# Local Opinions on Risk and Recovery Management in the Wake of the Lac-Mégantic Rail Disaster

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## **KEY MESSAGES AND SUMMARY**

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Second of a two-part series, this document presents the results of an ethnographic research project entitled Préoccupations, opinions, apprentissages et souhaits quant aux risques et à la gestion des risques de la population de la région de Lac-Mégantic.

## **Key Messages**

Second of a two-part series, this document presents the results of an ethnographic research project entitled Préoccupations, opinions, apprentissages et souhaits quant aux risques et à la gestion des risques de la population de la région de Lac-Mégantic [Concerns, opinions, lessons learned, and wishes respecting risk and risk management among the population of the Lac-Mégantic region]. This qualitative study was commissioned by the Direction de santé publique de l'Estrie after the Lac-Mégantic rail disaster of July 6, 2013. Between July 2014 and February 2015, 57 semistructured interviews were conducted with evacuated and non-evacuated residents of Lac-Mégantic, residents of other area municipalities, and socioeconomic stakeholders. The study makes no claim to represent the situation as it may stand at the time of reading or in the future. A number of changes have taken place since fieldwork was conducted in Lac-Mégantic, notably at the municipal government level and in the progression of reconstruction work.

The study offers a rare scientific look at the concerns, opinions, lessons learned, and wishes of a Québec population exposed to a major rail disaster. The study highlights how an industrial accident and the contamination of a town centre impact residents' quality of life and well-being.

With respect to risk management, the main findings made by the interviewees, also called "informants" in the text, are as follows:

- Authorities rapidly took the situation in hand, hence the perception of efficiency by informants. Several key figures were identified and also influenced the positive opinions.
- Informants felt that administrative constraints imposed by municipal and government authorities reduced management efficiency over time.



- The role of authorities in managing risk was a frequent topic of discussion. The multi-partner risk management dynamic was viewed in a positive light. The important role played by ministerial officials was the subject of criticism, especially regarding relations with municipal institutions. Some informants were severely critical of the power of the rail industry.
- Informants had mixed perceptions about how well the municipal government listened to their concerns. Study participants reported that they had been given an opportunity to express themselves, but felt that their remarks had been largely disregarded, especially with respect to important matters like the decision to demolish the buildings in the downtown core. The Réinventer la ville (Reinventing the town) consulting process was frequently cited as an example of this, even though many participants appreciated the initiative.
- Overall, many informants felt that residents didn't have enough power. Some reported feeling resigned to political and administrative decisions, whereas others were organizing themselves.
- The tension between human and economic considerations was highlighted. On one hand, informants spoke critically about the importance of economic recovery. On the other, many painted financial and human considerations as opposites and said economic concerns tended to take precedence over human ones. In this regard, participants were particularly critical of the municipality and the federal government in office at the time the interviews were conducted.
- Gaps in transparency in municipal and government communications led to a loss of trust among some participants. This feeling affected residents' understanding of certain decisions related to the demolition of the town centre, financial management of the recovery effort, the construction of commercial condos, and the purchase of contaminated land in the downtown core.
- The most common wishes regarding risk and recovery management were about managing reconstruction and rail safety in a spirit of peace and harmony.

The results are consistent with the recent social science literature on disasters, especially the literature on oil spills. They also echo a number of guiding principles of risk management employed by Québec public health officials, including transparency, openness, rigour, and caution.

In light of contemporary development in the oil industry, this study provides an opportunity for risk governance actors to learn from the response provided to the community of Lac-Mégantic after the rail disaster.

## **Summary**

### **Project Background**

Second of a two-part series, this document presents the results of an ethnographic research project on the aftermath of the July 6, 2013 rail accident in Lac-Mégantic in Québec's Estrie region, when a driverless train carrying crude oil derailed, causing a massive fire and multiple explosions. The disaster killed 47 people and spilled an estimated 6 million litres of oil, the largest oil spill in Québec's history.

The Direction de santé publique de l'Estrie commissioned Institut national de santé publique du Québec to conduct a study on perceptions, opinions, lessons learned and wishes resulting from the rail disaster with respect to risk and risk management. The results of the study helped guide regional public health authorities in their response to social issues related to recovery.

The study provides a portrait of the opinions and wishes of the population respecting risk management and recovery for the period extending from the night of the accident to the interviews conducted in 2014 and 2015. A number of changes have taken place since fieldwork was conducted in Lac-Mégantic, notably at the municipal government level (November 2015 election) and with respect to reconstruction work (completion of decontamination and opening of the reconstruction office).

This study offers a rare scientific look at the concerns, opinions, lessons learned, and wishes of a Québec population exposed to a major rail disaster. It also highlights how an industrial accident and the

contamination of a town centre impact residents' quality of life and well-being. The strength of a qualitative approach is to show the variations in and particularities of the situation under study. In the case of Lac-Mégantic, the results reflect the specifics of this particular tragedy while also echoing the many studies on the social and psychological impacts of disasters.

### **Research Objectives**

In order to meet the needs of the Direction de santé publique de l'Estrie, the study had the following objectives:

- Document the concerns, lessons learned, and wishes of local stakeholders in terms of health risks (Objective 1);
- Document the opinions and wishes of local stakeholders about the risk management and recovery (Objective 2);
- Identify avenues for analyzing responses to the disaster in order to better adjust public health approaches (Objective 3).

This second report focuses primarily on the second and third objectives.

## Methodology

The study adopted a qualitative ethnographic approach. Quota sampling was used to represent the population and the characteristics essential to the study as accurately as possible. The quota sampling includes: residents evacuated on July 6, 2013, residents of other parts of Lac-Mégantic, residents of neighbouring towns (within the Regional County Municipality [RCM] of Granit), and local socioeconomic stakeholders (businesspeople, government officials and professionals, analysts and coordinators from community organizations, etc.). A total of 57 interviews were conducted in the summer and fall of 2014 and in the winter of 2015.

