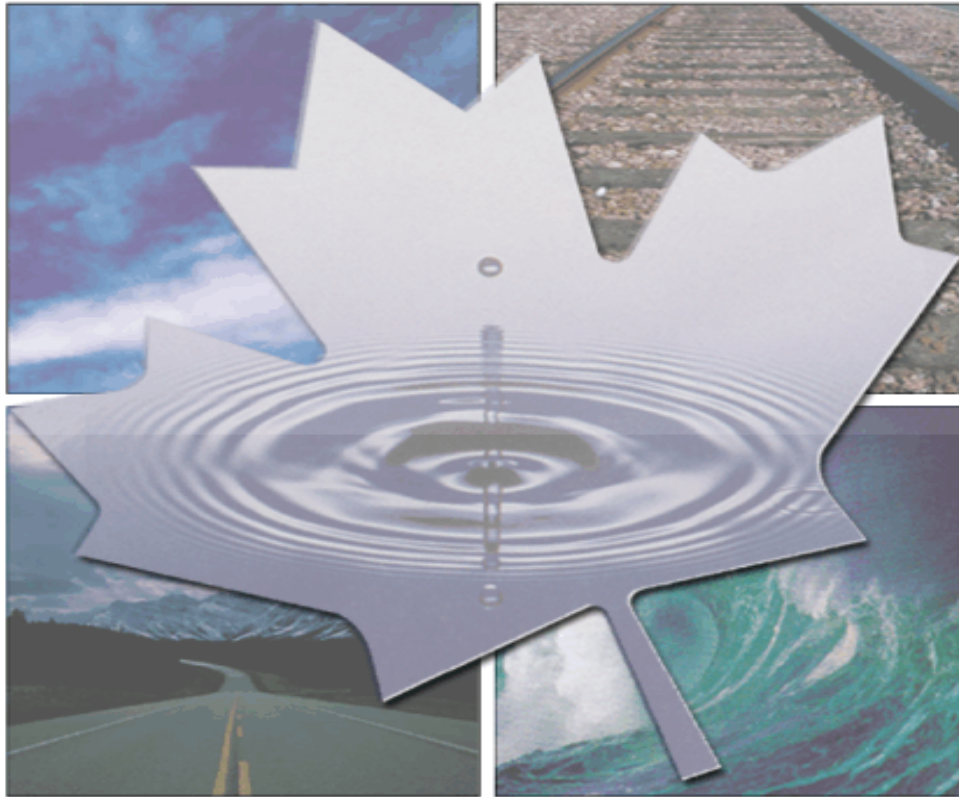


Audit and Advisory Services

Integrity, Innovation and Quality



Follow-up Audit of Transportation of Dangerous Goods

November 2014

File Number: 1577-13/14-106

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EXECUTIVE SUMMARY

INTRODUCTION

In August 2013, the Deputy Minister of Transport Canada (TC) initiated Safety and Security 2020, a targeted and more focused, yet complimentary initiative, which was based on the Clerk's four principles of Blueprint 2020. Viewed through the lens of TC's unique Safety and Security mandate, the objective of Safety and Security 2020 was to develop recommendations that would guide and support improved development and delivery of Transport Canada's regulatory programs and services.

The intent of Safety and Security 2020 was to review and support best practices and initiatives already in place or under development within Safety and Security as well as identify innovative opportunities that would improve the development and delivery of regulatory programs and services within Transport Canada. The findings from Office of the Auditor General (including Commissioner of the Environment) and internal audit reports were an important component of identifying these best practices and initiatives. Specifically, the recommendations from Chapter 1 of the Commissioner of the Environment and Sustainable Development's (CESD) fall 2011 report were consistent with two of the projects identified in Safety and Security 2020: aligned and efficient oversight programs, and aligned policy and regulatory development.

AUDIT OBJECTIVES

Our follow-up work to the 2011 CESD audit and an internal audit of 2006 examined whether the recommendations made have been fully implemented and are working as intended or are on track to be fully implemented.

CONCLUSIONS

We found that the Transportation of Dangerous Goods Directorate has implemented most of the CESD recommendations and is continuing to work on implementing the remainder. Some of the implemented recommendations need further consideration to ensure effective oversight of the transportation of dangerous goods system while others require further work to address some gaps we have found.

