The recent accidents aside, rail transport is generally considered safe; more than 99% of hazardous rail shipments arrive safely. Indeed, it is this very safety that keeps railroads from being able to refuse to carry hazardous cargoes. They have a legal "common carrier" obligation to haul cargoes that barge and truck lines can turn down. Railroads haul 150 million tons of hazardous materials a year, a growing amount of it crude oil.

Their insurance situation is among the issues worrying some officials in cities and towns because of rail crossroads. "Even if it happens outside of town, the massive damage to property and the environment—you're stymied when you have these kind of crude oil fires burning hot and big for days," says Karen Darch, president of the village of Barrington, Ill.

Ms. Darch was among municipal leaders from Illinois, Vermont, Maine and New Brunswick who recently toured Lac-Mégantic to assess risk to their own communities. She says she was astounded by the potential cost to clean up and rebuild. "How does any community in America look at a cost like that and realistically think it can be covered? There's just no way."

At the heart of the insurance concerns: Horrific as the Lac-Mégantic accident was, it isn't the worst-case scenario.

"Your worst nightmare" is sabotage of a train carrying a toxic substance in a heavily populated area, says Canadian Pacific's Mr. Harrison. "The estimates of the lives and the damage—I don't even want to repeat what it would be."

When a Norfolk Southern Corp. train derailed in Graniteville, S.C., early one January morning in 2005, the chlorine gas from a single ruptured tank car killed nine, injured 554 and cost \$178 million, excluding cleanup and a legal settlement.

At a different time of day, it "would've potentially bankrupted the safest railroad in the country," says Marsh's Mr. Beardsley. "Every railroad knows it could happen to them."

Since that accident, "every time we pick up a carload of chlorine, we're placing a bet on the company," says Norfolk Southern's CEO, Charles W. "Wick" Moorman, because of the limited insurance.

To coax an additional \$1 billion of coverage for big railroads, beyond the \$1.5 billion or so they now can obtain, would be significantly more expensive and would be impractical, driving up the cost of existing insurance, according to Richard B. DeCoster, who leads the rail practice at Aon PLC, the London-based insurance brokerage and risk management company.

Railroads have to renew their insurance annually. Each fiery oil-train derailment is raising more tough questions, both insurance brokers and rail executives say. Railroads are pushing regulators to be tougher on shippers and railcar owners.

One reason is that although railroads have transformed themselves into an efficient part of the North American supply chain, and a central element in today's robust new North American oil production, they can't fully control safety because they don't own an entire train. A train is a joint enterprise between a railroad, which owns engines and track; shippers and railcar companies that own 99% of tank cars; and customers that own contents, including hazardous ones. Railroads must rely on their partners for safe loads.



A train carrying oil exploded Dec. 30 near Casselton, N.D., after derailling and colliding with another train.  
*Zuma Press*

That matters because an issue coming to the fore in recent accidents is the volatility of crude-oil cargoes. Normally, crude oil is slow to ignite, much less explode. Yet the Lac-Mégantic disaster and the recent crashes in Alabama, North Dakota and New Brunswick all involved witness reports of explosions.

What happened in Lac-Mégantic set off a round of questions about the nature of oil cargoes and the crashworthiness of the tank cars.

In Lac-Mégantic, "the valves on the tank cars either ripped off or didn't operate," says Dominique Dostie, an electrician and volunteer firefighter. Tankers began exploding, he says, sending up towering clouds.

"As soon as the crude oil left the tanker, it was on fire," he adds. Copper plumbing melted. Tracks twisted and melted. Manhole covers blew from pressure below. "It was like hell," Mr. Dostie says.

Canadian investigators are trying to figure out why the oil that spilled from some of the tank cars caught fire so quickly. According to their still-preliminary findings, some oil was mislabeled.

World Fuel Services Corp., based in Miami, Fla., has said in SEC filings that it purchased the crude oil, leased the tank cars and arranged for loading. In the company's third-quarter conference call, the company's chief financial officer, Ira Birns, said that, with respect to questions about the classification of the crude oil and the type of tank cars it was in, "while we're not able to comment specifically on these topics due to the pending legal proceedings, we can say there is nothing we're aware of currently with respect to those topics that we believe contributed to the cause of the derailment or its consequences."

Crude oil varies in boiling point and flammability and can be classed in three hazard groups. Oil in the train at Lac-Mégantic came from 11 separate suppliers, investigators say. It had moved from trucks to railcars. With each transfer, its classification changed, investigators have said.

