Transportation of Dangerous Goods:
Optimization of Virtual versus On Site Inspections

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Introduction

Thank you for your time today Minister. My name is Christy Hitchcock and I am joined by my colleagues Bartek Rzentkowski, Elise Wohlbold, Julie Kisch, Tracy Boudreau and Marieve Desbiens. We intend to present a plan to increase our ratio of virtual oversight inspections, using a prudent and phased approach that is built on evidence and responsive to public concerns.

Overview

To begin, I would like to outline what we are seeking to accomplish and move into key considerations and, if you support the approach, I would like to spend some time on a potential implementation plan.

My colleagues and I are available to answer any questions you may have or to discuss any areas of concern, either at the end of the presentation or as we move through it.

Decision Sought

We recommend you agree to us increasing virtual inspections from 10 percent of our total inspections to 20 percent. We intend to return in a year with analysis to advise whether this doubling of virtual inspections should subsequently be increased or decreased. We hope this brief gives you sufficient information to approve this change.

Background

Simply, with the onset of the pandemic, we were forced to change our operations quickly and transition into a remote (or virtual) inspection environment. Similar to many other areas of the government, we have effectively modernized aspects of our inspection regime and we believe that we can capitalize on this success and build public support to maintain a larger proportion of remote activities.

We know that the Lac Megantic tragedy has had a profound impact on Canadians and there may be considerable reticence to maintain a mostly remote inspection regime in a post-pandemic reality.

Therefore, we are proposing a measured approach that allows us to undertake virtual activities that pertain to the administrative side of the inspection in higher risk sites and fully remote inspections in low risk sites. This means moving to increase the proportion of our remote activities from 10% to 20% overall.

We plan to educate, consult, and check in with our stakeholders to support a viable remote inspection approach over the longer-term. Before expanding, we need to know what our stakeholders can support, as well as what the public will accept and that they are confident that we can maintain a safe inspection regime for some of our most hazardous products.

Based on our results, we will return with a plan to expand our virtual regime, or to make changes as necessary. We believe that we have been able to transition effectively to a remote approach, but we know that we have a significant public education challenge facing us before we can implement this with stakeholder and broader public support.

We have maintained a strong regulatory framework for the Transportation of Dangerous goods, and this governs all modes – land, rail, air and marine. This framework allowed us to transition to and from a remote environment as successive waves of the pandemic have occurred.

Each of these modes have different challenges. Despite this, we have seen the value of remote activities and we are aware of some of the potential pitfalls. I do want to underscore that none of the challenges that we faced through the pandemic placed public safety at risk. Rather, some of the changes have been administrative in nature, such as problems sharing large files or connectivity issues.

We view our pandemic transition as the initial phase. We now have some time to develop a measured, thorough approach that has stakeholder support and will be sustainable over the longer term. Based on this initial period, we have determined that we can confidently recommend changes to the framework to expand remote activities.

We believe that this will eventually translate into saving time and money, both for the department and our stakeholders. Moreover, we believe that generally speaking, our existing regulatory framework is comprehensive and does not need to be fundamentally re-invented at this time.

That said, we know that we have a significant public education challenge or opportunity facing us before we can expand. We also know that our stakeholders need time to adapt, train employees, and modernize some of their practices.

Although the pandemic demonstrated that we can replicate many activities in a remote environment, it is not suitable for all activities, for example, following up on cases of repeated non-compliance. Therefore, we need to ground our approach in empirical evidence.

Virtual Inspections

There are significant advantages to remote inspections. Our inspectors can review documentation in advance and there is some scheduling flexibility, which has been welcomed by our stakeholders.

We can save on travel costs and have the ability to shift if we have a large proportion of our inspectors away due to illness. This also allows us to cover a larger area than traditional inspections as there is no need to travel from site to site, and risks to employees are greatly minimized. This may eventually translate in our ability to schedule more frequent follow up activities for sites of concern.

While the strengths are both evident and compelling, I do want to underscore that remote inspections are not appropriate for high-risk sites. They are not appropriate for following up on issues related to non-compliance or to take enforcement actions.

