

Banff derailment a warning sign of potentially 'disastrous' spill on the horizon: researchers

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Last Updated: December 29, 2014 8:37 AM MST

Trains resumed service through Banff National Park Sunday after a messy derailment in wildlife habitat, but authorities continued to clean up grains and potentially toxic cargo that spilled into a creek.

Fifteen Canadian Pacific cars fell off the tracks while crossing a bridge over 40 Mile Creek near Banff townsite early Friday with seven falling into the water below, spilling some of their contents.

The cars were loaded with lentils and fly ash, a byproduct of coal-fired plants that has sparked the concern of officials at Alberta Environment, who are overseeing the cleanup.

Authorities installed a berm across the creek in an attempt to stop the ash from reaching the Bow River, which lies about 200 metres downstream.

Canadian Pacific spokesman Marty Cej said the company was still working with environmental agencies to determine exactly how much cargo fell into the creek, but that they'd know more in the coming days.

David Schindler, an ecology professor at the University of Alberta, said fly ash, when mixed with water, can be "very toxic" for fish by increasing pH levels. It also contains harmful trace metals that are released by coal combustion, he said.

"And if it gets wet, the high pH can kill any vegetation it lands on."

While there may have been some biological effects at the lower reaches of the creek downstream of the spill, Schindler said, the Bow River would have diluted any remaining ash to "prevent any significant problems."

Schindler, an academic leader in aquatic research, said in an email the impact likely would have been far worse if the spill was farther upstream of the river.

“Like the Obed spill a year ago, I think this is a warning not to be so cavalier about environmental spills, whether they be from pipelines, trains or tailings ponds,” he said, referring to a big coal tailings pond spill in October 2013.

“Eventually we will have a spill in the wrong place and it will be disastrous.”

Parks Canada officials, who have been monitoring water quality, found a change in acidity levels Friday, but throughout the cleanup the levels have been returning to normal, spokeswoman Tania Peters said.

“That’s why we don’t think there is going to be any long-term environmental impacts,” Peters said.

There were 27 train derailments in Alberta during the first 11 months of the year, higher than the province’s five-year average of 15, according to the Transportation Safety Board. It was also highest among the provinces, with Ontario coming in second with 20.

Looking at the past five years, Alberta continued to lead the pack with 99 derailments, as British Columbia trailed closely behind with 93.

In Slave Lake, Mayor Tyler Warman called for an evaluation of the local rail line in September after the sixth derailment in five months.

Jim Pissot, director of the Wild Canada Conservation Alliance, said the spill in Banff serves as a glaring reminder of the risks of transporting much more dangerous goods, such as petroleum products, through fragile wildlife habitats.

Pissot said governments, emergency responders and railway operators must be adequately prepared for an “almost inevitable” derailment that would spill oil into the Bow River.

The conservationist said he has asked authorities for years about the steps they have taken to ensure an “adequate and timely” response to control toxic spills, without a satisfactory response.

“We have a warning now that it can happen; we’ve had warnings across the country that these things do happen,” he said.

“Banff National Park and the Bow River watershed are incredibly important to Canadians. And we ought to be doing everything we can to improve the safety ... and be able to respond quickly.”

CP Railway said in a statement it has a federally mandated emergency plan that officials “properly enacted” during Friday’s spill in Banff.

“That included immediate notification to all the appropriate agencies, sharing of info with first responders and enactment of our emergency management plan,” the company said in the statement.

Parks Canada confirmed it was notified about the spill “right away” and was satisfied with the company’s response.

An investigator with the Transportation Safety Board collected evidence at the derailment site to determine whether they will launch a more in-depth investigation. A decision is expected as early as Monday.

Spokesman John Cottreau said officials will consider whether there is potential to “learn something that will help us improve safety in the transportation system.”

TSB officials have obtained a locomotive event recorder, which contains critical information about the derailment, including the speed at which the train was travelling.

The data will be sent to an Ottawa lab which has specialized equipment that can read the recorder’s contents. Cottreau said he didn’t know when that information will be publicly available.

The derailed train’s spilled cargo poses potential problems for surrounding vegetation and wildlife, though Parks Canada does not expect there will be a long-term impact on the environment.

Aside from the risks posed by ash, spilled lentils could attract bears, though Parks Canada officials don't believe this will be an issue because bears should be hibernating by now.

Off The Rails

Total derailments by province, 2010 to 2014***

Alberta: 99

British Columbia: 93

Ontario: 88

Saskatchewan: 51

Quebec: 45

Manitoba: 36

Newfoundland and Labrador: 6

New Brunswick: 4

Nova Scotia: 1

Prince Edward Island: 0

** Totals exclude rail yards and side tracks.*

*** 2014 data is current from January to November.*

Source: Transportation Safety Board of Canada