They say initial data indicated the oil ranged from the most hazardous to some that wasn't classified at all. Truck shipping data, however, indicated all was the medium-hazardous type. In any case, when it reached the train, its classification changed to least hazardous—less prone to ignite—the Canadian investigators say in initial reports.

It was loaded into tank cars that, while commonly used to haul crude oil, the accident suggests may not be suitable for such volatile liquids, the investigators say.

After the accident, Canadian and U.S. regulators ordered all railroads to lock trains and stop leaving them unattended on main lines. Railroads voluntarily chose to slow those carrying crude oil and ethanol to 50 miles an hour. That won't decrease derailments, says Matthew K. Rose, executive chairman of BNSF Railway Corp., but it will reduce damage if one occurs.

Mr. Rose would like to see a liability setup similar to a no-fault system the nuclear-power industry has. Under the U.S. 1957 Price-Anderson Act, power companies contribute to an insurance fund, now totaling billions of dollars, to compensate the public and partly indemnify the industry in case of a nuclear accident. In the splintered industry, the idea has gained no traction.

Railroads are pressing for chemical and oil companies and other shippers (responsible for labeling crude oil and other shipments) and railcar owners to take more responsibility. So are regulators. In the U.S., the Federal Railroad Administration and the Pipeline and Hazardous Material and Safety Administration have been cracking down in the Bakken oil region of North Dakota and Montana to make sure shippers accurately disclose the riskiness of their shipments and put them on strong-enough tank cars.

Railroads in both the U.S. and Canada also want regulators to require a radical upgrade of the tank-car fleet. Companies that make or lease tank cars and some shippers say the changes are too expensive or could slow down the oil business.

Tank cars don't cause derailments, according to findings of the U.S. National Transportation Safety Board, but can make an accident worse if the cars don't have features such as puncture shields, certain pressure-

relief valves and heat-resistant jackets. Requiring such features is among changes proposed in November by the Association of American Railroads, the trade association of the freight railroads.

Some shippers say the railroads need to clean up their act. In a filing to PHMSA, which is considering tightening tank-car standards, the American Petroleum Institute said most major derailments are caused by broken rails and called for addressing "this root cause."

The issue "starts to revolve around the dollar sign," says Canadian Pacific's Mr. Harrison. "Can we do this safer? Yes. But who's going to pay? If you decide this commodity must be moved in the public interest, then I think all of us have to pay."

What the industry needs, he says, is less self-interest and more cooperation to protect against disasters. "You can't engineer yourself out of this," he says. "We all have to play a part here. That's what missing."

Meanwhile, residents of Lac-Mégantic struggle with grief, intermingled with anger. "Who can we blame?" asks Mr. Garant, the councilman. "Who killed my best friend? All we know is that it was a train."

### **Corrections & Amplifications**

Canadian investigators into the Lac-Mégantic disaster said in preliminary findings that the oil was loaded into tank cars that, while commonly used to haul crude oil, the accident suggests may not be suitable for such volatile liquids. An earlier version of this article incorrectly said the investigators said the oil wasn't loaded in the right kind of tank car.

**Write to Betsy Morris at [betsy.morris@wsj.com](mailto:betsy.morris@wsj.com)**

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2. Rail -- The Cheaper, Faster Route To Profits: The drive to achieve profits more quickly has led oil executives to abandon building safe pipelines, and instead embrace ancient rail cars ...

- "Because of a lack of pipelines, more than two-thirds of the Bakken production is transported by train, and oil executives are hoping to double the Bakken's output over the next several years. Any heightened effort to upgrade older transport cars or replace them with newer, more secure cars could slow production."

3. The Inability To Safely Deliver Crude By Rail: Ron Ness, president of the North Dakota Petroleum Council, said "What we are thinking is you need to keep the trains on the tracks, right? What are we doing to keep the trains on the tracks to prevent derailments, inspecting the tracks?"

4. Recognizing The Need To Keep Rail Shipments Of Crude Far Away From Citizens: Jack Ekstrom, a vice president at Whiting Petroleum said, "It seems likely that building track around cities rather than through cities would be safer."

5. Infighting, Posturing, And A Lack Of Consensus Regarding Solutions: Officials are divided regarding what to do, are at odds with the oil companies, and the oil companies are pointing fingers at the railroads ...

- "The drive by both state Republican and Democratic leaders is creating fissures among them and the oil industry, and between rail and oil interests, about what should be done to avoid future accidents."

- "Executives in the oil industry have objected to the Transportation Department's safety alert about the potential volatility of Bakken crude, which is of high quality and rich in natural gas liquids that may make it more prone to ignite at lower temperatures. The oil industry says that it is a problem with the train cars carrying the crude, not with the oil."