The ADM, Safety and Security, will review the recommendations and develop an action plan to address our findings.

STATEMENT OF CONFORMANCE

This audit conforms to the Internal Auditing Standards for the Government of Canada, as supported by the results of an external assessment of Internal Audit's quality assurance and improvement program.

Signatures

<hr/>	2014-11-06
Dave Leach (CIA) Director, Audit and Advisory Services	Date
<hr/>	2014-11-06
Martin Rubenstein (CPA, CIA, CFE) Chief Audit and Evaluation Executive	Date

1. INTRODUCTION

1.1. PURPOSE

Audit and Advisory Services completed an Audit of Inspection Standardization Practices – Transportation of Dangerous Goods in 2006. The audit identified a number of gaps and weaknesses and made 13 recommendations which over the course of several years were subsequently identified as having been fully implemented.

In 2011, the Commissioner of the Environment and Sustainable Development (CESD) conducted an audit of the transportation of dangerous products that for Transport Canada examined how the Department determines regulated organizations have complied with legislation for the transportation of dangerous goods and whether they have prepared emergency response plans. The audit found that the Department did not have a national risk-based inspection plan to establish its annual inspection priorities and direct the work of its inspectors; it did not adequately follow up on identified transportation deficiencies; did not know the extent to which organizations transporting dangerous goods are complying with regulations; and did not conduct adequate, timely reviews when approving emergency response assistance plans. The audit also found that similar issues had been identified in the 2006 internal audit and made one overarching recommendation with eight subcomponents.

The Department accepted the CESD's recommendation and developed a detailed management action plan to address the audit findings. Progress was reported to the departmental Audit Committee who in 2013 requested that an evidence-based assessment of the implementation of the management action plan be undertaken given the significance of the findings.

As a result, this follow-up audit was identified as part of our 2013/14 to 2015/16 risk-based audit plan.

1.2. BACKGROUND

Each year, tens of millions of shipments of dangerous products¹ are transported throughout Canada by road, rail, air, and ship. The shipment of these goods is subject to the *Transportation of Dangerous Goods Act, 1992* and the associated regulations are administered by the Transportation of Dangerous Goods Directorate (TDG Directorate) at Transport Canada (TC). The Directorate also develops standards and regulations, provides oversight, and gives expert advice to promote public safety in the transportation of dangerous goods in Canada.

As a result of several incidents in 2013 involving the transportation of dangerous goods by rail in Canada, Transport Canada has identified and will undertake a series of immediate and long-

¹ As defined by the Transportation of Dangerous Goods Act and Regulations.

term targeted “prevention”, “preparedness and response”, and “liability and compensation” actions. The Targeted Action Steering Committee (TASC), which is co-chaired by the Assistant Deputy Minister, Safety and Security, and the Assistant Deputy Minister, Policy, oversees the implementation of these actions.

1.3. AUDIT OF OBJECTIVE, SCOPE AND APPROACH

1.3.1 Audit Objective

The objective of our follow-up was to provide assurance that the recommendations made by the Commissioner of the Environment and Sustainable Development² in 2011 as well as those made by Audit and Advisory Services in 2006 have been fully implemented and are working as intended or are on track for full implementation.

The audit team looked at the eight components of the 2011 CESD audit recommendation listed below:

- a) the development and implementation of a national risk-based inspection planning process;
- b) the proper documentation of compliance monitoring and follow-up activities;
- c) gaps in guidance for compliance monitoring follow-up activities are addressed;
- d) roles and responsibilities for monitoring compliance with the Act and regulations have been clarified;
- e) the development and implementation of a performance measurement system that allows TC to report on the rate of regulatory compliance;
- f) clarification of the requirements for the review and approval of emergency response assistance plans;
- g) the development of guidance for the review of emergency response assistance plans; and
- h) the development of a plan and timeline to complete emergency response assistance plan reviews.

As well, the audit included follow-up on one recommendation from the 2006 internal audit, “(3.2.4) Consider cost/benefit associated with developing and implementing a national activity reporting system that will capture inspector time expended on specific tasks.”

1.3.2 Audit Scope and Approach

The audit covered the period from April 1, 2012, to March 31, 2014, and included document and file reviews and interviews at each of the Department’s five regions. Site visits were completed in two Regions.