It does take time to schedule the inspections and when used for more than administrative activities, inspectors need to ask probing questions to ensure that they are not seeing only what the industry wants to show us. What could be verified with a glance, sometimes needs to be a specific question.

One of the main strengths of an in-person inspection is that the inspectors can see other problems, issues or evidence of non-compliance that may be less evident with a remote inspection. An in-person inspection allows the inspector to develop a different relationship with industry. It is easier to build rapport, trust and to have a richer relationship to help solve problems in a more collegial fashion through in-person inspection.

Based on our experience in the pandemic, from time to time, there are issues with technology, similar to what we have all experienced when using Zoom, Teams or WebEx. These are not insurmountable, but they can cause delays. Remote devices are not suitable in all sites, for example, with flammable liquids, so this is another issue that needs to be built into the risk framework.

Considerations (1/2)

We intend to use a sophisticated risk profile to prioritize how to conduct inspections. The frequency of on-site inspections will be informed by the risk metrics associated with each mode of transport, the commodities moved, and the safety record of the company. This is important, as we know that there are risks for some modes that do not exist for others.

For example, there are more risks with the marine mode. If there is an explosion, spill, or other type of incident, often there is only the crew to deal with it. Depending on the nature of the event, it may be well beyond the crew's capacity to contain the accident and its aftermath. In addition, it could be hours to weeks before shore assistance would be able to help with the clean up.

We can all recall significant oil spills in the recent past and in the marine mode, we need to be mindful of the realities. Under our risk profile, a marine company with a history of non-compliance, transporting chemicals, would not be a candidate for a virtual inspection. We could exchange forms, but that would be the end of the remote activities. We believe that this would be consistent with the public's expectations.

Our risk criteria will be informed by what we have learned from the pandemic. We also intend to develop key indicators at the outset in order to assess how many activities and inspections are conducted remotely. Issues of non-compliance will be carefully measured, as will the inspectors' responses. For example, are we seeing more non-compliance at fully remote sites, or less? Are inspectors issuing more warnings? Are issues of non-compliance remedied more slowly by industry, or more quickly as inspectors can schedule more follow up calls?

We will work with our inspectors to identify critical issues from their perspective, as well as, their training needs. We will also assess whether they are ready to use technology differently, such as using drones for higher risk on-site activities in the future.

All of this will help the Department to collect data to support evidence-based next steps.

Considerations (2/2)

Stakeholder engagement is one of the most critical elements to expanding a remote approach. We need to consult early and throughout this process and build public confidence. In one way, the proliferation of remote activities during the pandemic should help the public to understand that it is easier and faster to review administrative documents remotely. In fact, they are likely to expect this from the Department.

However, the public may be less accepting of an entire inspection done remotely and highly skeptical that inspectors can identify problems this way. Using this approach for transporting dangerous goods is likely to cause some anxiety.

Therefore, it is crucial that we can explain how a remote inspection would work and when and where it would be used. We know that there is no room for error and that the public has little tolerance for risks to communities or to the environment. Our approach needs to be one that aims to educate, explain and engage.

Our approach for industry would be slightly different; much more technical in nature. We also want to use these opportunities to assess where there may be barriers to industry readiness to expand remote activities.

If it makes sense, there could be some opportunities to invite industry representatives to public sessions to hear concerns.

Next Steps

Should you approve this approach, we intend to start with our internal elements – the inspection framework, training, data collection and evaluation strategies, and then move to developing consultation materials.

Industry would be consulted first and this will give us a chance to develop our public consultation materials concurrently. Activities would be scheduled throughout the country, with more activities with communities who may have diverse or specific needs.

Finally, we do intend to thoroughly evaluate our findings and to report back to you with those findings.

Recommendations

To conclude, at this time, we are seeking your support to increase the proportion of our current virtual activities from 10% to 20% and to report back to make recommendations for future changes.

We believe that this is a prudent and measured way forward for our inspection framework that is consistent with stakeholder capacity and public expectations.

Once we have built confidence and trust in the approach, we will be well-positioned to expand and then incorporate additional technological tools in the future.

Thank you for your attention, Minister, I would now like to invite any questions you may have.