- According to the article, Transportation Secretary Foxx "wants to organize a meeting" and then "might be able to provide some guidance regarding the standard for new railcars."

Truly, with an industry in turmoil and the lives and quality of life of the citizens of SLO County at stake, is there any doubt that the Phillips 66 "rail spur" project should be denied?

As always Supervisor Ray and Mr. Wilson, thank you for being our advocates.

Sincerely,  
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# Philadelphia Derailment Sparks Outrage; Groups Press for Halt to Oil Trains

JANUARY 21, 2014

*tags:* Bakken Shale, Bakken shale oil, crude oil, derailment, Dot-111, Philadelphia, Philadelphia derailment, press release, train derailment, train explosions

by Coryn S. Wolk



(<http://news.yahoo.com/video/freight-train-derails-philadelphia-bridge-174313929.html>)

*A view of the train cars and 1-76 on Monday. From Yahoo News.*

*As of 9 p.m. Monday night, the train cars were still on the bridge. According to a **Reuters story published yesterday** (<http://www.reuters.com/article/2014/01/20/usa-derailment-pennsylvania-idUSL2N0KU12B20140120>), “CSX Railroad said it would take one to two days for workers to remove the oil and sand cargo and the derailed cars.” But with close to a foot of snow falling on Philadelphia through Tuesday night, that seems unlikely.*

**For Immediate Release: January 21, 2014**

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Wes Gillingham, Program Director, Catskill Mountainkeeper, 845-901-1029 (tel:845-901-1029)

## **Philadelphia Derailment of “Oil Bomb” Train Sparks Outrage;**

### **Near-Miss from Disaster is Sixth Derailment of Bakken Shale Train Since June**

#### *Groups Press for Immediate Halt*

*Philadelphia, PA* – Outrage is building among residents whose lives are put at risk by the mile-long oil and gas trains coming from the Bakken Shale formation in North Dakota, Montana and Canada, in the aftermath of the oil train derailment yesterday in Philadelphia. The derailment occurred in a densely populated neighborhood, over a major highway, near several large universities, Children’s Hospital and the University of Pennsylvania medical complex. Rapid evacuation of a five-mile radius from any future oil train explosion and fire in the Philadelphia area, or any urban area, would be impossible. When a similar train exploded and burned on December 30<sup>th</sup>, 2013 in Casselton, North Dakota, evacuation was urged for a five-mile radius to avoid damaging inhalation of toxic smoke.

Today Protecting Our Waters, Clean Air Council, Philadelphia Interfaith Power and Light, the Catskill Mountainkeeper, and Catskill Citizens for Safe Energy join together in calling for a halt to the dangerous trains carrying fracked oil and gas.

“This derailment, just blocks from my Philadelphia home of 24 years, is truly terrifying because all five of the other recent derailments of this type of shale oil and gas train have erupted into fireballs, including the one that incinerated fifteen acres of downtown Lac-Megantic and killed 47 people in that small town,” said **Iris Marie Bloom, director of Protecting Our Waters**, a Philadelphia-based grassroots nonprofit.

“Human life is worth more than oil and gas, which is changing our climate and harming the health of residents in the increasingly extreme “sacrifice zones” for fossil fuel extraction and infrastructure, including risky transportation. These ‘oil bomb’ trains are putting lives at risk in urban and rural areas alike,” Bloom continued. “We agree with Canadian Pacific Railroad CEO E. Hunter Harrison, who told CNBC on January 15<sup>th</sup>, *‘These 111 tank cars that you hear so much about, if I was calling the shots, would be stopped tomorrow.’*”

“This near miss [in Philadelphia] highlights the public safety and health concerns related to a continued reliance on polluting fossil fuels for our energy needs,” said Matt Walker, Community Outreach Director of the Philadelphia-based Clean Air Council. “No one—not the residents of the Bakken shale fields of North Dakota living near active drilling and flaring, or residents of Philadelphia, should have to be exposed to the health and safety impacts of unbridled dirty energy. The Council calls for a swift transition away from polluting and harmful energy, including fracked crude oil and gas, to clean, safe renewable energy, with conservation and energy efficiency.”

Rabbi Mordechai Liebling, a member of the Philadelphia chapter of Interfaith Power and Light PA, said: "It is morally indefensible to endanger the lives of tens of thousands of people along hundreds of miles of railroad track by shipping an extremely dangerous substance in tanker cars that the authorities admit are unsafe and need to be phased out."