Specifically, we reviewed 44 Means of Containment (MOC) files, 80 general compliance files and 69 follow-up files; interviewed 10 inspectors, all regional remedial measures specialists

² http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201112_01_e_36029.html

(RMS), five Civil Aviation Safety Inspectors (CASI) inspectors, all TDG Regional Managers and Regional Directors of Surface; and completed site inspections with three inspectors.

With respect to the CESD's recommendation "d" on roles and responsibilities for monitoring compliance with the Act and regulations, we reviewed the files for documentation and completeness.

1.4. REPORT STRUCTURE

The Introduction of this audit report is followed by findings grouped into two categories – Status of CESD Recommendations and Status of Internal Audit Recommendations. Note that, in some cases, findings are identified and recommendations are made as opportunities for improvement. Recommendations are made after each finding. A table of all recommendations and management's action plan to address these is included at the end of the report.

2. FINDINGS

The follow-up confirms that 20 of the 28 corrective actions that the TDG Directorate developed in response to the 2011 CESD audit are complete and seven are substantially or partially complete. One action plan was not implemented however the decision not to implement it has resulted in the recommendation not being fully addressed.

There is an overarching issue of inconsistency with respect to the oversight program which includes inspection planning, conducting, reporting and monitoring within and across regions. As well, issues with the Inspection Information System (IIS) will need to be resolved in order for many of the TDG Directorate's planned initiatives to be carried out.

The Compliance Measurement Strategy which was recently developed by the TDG Directorate is, in the audit team's opinion, a sound approach to effective performance measurement and one which should be shared with other modes.

2.1. STATUS OF CESD RECOMMENDATIONS

A summary of the CESD recommendations that the audit team have assessed as not being fully complete is provided below. For each CESD recommendation the Department's original action plan is described along with the TDG Directorate's reported implementation status as of June 5, 2014. As well, Internal Audit's assessment of the current status and their assessment of the potential risks are summarized below.

2.1.1. Integrated Risk-based Inspection Planning

CESD Recommendation 1a):

The [Department's] action plan should ensure that a national risk-based inspection planning process is developed and implemented.

Department's Action Plan: *Develop policy for inspection sites and means of containment facilities.*

TDG Directorate's Reported Status: Not Applicable³ *"This additional policy was planned in case it was not possible to integrate the Oversight Risk Tool and the Means of Containment"*

³ As reported on June 5, 2014, [RDIMS-#7296938-TDG AUDIT SUPPORTING DOCUMENTS FOR ACTION PLAN](#)

(MOC) Risk tool. The tools are now integrated and we [TDG] are waiting until full implementation is tested to determine if an additional policy will be necessary” (April 2012).

Internal Audit’s Assessment of the Current Status: *The audit team believes there is now enough experience using the new integrated tool to conclude that the Oversight Risk Tool and the MOC Risk Tool are still not sufficiently integrated for risk-based planning purposes, and a policy is therefore required for full integration and additional guidance be provided to users.*

Specifically, the TDG Directorate has not integrated the prioritization of general compliance and means of containment inspections. There is no method for reconciling inspection priorities between the two categories of inspections because the planning processes are independent from one another.

Risk and Impact

Without an integrated approach to the prioritization of general compliance and means of containment inspections, TDG program resources may not be targeted to the areas of highest risk.

A general compliance inspection is an inspection of an operator who handles, offers for transport, transports or imports dangerous goods while a means of containment inspection refers to an inspection of a facility that manufactures or tests TDG containers. Both types of inspections are completed by TDG Inspectors.

The TDG Directorate’s action plan included integrating the prioritization planning for general compliance inspections and means of containment inspections. However, we found that planning for each type of inspection is done separately and involves using different risk assessment factors to risk rank inspection priorities. Moreover, headquarters TDG functional managers do not provide the regions with direction or guidance to help them determine the relative priorities between the two types of inspections. Interviews with regional staff indicate that general compliance inspections are usually given higher priority and means of containment inspections are completed if resources are available.

Recommendation

1. ADM Safety and Security should ensure that a policy is developed and implemented so that prioritization of general compliance inspections and means of containment inspections is integrated and clear direction is provided to Managers.

2.1.2. Training on Risk Planning**CESD Recommendation 1a):**

The [Department's] action plan should ensure that a national risk-based inspection planning process is developed and implemented.