A logico-semantic content analysis was performed to highlight key themes in the corpus and explain the links between them. Similarities and differences between subgroups of participants (also referred to as "informants" in the text) were also compared when germane to the analysis. The analysis also showed how the situation under study tied in with the relevant social science literature.

## Main Research Findings Regarding Changes, Opinions, and Wishes

In addition to documenting the emergency response framework, the study collected data in order to document the main opinions regarding risk management and the main wishes respecting recovery.

#### A QUESTION OF EFFICIENCY

Many informants thought that authorities had acted quickly to take the situation in hand, in relation to both an emergency response and administrative perspective. Several key actors identified by these informants seemed to epitomize their positive views. However, a few participants felt that the response had been inefficient because municipal and government authorities had imposed numerous constraints at the local level. This situation is also seen as a source of frustration.

#### **EXERCISING AUTHORITY**

The informants reported that partners involved in risk management had worked together and were positive about their desire to cooperate. However, this multipartner management approach seems to have been less apparent in the economic sphere. Many informants also mentioned that Lac-Mégantic's municipal management approach represented a risk of concentrating power, at least on certain issues, especially with regard to reconstruction. Some participants thought that municipal authorities insufficiently included input from the population in their decision making, especially for important matters like the decision to demolish buildings in the downtown core. A consulting process, Réinventer la ville (Reinventing the town), was frequently cited as an example of this, even though many participants appreciated the initiative. On the issue of power, participants also had numerous comments about the dominant position of the rail industry. Feelings of anger and helplessness were the most common responses when this theme was raised during interviews.

#### AN APPROACH FOCUSED ON PEOPLE OR ON THE ECONOMY?

The tension between a people-oriented and an economically oriented approach emerged clearly in the interviews. The perception that economic development was more important than human concerns was attributed in part to the actions of the federal government, which was seen as having eased regulations and reduced rail safety in order to save money. Informants were also preoccupied that economic recovery was the municipality's main priority; this position was criticized, as was the approach adopted for recovery. Redevelopment of Lac-Mégantic's business district in three different sectors (commercial condominiums, town centre, and Rue Laval) also sparked doubts and concerns, but it was the October 2014 announcement of the demolition of buildings in the downtown core that generated the most criticism and reinforced the idea that the municipality put administrative management concerns ahead of human concerns.

#### TRUST AND TRANSPARENCY

The question of trust was another issue highlighted by many informants in all of the categories, and seemed to stem from the issues discussed earlier. Gaps in communication between municipal and government officials and residents seem to have led to a loss of trust in authority and perceptions of a lack of transparency. This perception affected residents' understanding of certain decisions related to the demolition of the town centre, financial management of the recovery effort, the construction of commercial condos, and the purchase of contaminated land in the downtown core.

#### WISHES AND CHALLENGES

Participants identified a variety of risk management challenges and recovery issues. Those mentioned most often were reconstruction of the town centre and rail safety. A perceived lack of caution on the part of government authorities and the rail industry led informants to express wishes for a rail bypass, stronger preventative measures, and increased industry monitoring to ensure regulatory compliance. Many participants also called for fairness, justice, peace and harmony in the management process and between groups of stakeholders involved in determining the future of the town centre.

#### Conclusion

The results are consistent with the recent social science literature on disasters, especially the literature on oil spills. Such situations had not yet been documented in a Québec context; the study remediated this.

In keeping with Revet and Langumier (2013), we can conclude that disasters are governable and are a matter of both *management* and *power*, two possible ways of looking at the term *governance*.

Disasters are a matter of *management* in that they are linked to complex administrative processes that begin well before the disaster takes place. They are also a matter of *power*, since disasters like the one in Lac-Mégantic not only require decisions but also input from formal (e.g., governments) and informal (e.g., residents) decision makers who participate in a defined process and social dynamics that impact their ability to influence how decisions are made.

In Lac-Mégantic, as in other communities where environmental disasters have occurred, social issues have compounded management challenges. This study draws attention to questions raised by local stakeholders about transparency and fairness. As is the case elsewhere, these questions undermine trust in authorities and risk managers and exacerbate disagreements over reconstruction projects and local development trajectories. Such disagreements are a frequently mentioned social issue (Gill and Richie, 2015). The study also shows that certain vulnerable groups have been left even more fragile, a situation similar to what has been observed following other comparable disasters. Reconstruction situations appear especially conducive to this form of marginalization (Langumier, 2008). Lastly, elements are in place in Lac-Mégantic that could raise new social tensions in the wake of the disaster, further impacting psychosocial aspects of recovery. In other comparable communities, similar situations have resulted in high tensions and new psychological and social impacts (Freudenburg, 1997).

This study of Lac-Mégantic and area shows that Québec is not immune to the social consequences of a technological disaster. These findings are in keeping with the risk management principles promoted by Québec's public health network for nearly 20 years now, including

transparency, empowerment, caution and fairness. These principles underpinned our research approach and allowed us to support health authorities by providing results that were integrated into decision making throughout the course of the study.

In light of contemporary developments in the petroleum industry, and like another recent study (Valiquette L'Heureux, 2016), our research provides risk governance actors an opportunity to learn from the response provided to the community of Lac-Mégantic after the rail disaster.

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The French version is entitled Opinions locales quant à la gestion des risques et du rétablissement à la suite de la tragédie ferroviaire de Lac-Mégantic and is also available on the website of the Institut national de santé publique du Québec at: <a href="http://www.inspg.gc.ca">http://www.inspg.gc.ca</a>.

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