"This could have been catastrophic," said Wes Gillingham, Program Director for the Catskill Mountainkeeper. "The train could have exploded onto a busy highway, spewing the toxic contents directly into the Schuylkill river which flows into the Delaware River."

"This should stand as a wake up call not just to Philadelphia but also all across the country to any community near a rail transport," said Gillingham. "The clear message is we need to stop the runaway gas and oil industry from endangering our communities for the sake of their profits."

Gillingham added, "Every time we turn around there is another report of problems with Bakken oil or tar sands crude being shipped by rail. In 2006, reports show there were 5000 rail cars of petroleum. Now we are up to somewhere around 500,000. This is a recipe for disaster with combination of inadequate inspections faulty cars, aging tracks and a greedy industry bent on getting their tar sands crude and fracked oil and gas to market as fast as they can no matter the cost to the communities along the way. In 2013, according to the Pipeline and Hazardous Materials Safety Administration (PHMSA), **over 1.5 million gallons of crude spilled from rail cars (<http://news.msn.com/us/more-oil-spilled-from-trains-in-2013-than-in-previous-4-decades>)**. That is more than has spilled in the previous forty years."

The exploding trains have also damaged air, drinking water and wetlands. Yesterday's derailment put the Schuylkill River at risk as toxic Bakken shale oil, known to contain carcinogenic benzene and deadly hydrogen sulfide at high levels, dangles over the river, threatening to catch fire and explode as other train cars have done.

Economist Janette Barth, PhD, who has written and lectured extensively on the economic impact of shale gas development and is a director of Catskill Citizens for Safe Energy, commented, "The recent derailments and explosions of trains carrying crude are just another of the many costs that have not been considered in analyses of the economic impacts of increased shale oil and gas production in the United States. It is far too costly for Americans to allow continued exploration and development of shale oil and gas. The time is now to ramp down the production and use of fossil fuels and to increase the development of renewable energy."

**BACKGROUND:** The chronology of six derailments across North America overshadows the fact that yesterday's derailment is also the fourth derailment of this type of train to *occur in the Philadelphia area since 2011*. First, the five previous "oil bomb" train derailments, explosions, fires and evacuations:

1. 2013: June 6<sup>th</sup>: **Lac-Megantic, Canada: Bakken Shale oil train derails** ([www.cbc.ca/news2/interactives/timeline-lac-megantic/](http://www.cbc.ca/news2/interactives/timeline-lac-megantic/)), explodes, burns 15 acres of downtown Lac-Megantic, kills 42 people; additional five presumed dead.
2. 2013: October 19<sup>th</sup>: **Edmonton, Canada: A fireballs erupts** (<http://www.cbc.ca/news/canada/edmonton/albertans-remain-out-of-homes-in-wake-of-cn-derailment-1.2127244>) as a Bakken Shale train derails; one LPG car explodes and three burn; homes burn to the ground.

4. 2013: December 30<sup>th</sup>: In Casselton, North Dakota a stunning mushroom-shaped fireball erupts (<http://protectingourwaters.wordpress.com/2014/01/01/smoke-and-flames-shale-oil-train-explosion-photos-video-from-north-dakota/>), followed by heavy plumes of toxic smoke, when 21 cars of a Bakken Shale oil and gas train derail and burn. Town evacuated; evacuation urged for everyone in a five mile radius to avoid the toxic smoke.

5. 2014: January 7<sup>th</sup>: **Plaster Rock, New Brunswick, Canada** (<http://www.theolympian.com/2014/01/08/2920008/freight-train-derails-in-canada.html>): 150 people evacuated when 17 cars derailed including 5 oil cars, 4 LPG cars. Two LPG tank cars and one crude oil tank car caught fire.

6. 2014: January 20<sup>th</sup>: **Philadelphia, Pennsylvania** (<http://protectingourwaters.wordpress.com/2014/01/20/a-near-miss-from-disaster-oil-train-derails-in-philadelphia/>): Seven cars of a 101-car CSX train from Chicago derailed on the Schuylkill Arsenal Railroad Bridge over the Schuylkill River. Six were carrying crude oil, and one was carrying sand.