Department's Action Plan: *Provide training to TDG Inspectors on the risk planning and inspector's tool.*

TDG Directorate's Reported Status: Completed. *"Training on the TDG Risk Tool has been delivered to all inspectors in the regions. There is a possibility, even after training, that inspectors may not apply the criteria in the risk tool uniformly and consistently across the country. TDG has identified this as a risk and is closely monitoring the situation."*

Internal Audit's Assessment of the Current Status: Partially Completed

While the Department's action plan identified training as a priority, the internal audit team identified gaps in the oversight program that need to be addressed before training is meaningful.

The risk based inspection planning process focuses on individual sites and does not identify risks at a more strategic level (e.g. by mode or industry type). In addition, the effectiveness of the planning process including the allocation and targeting of inspection resources is based on the information in the IIS database which is neither complete nor accurate.

Risk and Impact

There is a risk that the current risk management framework (i.e., the risk management policy, tools, IIS data etc.) is not identifying the areas of highest risk and not enabling management to target resources to improve the level of compliance and ultimately the level of safety.

While the focus of this action plan was on training inspectors to use the risk assessment tool, improvements to the risk assessment framework are required.

As the key source of information for prioritizing inspections, the IIS should contain all relevant site-specific information with respect to operators that handle and transport dangerous goods. However, the IIS does not currently interface with any other systems that capture information on the transportation of dangerous goods. Relevant information from other TDG databases can only be added to the IIS manually. For example, the TDG IIS does not include all air sites inspected by the former Civil Aviation inspectors and site profiles are only being added to the database as inspections are completed, which may take a long time before IIS contains a complete list of air operators. As well, the criteria used to assess risk for transporting dangerous goods by rail and road may not necessarily apply to air and marine operators and other relevant risk factors unique to the air and marine modes should be considered. Consequently, risk assessments may not be accurate and a site can receive a lower or higher risk rating than warranted.

A more formal approach should be developed to identify and incorporate new sites into IIS. The current database contains 23,000 sites that handle and/transport dangerous goods, yet it is estimated that the actual number of sites may be as high as 80,000. The TDG Directorate has recently started an activity to use other databases to supplement the information in the IIS. The audit team believes this is an important step in making sure that the information in IIS is complete to provide a comprehensive inventory of potential sites to assess risk and help target TDG inspection resources.

Currently, inspection planning focuses almost exclusively on site-specific risk factors as opposed to considering other more strategic risks factors. For example, certain types of violations contribute to the risk calculation of a specific site but there is no process in place to identify common violations that may be systemic across an industry. Also, when new potential risks are identified they are only considered in relation to specific sites as opposed to considering their potential impact on an industry as a whole. As well, the response to new risks is to carryout site inspections and little consideration is given to determine whether other approaches (e.g. awareness and education; industry wide assessments) would be more cost-effective to ensure compliance.

Recommendation

2. ADM Safety and Security should ensure that:

- *There is a plan in place to have a complete and accurate inventory of information for risk based planning ;*
- *Risk is considered at a strategic level in addition to the site specific level;*
- *Alternatives to inspections are considered as a means to increase compliance; and*
- *Staff receives the necessary training to be able to understand and apply the risk framework to all modes.*

2.1.3. TDG Inspectors' Manual

CESD Recommendation 1c):

Gaps in guidance for compliance monitoring and follow-up activities are addressed.

Department's Action Plan :

1. Update the TDG Inspector manual to reflect site prioritization by including the prioritization tool.
2. Undertake a gap analysis in the guidance material in the TDG Inspector Manual.
3. Update the TDG Inspector Manual

TDG Directorate's Reported Status: Completed

Internal Audit's Assessment of the Current Status: Partially Completed

Although the gap analysis was conducted and Chapter 3 was updated, the five chapters identified as requiring updating in the gap analysis have not yet been updated.

Risk and Impact

Without an up-to-date manual, inspectors may not be following a current and consistent approach to conducting inspections. This may be contributing to the overarching inconsistencies issues identified by the audit team with respect to planning, conducting and documenting an inspection.

A gap analysis of the inspector manual was completed in 2012 and identified five chapters that required updating. To date, only one chapter has been revised.