#### **Philadelphia area derailments involving 111 type tank cars since 2011:**

1. Derailment in East Park near Fountain Green Drive in January 2011
2. Derailment in Paulsboro in November 2012
3. Derailment in September 2013 near PBF's Paulsboro refinery

#### **Risk factors making Bakken Shale oil trains particularly unacceptably dangerous:**

1. Rail cars of the 111 type are not designed to carry this type of fuel.
2. Presence of volatile organic compounds, including carcinogenic benzene, increases pressure, flammability and explosive character of the fuel
3. Presence of deadly and explosive hydrogen sulfide gas, found by Enbridge in Bakken Shale oil at 1,200 parts per million. Just a few inhalations of H<sub>2</sub>S at 200 parts per million can cause respiratory failure in humans.
4. Researchers have found that in collisions, the highly rigid, thin skins of the (111 type) tank ruptures easily.
5. Rails over which these trains travel are often very old. The Philadelphia railroad bridge involved in yesterday's derailment was built at the turn of the 20<sup>th</sup> century.
6. Experts are wondering whether the Bakken Shale oil and gas is so flammable that it should be re-categorized as a Class 1 explosive material, but while the experts wonder, it is categorized as if it is less explosive and flammable than it is.

#### **Notes:**

**Source for CNBC quote:** A lifelong “railroad man,” E. Hunter Harrison, CEO of Canadian Pacific, said on January 15<sup>th</sup>, 2014, “The 111 tank cars that you hear so much about, if I was calling the shots would be stopped tomorrow,” Harrison said, speaking with Tyler Matheson on CNBC’s Nightly Business Report. “They’re not ready, they’re not equipped for that commodity [Bakken Shale crude] as I see it, they’ve been controversial for two decades now, so that needs to change.”

**Source for Philadelphia area derailments and H2S content in Enbridge oil tank:** *Hidden City: “A Petaled Rose of Hell: Refineries, Fire Risk, and the New Geography of Oil in Philadelphia’s Tidewater,”* by Christopher Dougherty. Online at <http://hiddencityphila.org/2013/12/a-petaled-rose-of-hell-refineries-fire-risk-and-the-new-geography-of-oil-in-philadelphias-tidewater/>

7 COMMENTS

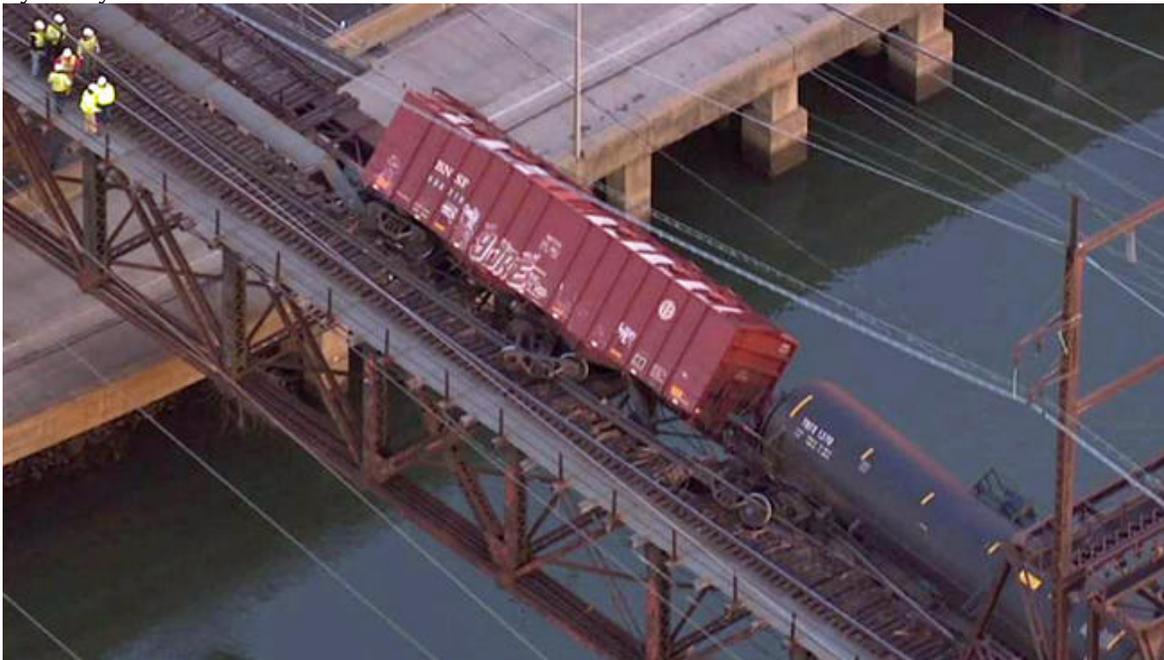
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## A Near Miss from Disaster: Oil Train Derails in Philadelphia

JANUARY 20, 2014

tags: Bakken, Bakken Shale, CSX, derailment, explosion, fracking, Marcus Hook, oil, oil train, Philadelphia derailment, train derailment

by Coryn S. Wolk



(<http://www.nbcchicago.com/traffic/transit/CHI-COPYTrain-Headed-to-Chicago-Derails-on-Bridge-Over-Schuylkill-River-241126061.html>)

*Bakken Shale oil train derailed over the Schuylkill River in Philadelphia on January 20th, 2014. Photo: NBC Chicago/SkyForce*

Just after 1 a.m. this morning, seven cars of a 101-car CSX train from Chicago **derailed** (<http://www.nbcchicago.com/traffic/transit/CHI-COPYTrain-Headed-to-Chicago-Derails-on-Bridge-Over-Schuylkill-River-241126061.html>) on the Schuylkill Arsenal Railroad bridge over the Schuylkill River. Six were carrying crude oil, and one was carrying sand. **ABC 6 Action News** (<http://abclocal.go.com/wpvi/story?section=news/local&id=9400284>) and **Fox Philadelphia** (<http://www.myfoxphilly.com/story/24496505/train-carrying-crude-oil-derails-on-philly-bridge>) have short videos on the derailment, although the AP story they include incorrectly states that the accident occurred around 1 p.m. The bridge runs just south of the South Street Bridge from University City to Grays Ferry. It also runs over the heavily-trafficked Schuylkill Expressway, which was shut for two hours following the derailment. Unlike in previous U.S. explosions, this is a densely-populated area. It's also in close proximity to large institutions, among them Drexel University, the University of Pennsylvania medical complex, including Children's Hospital; and the University of Pennsylvania.



(<http://protectingourwaters.files.wordpress.com/2014/01/philadelphia-derailment-bridge.jpg>)

*The Schuylkill Arsenal Bridge over the University of Pennsylvania's fields, the Schuylkill Expressway, and the Schuylkill River. From Google Maps*

As the trains were carrying oil from out west and following a route we know that the Bakken oil trains take on their way to the Philadelphia Energy Solutions refinery in South Philadelphia, it's a safe bet that these were the same trains that have **derailed** (<http://protectingourwaters.wordpress.com/2013/11/12/oil-train-derails-explosion-in-alabama/>) and **exploded** (<http://protectingourwaters.wordpress.com/2013/12/31/breaking-yet-another-bakken-shale-oil-train-explodes-into-flames/>) **four times** (<http://www.reuters.com/article/2013/10/19/us-cn-railway-derailment-idUSBRE99I04820131019>) in the last eight months and whose construction and contents are becoming notorious for **their safety hazards** (<http://desmogblog.com/2014/01/05/exclusive-permit-shows-bakken-oil-casselton-train-contained-high-levels-volatile-chemicals>). Of course, it doesn't help that the trains were crossing a 100-year-old bridge that now sees two mile-long oil trains each day. Fortunately, none of the cars fell off the bridge, nor have authorities found any leaks. News photos show the cars almost dangling from the narrow two-track bridge, precariously close to falling into the river. As of 9 a.m. this morning, they were still there.

As with pipeline explosions and leaks, it seems like oil train derailments and explosions are becoming business as usual. Also as usual, authorities aren't sure what may have caused the train to derail. That's a question that needs to be answered before any more of these trains run. Will it be? That's partly up to us— and to you.

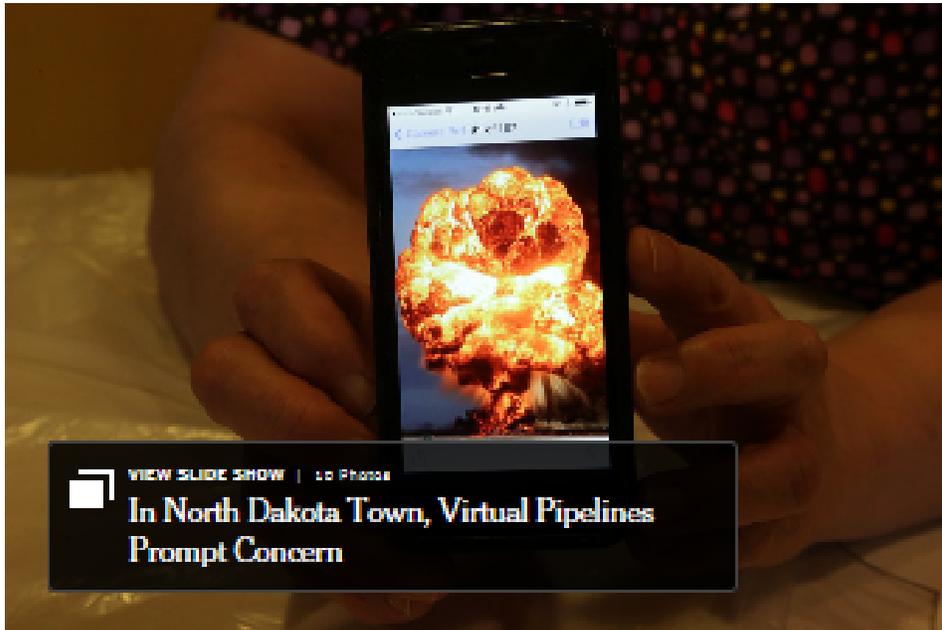
So Philadelphians, or anyone else living in the path of these “bomb trains”: **write and call your elected officials** and ask them if they have an evacuation plan for if disaster occurs. Urge them to make sure the trains are stopped to ensure residents' safety; **join our regional letter-writing campaign** (contact [powinquiries@gmail.com](mailto:powinquiries@gmail.com) for fact sheets and more information), and **tell your neighbors** about the threat chugging right through our backyards.