Both TDG Managers and inspectors consider the manual as a resource tool and refer new staff to it on a regular basis despite acknowledging that there is information in the manual that no longer applies.

The level of detail required in the manual to ensure consistent and well documented inspections is not sufficient. Each region and/or inspector seems to be making their individual decisions as to what information should be documented in an inspection report. In addition, the IIS system does not make certain fields mandatory that would improve the consistency of data collection.

Recommendation

3. *ADM Safety and Security should ensure that the TDG Inspector Manual is current and provides sufficient direction and guidance to TDG inspectors to support consistent delivery of the national program.*

2.1.4. Follow-up Procedures

<p>CESD Recommendation 1b):</p> <p><i>Compliance monitoring and follow-up activities are properly documented.</i></p>
<p>Department's Action Plan: Provide training to inspectors and managers on the use of the severity index and follow-up procedures.</p>
<p>TDG Directorate's Reported Status: Completed "Training material has been developed and it was used to train TDG inspectors and managers by the end of August 2013."</p>
<p>Internal Audit's Assessment of the Current Status: Partially Completed</p> <p><i>The standard and procedures to carry out follow-up inspections are not sufficiently understood by inspectors and follow-up inspections are not being consistently carried out across the regions.</i></p> <p>Risk and Impact</p> <p><i>There is a risk that inspectors are not following up after an initial inspection to ensure compliance. If a violation has not been corrected, this could result in dangerous goods not being transported as required.</i></p>

Although the follow-up standard came into effect in December 2012, it was not formally communicated to regional inspectors and it could not be implemented until changes were made to the IIS to allow for the calculation of the severity index score. The standard was developed with the premise that follow-up inspections should be prioritized based on the severity of violations. To facilitate this, modifications have been made in the IIS to calculate a severity index derived from inspection results. The standard requires that a follow-up site visit be carried out when the severity index is eight or higher.

Our review of files that met the follow-up inspection threshold (severity index eight or more) found that the standard was neither well understood nor consistently followed. Some regions

were doing follow-up on all violations regardless of the severity index score, while others were not carrying out follow-up inspections consistent with the standard.

This confusion and inconsistency is understandable given that the regions were not formally informed of the new standard and it was not until November 2013 that the IIS started calculating the severity index. Since then, there have been other issues with the implementation of the new IIS which in some cases required inspectors to complete inspections outside the system (i.e., they could not record the inspection results in the system) and as a result the severity index could not be calculated.

In addition, some of the violations that met the severity index threshold did not, in the opinion of the audit team, necessarily require a follow-up site visit to ensure compliance. In the files reviewed, in some cases compliance could easily be confirmed by receiving information from the operator electronically (e.g. fax/scanned documentation) and would not require the inspector to return to the site.

The TDG Directorate is aware of the issues and is working with the regions to make the necessary changes to ensure the follow-up inspection regime is effective.

Recommendation

4. *ADM Safety and Security should ensure that the review of the follow-up standard is completed to ensure it provides clear direction as to when follow up is required and improvements are made to the severity index calculation to ensure follow-up priorities are appropriately determined.*

2.1.5. Quality Assurance Program

CESD Recommendation 1b):

Compliance monitoring and follow-up activities are properly documented.

Department's Action Plan: Put into place a Quality Assurance program that verifies compliance monitoring and follow-up procedures are adhered to by TDG inspectors.

TDG Directorate's Reported Status: Completed: "The Quality Assurance for Compliance Oversight and Follow-up Framework is finalized and approved (May 2014)."

Internal Audit's Assessment of the Current Status: Substantially Completed

A quality assurance program for compliance oversight and follow-up was launched in May 2014 which includes requirements for both the Regions and the HQ TDG Directorate to implement. Regions are starting to follow the new quality assurance for compliance oversight and follow-up approach as required. However, the TDG Directorate has not finalized their plan for implementing the Quality Assurance Review teams which are a key component of the quality assurance program for compliance oversight and follow-up.

Risk and Impact

Without a plan to fully implement the quality assurance program for compliance oversight and follow-up, the TDG Directorate may not meet its target of reviewing each region once every five years and may not have the necessary information for continuous improvement.