11 COMMENTS

*from* → News, Take Action

# Accidents Surge as Oil Industry Takes the Train

By CLIFFORD KRAUSS and JAD MOUAWAD JAN. 23, 2014



Jin Wilson/The New York Times

- EMAIL
- FACEBOOK
- TWITTER
- SAVE
- MORE

12 YEARS & SLAVE  
NOW PLAYING  
GET TICKETS

CASSELTON, N.D. — Kerry's Kitchen is where Casselton residents gather for gossip and comfort food, especially the caramel rolls baked fresh every morning. But a fiery rail accident last month only a half mile down the tracks, which prompted residents to evacuate the town, has shattered this calm, along with people's confidence in the crude-oil convoys that rumble past Kerry's seven times a day.

What was first seen as a stopgap measure in the absence of pipelines has become a fixture in the nation's energy landscape — about 200 "virtual pipelines" that snake in endless processions across the horizon daily. It can take more than five minutes for a single oil train, made up of about 100 tank cars, to pass by Kerry's, giving this bedroom community 20 miles west of Fargo a front-row seat to the growing practice of using trains to carry oil.

"I feel a little on edge — actually very edgy — every time one of those trains passes," said Kerry Radermacher, who owns the coffee shop. "Most people think we should slow the production, and the trains, down."

## Moving More Oil Over Rails

As domestic oil production has increased rapidly in recent years, more and more of it is being transported by rail because of the lack of pipeline capacity. The trains often travel through populated areas, leading to concerns among residents over the hazards they can pose, including spills and fires.



Source: Union Pacific; Energy Information Administration; Association of American Railroads

Casselton is near the center of the great oil and gas boom unleashed these last few years. And it has seen up close how trains have increasingly been used to transport the oil from the new fields of Colorado, Wyoming and North Dakota, in part as a result of delays in the approval of the Keystone XL pipeline. About 400,000 carloads of crude oil traveled by rail last year to the nation's refineries, up from 9,500 in 2008, according to the Association of American Railroads.

But a series of recent accidents — including one in Quebec last July that killed 47 people and another in Alabama last November — have prompted many to question these shipments and have increased the pressure on regulators to take an urgent look at the safety of the oil shipments.

In the race for profits and energy independence, critics say producers took shortcuts to get the oil to market as quickly as possible without weighing the hazards of train shipments. Today about two-thirds of the production in North Dakota's Bakken shale oil field rides on rails because of a shortage of pipelines. And more than 10 percent of the nation's total oil production is shipped by rail. Since March there have been no fewer than 10 large crude spills in the United States and Canada because of rail accidents. The number of gallons spilled in the United States last year, federal records show, far outpaced the total amount spilled by railroads from 1975 to 2012.

Railroad executives, meeting with the transportation secretary and federal regulators recently, pledged to look for ways to make oil convoys safer — including slowing down the trains or rerouting them from heavily populated areas. (Trains go up to roughly 35 miles an hour through towns and at higher speeds outside populated areas.) They also agreed to speed up a review of tougher standards for the train cars used for oil. And last Thursday, safety officials urged regulators to quickly improve industry standards.

"This is an industry that has developed overnight, and they have been playing catch-up with the infrastructure," said Deborah A. P. Hersman, the chairwoman of the National Transportation Safety Board, which is investigating the Casselton accident. "A lot of what we've seen could have been a lot worse."

But given the fragmented nature of the business — different companies produce the oil, own the rail cars, and run the railroads — there is no firm consensus on what to do. And few analysts expect new regulations this year.