A national quality assurance program for compliance oversight and follow-up consisting of HQ and regional requirements was launched in May 2014. During our regional site visits, the regions were just starting to follow the new approach. Before the launch of the new program, regions had an informal approach to quality assurance for compliance oversight and follow-up with practices varying amongst regions. Under the new program, regions are required to review a percentage of inspections based on the seniority of inspectors. HQ has not yet finalized a plan to form quality assurance review teams consisting of NCR and regional staff to complete a quality assurance review in each region once every five years. The reviews will identify generic and specific actions needed to continuously improve the national TDG program.

Program Delivery is inconsistent amongst and within Regions

The impact of not having a national quality assurance process for compliance oversight and follow-up was evident to the audit team in the inconsistency across and within regions with respect to inspection planning, conduct, reporting and follow-up. These regional differences impede TDG's ability to assess and report on industry compliance with the Act. For instance:

- There is no specific guidance to inform inspectors specifically what should be reviewed while on site or the level of detail to record in an inspection report.
- Each Region has its own approach to how sites are assigned to inspectors for inspection and inspectors have their own approaches to complete inspections and record the findings. Some inspectors do everything electronically while others work by hard copy and input the information into the IIS afterwards. Some inspectors record details describing how they carried out their site visit and what they inspected while for others it was impossible from our file review to determine how they carried out their inspections and the substantiation of what was found.

- There is also inconsistency as to what should be counted as an inspection. One region completes a new inspection report for follow-up inspections to "*get credit for an inspection*". Other regions complete inspection reports even when they visit sites and discover that the site no longer transports dangerous goods; while others do not. Since each inspector and region is given inspection targets that are monitored as part of national reporting, it is critical that inspections be defined consistently to ensure complete and accurate reporting.
- Another example of inconsistent practices relates to inspectors taking samples of dangerous goods being transported to test and verify that the container contents are correctly labeled. The TDG Inspector Manual includes a chapter on taking and testing dangerous goods samples but only one region was doing any sort of sampling.

Consistency with respect to how inspections are planned, conducted, documented and recorded is critical in order to provide accurate information for reporting purposes.

Recommendation

5. ADM Safety and Security should ensure:

- *Clear direction and guidance is provided to regions to promote a consistent approach to inspection planning, conduct and reporting; and*
- *The recently developed quality assurance program for compliance oversight and follow-up is fully implemented including establishing review teams and scheduling the quality assurance reviews.*

2.1.6. Measuring and Monitoring Compliance Rates by Mode

CESD Recommendation 1e):

A performance measurement system that allows the Department to report on the rate of regulatory compliance is implemented.

Department's Action Plan: Develop a measurement tool for TDG inspectors to collect the appropriate information to enable reporting on a multi-modal compliance rate.

TDG Directorate's Reported Status: Completed "*Completed as it was determined that this activity was unnecessary. No additional measurement tools are required for TDG inspectors to collect compliance measurement data. The Compliance Estimation Program's data collection sheet was integrated into the new version of IIS, and as of April 1, 2014, is mandatory for inspections at all sites that handle, offer for transport, transport or import dangerous goods*".

Internal Audit's Assessment of the Current Status: Partially Completed

A compliance performance measurement strategy has been approved that includes reporting the level of compliance by mode. The strategy is based on the existing compliance estimation program. The success of the strategy is dependent on the collection of certain information that is currently not being collected.

Risk and Impact

Without complete and accurate data, TDG Directorate will not be able to report on multi-modal compliance rates, which in turn affects their ability to complete risk assessments and target resources to the areas of highest risk.

The TDG Directorate has developed a Compliance Performance Measurement Strategy which was approved in April 2014 by the TDG Senior Management Committee. The strategy is detailed and once fully implemented it will provide valuable performance information across all modes transporting dangerous goods. However, the strategy will only be successful if all required information is collected. At the time of the audit, compliance related data for air and marine inspection sites specific to these modes was not being consistently collected.

Recommendation

6. *ADM Safety and Security should ensure that data collection supports full implementation of the Compliance Performance Measurement Strategy.*

2.1.7. Emergency Response Assistance Plans**CESD Recommendation 1h):**

A plan and timeline to complete emergency response assistance plan (ERAP) reviews is developed and implemented.

Department's Action Plan: Establish internal service standards to guide regional and HQ RMS in completing (approving/rejecting) an ERAP.