"There was no political pressure to address this issue in the past, but there clearly is now," said Brigham A. McCown, a former administrator of the Pipeline and Hazardous Materials Safety Administration. "Producers need to understand that rail-car safety can become an impediment to production."

The stakes are high. In five years, [domestic oil production](#) has jumped by 50 percent, to reach 7.5 million barrels a day last year.

But with little pipeline infrastructure, energy producers had to scramble for new ways to get their oil to refiners. Rail was the answer.

"The reality is that this came out of nowhere," said Anthony B. Hatch, a rail transport consultant. "Rail has gone from near-obsolence to being critical to oil supplies. It's as if the buggy-whips were back in style."

Far more toxic products are shipped on trains. But those products, like chlorine, are transported in pressurized vessels designed to survive an accident. Crude oil, on the other hand, is shipped in a type of tank car that entered service in 1964 and that has been traditionally used for nonflammable hazardous liquids like liquid fertilizers.

Safety officials have warned for more than two decades that these cars were unsuited to carry flammable cargo: their shell can puncture and tears up too easily in a crash.

In 2009, a train carrying ethanol derailed and exploded, killing one person in Cherry Valley, Ill. The National Transportation Safety Board said the inadequate design of the tank cars made them "subject to damage and catastrophic loss of hazardous materials."

After that accident, railroads and car owners agreed in 2011 to beef up new cars with better protections and thicker steel. But they resisted improving safety features on the existing fleet because of cost. They also argued that thousands of new cars were being ordered anyway, so it would be just a matter of time before the fleet was replaced.

But analysts said that time has run out; railroads and car owners can no longer ignore the liabilities associated with oil trains, which could reach \$1 billion in the Quebec accident.

"Quebec shocked the industry," Mr. Hatch said, adding that while rail safety has improved over all, "the consequences of any accident are rising."

Last November, the Association of American Railroads said it would support requiring that the 92,000 tank cars used to transport flammable liquids, including crude oil, be retrofitted with better safety features or "aggressively phased out."

Still, other groups have resisted. The Railway Supply Institute, which represents freight car owners, told regulators three weeks before the Casselton accident that existing cars "already provide substantial protection in the event of a derailment" and suggested minor modifications to be phased in over 10 years.

While the safety record of railroads has improved in recent years, the surge in oil transportation has meant a spike in spill rates. From 1975 to 2012, federal records show, railroads spilled 800,000 gallons of crude oil. Last year alone, they spilled more than 1.15 million gallons, according to the Pipeline and Hazardous Materials Safety Administration. And that figure does not include the Casselton spill, estimated at about 400,000 gallons.

The accidents have also created a sense of weariness among elected officials and even staunch oil backers.

North Dakota Gov. Jack Dalrymple, a Republican, insisted that the first priority was improving tank cars. "These exploding tank cars are obviously very powerful and very dangerous," he said.

The accidents have brought another problem to light. Crude oil produced in the Bakken appears to be a lot more volatile than other grades of oil, something that could explain why the oil trains have had huge explosions.

Here too, the warnings came too late.

Federal regulators started analyzing samples from a few Bakken wells last year to test their flammability. In an alert issued on Jan. 2, P.H.M.S.A. said the crude posed a "significant fire risk" in an accident.

The Federal Railroad Administration also pointed to rising numbers of oil cars that showed a "form of severe corrosion" on the inside of the tanks, covers and valves.

After the recent meeting with regulators, the American Petroleum Institute pledged it would share its own test data about the oil, which they have said is proprietary.

While the tank cars themselves have not caused any accident, they failed to contain their cargo. That happened on the outskirts of Casselton when a 106-car oil train crashed into a soybean train that derailed on a parallel track.

In a preliminary report, the N.T.S.B. said 18 of the 20 oil tank cars that derailed were punctured. Much of the oil spilled was incinerated by the explosions, and some soaked into nearby corn fields.

Aside from evacuating nearby farms, there was little the fire department could do but watch the train burn.

Tim McLean, Casselton's fire chief, pictured what the town would look like if an oil train derailed. The large propane supply tank would explode "like a bomb" and incinerate two multifamily houses next to it. Five blocks to the west are a lumber yard and two gasoline stations. Oil might accumulate in storm sewers and possibly spread a fire underground.

"There's virtually no way we could protect these buildings," he said as he passed the barber shops, drugstore and pizza parlor, all occupying sturdy brick buildings more than a century old. "It would be too hot."

The terror of what might have happened hit many here immediately.

Adrian Kieffer, the assistant fire chief, rushed to the accident and spent nearly 12 hours there, finishing at 3 a.m. "When I got home that night, my wife said let's sell our home and move," he said.