TDG Directorate's Reported Status: Completed. *"The internal service standards are documented in the ERAP Assessment Framework (Aug 2012)."*

Internal Audit's Assessment of the Current Status: Partially Completed

The TDG Directorate implemented many changes to improve the ERAP approval process. However, there is no systematic monitoring to ensure that ERAPs are being approved in a timely manner and there continues to be a sizeable backlog.

Risk and Impact

There is a risk that ERAPs are not being approved in a timely manner which could contribute to an ineffective emergency response if an accident were to occur before an associated ERAP was approved.

Prior to the 2011 CESD audit, all ERAPs were approved using a process that required a detailed review of plans and site visits. This process has since changed and ERAPs are now risk ranked to determine whether or not they require a site visit and to determine when the ERAP will need to be reviewed and reapproved.

A 15-day service standard has been established for the review of an ERAP application; however, this standard is not being tracked and performance is not being monitored.

The ERAP process is centralized whereby all applications are routed to the HQ TDG Directorate and all ERAP approvals are made by HQ based on a recommendation from regional Remedial Measures Specialists (RMS). Regional RMS are concerned with delays they have experienced. The audit team was provided with examples of where an application was received in HQ but it was not sent to the region in a timely manner. The team was also provided evidence of regional RMS' making recommendations to HQ to approve ERAPs but the approval letters were not sent for weeks and, in some cases, months after the recommendations were made. These delays have a direct impact on industry as dangerous goods cannot be transported without an approved ERAP.

The process to approve interim ERAPs has been changed to grant interim approvals only when all the required documentation has been received and approved by the RMS and only the site visit remains to be completed.

The 2011 CESD audit identified 227 interim ERAP approvals that exceeded five years. As of July 2014, this number has been reduced by 30% to 157. Given interim approvals are now valid up to a maximum of three years the actual backlog may be greater than 157 and there is no formal plan in place to eliminate the backlog.

Roles and Responsibilities for Remedial Measures Specialists (RMS)

While the new ERAP framework has provided significant clarification and direction with respect to roles and responsibilities, there are some areas of confusion that need to be addressed.

TC has a governance structure that includes both functional and operational authorities. The functional authority should set national standards for program delivery, provide guidance and training to regional inspectors, and monitor the performance of the program. Regional operational authority includes providing day- to- day direction and supervision to staff responsible to deliver the program. The TDG Directorate in HQ is the functional authority for the Remedial Measures Specialists who are located in each region while regional TDG Managers are the operational authorities. The RMSs report to the regional TDG Managers.

RMS expressed concerns that they are not getting sufficient direction with respect to reviewing and approving national ERAPs that involve more than one region. In addition, regional TDG Managers have indicated that the functional authority was overstepping its role, bypassing the regional TDG Manager, by working directly with the regional RMS to develop the regional work plans and only looking to the TDG Manager to approve travel funds to carry out site inspections.

There was also concern about attendance of RMS at accidents. RMS interviewed felt that some decisions were made without their input or knowledge even though they were actually at the accident site.

A response manual describing roles and responsibilities has been in a draft format since 2013. Finalizing and communicating its guidance may help resolve this issue.

Recommendations

7. *ADM Safety and Security should ensure that the ERAP process is timely, efficient and effective and its performance is monitored. A plan should be developed and implemented to eliminate the current backlog.*
8. *ADM Safety and Security should ensure that roles and responsibilities for TDG functional authority, Regional TDG Managers and RMS are clearly defined and communicated to all TDG staff.*

2.2. STATUS OF INTERNAL AUDIT RECOMMENDATIONS

2.2.1. National Activity Reporting

Audit and Advisory Services completed an Audit of Inspection Standardization Practices – Transportation of Dangerous Goods in 2006. The audit made 13 recommendations which over the course of several years were subsequently identified as having been fully implemented. Many of these recommendations were similar to those subsequently made in the 2011 CESD audit. The audit team identified one recommendation as outstanding and not covered by the CESD audit.

A national activity reporting system is in place but is not being consistently used and is not capturing all activities.

Risk and Impact

There is a risk that without a national activity reporting system TC does not have an accurate understanding of how an inspector's time is distributed among various activities. This will impede the Directorate's ability to accurately assign resources.

Internal Audit recommended management consider developing a national activity reporting system to track the time inspectors spend on various tasks including inspections. Although the IIS now has the capacity to capture time associated with certain tasks, regions are not consistently using this tool and have identified some inspection tasks that are not currently captured by the tool.

Recommendation

9. *ADM Safety and Security should fully implement national activity reporting by ensuring:*

- *A complete set of tasks for inspectors is captured; and*
- *All regions are using the activity reporting component of IIS consistently.*

3. CONCLUSION

The objective of Safety and Security 2020 was to develop a focused six-year implementation plan to further support and improve regulatory programs and services. As part of this, the full implementation of the CESD and internal audit recommendations will help advance the work underway.

We found that, although the majority of recommendations have been implemented, there are findings and gaps that still need to be addressed. In addition, there are opportunities to enhance some of the current practices to improve the effectiveness the TDG oversight program.

4. RECOMMENDATIONS AND MANAGEMENT ACTION PLAN

#	Recommendations	Detailed Management Action Plan	Completion Date (for each action)	OPI direct report for each specific action
1	ADM Safety and Security should ensure that a policy is developed and implemented so that prioritization of general compliance inspections and means of containment inspections is integrated and clear direction is provided to Managers.	a. Develop a policy to integrate the prioritization of general compliance inspections and means of containment inspections resulting from the TDG Container Facilities Compliance Inspection Prioritization and the TDG Risk Management Framework for Inspection Prioritization (<u>RDIMS-#7279381-TDG RISK FRAMEWORK FOR INSPECTION PRIORITAZATION</u>). b. Implement the policy mentioned in a. above to integrate compliance site inspections and means of containment facility inspections for the 2015-2016 TDG Annual Inspection Plan and reporting cycle and provide clear direction to Managers prior to the 2015-2016 inspection planning cycle.	March 2015	Safety & Security
2	ADM Safety and Security should ensure that: a. There is a plan in place to have a complete and accurate inventory of information for risk based planning;	a. Develop an information inventory plan that integrates all available data held by TDG. Site-specific information held by other modes within TC, and external sources (provinces, industry, 3 rd party private sector, etc.) should also be investigated. A list of potential TDG sites has been identified based on results from the DGAIS, ERAP	June 2015	Safety and Security

#	Recommendations	Detailed Management Action Plan	Completion Date (for each action)	OPI direct report for each specific action
	<p>b. Risk is considered at a strategic level in addition to the site specific level;</p> <p>c. Alternatives to inspections are considered as a means to increase compliance; and</p> <p>d. Staff receives the necessary training to be able to understand and apply the risk framework to all modes.</p>	<p>and lithium battery studies. A process to have these sites included in the inspection plan will be developed. The potential to use sites from other sources will be identified from other internal sources including CANUTEC.</p> <p>b. Review Rail Safety Risk-Based Planning process and adopt useful elements in the TDG Risk Prioritization Tool that takes into account overarching modal risk in addition to site/activity-specific trends.</p> <p>c. Include other activities that enhance the reporting database, and clarify roles and responsibilities at regional and national levels for the delivery of any other activities during the planning of oversight activities (e.g. outreach, training, company meetings, etc).</p> <p>d. i) Based on current process, complete the risk-based inspection training and deliver training to 95% of the inspectorate population at the September 2014 Inspector Bootcamp. ii) Provide training to the remaining inspectors not at the Bootcamp. iii) Working with the Multimodal Inspector Technical Training Group, incorporate the new policy on the integration of the prioritization of general compliance into training activities.</p>		

#	Recommendations	Detailed Management Action Plan	Completion Date (for each action)	OPI direct report for each specific action
3	ADM Safety and Security should ensure that the TDG Inspector Manual is current and provides sufficient direction and guidance to TDG inspectors to support consistent delivery of the national program.	<ul style="list-style-type: none"> a. Review and revise the gap analysis undertaken in 2012-2013 (with staggered implementation of b. based on prioritization). b. Ensure current policies with respect to planning, conducting and documenting inspections are clearly reflected in the TDG Inspector Manual, are published and are in effect. Implement “Inspector Standards” documents (standard operating procedures) where additional direction is required. Review and update Chapter 4 (Enforcement), Chapter 5 (Guidelines on Inspection and Investigation), Chapter 6 (Inspection) and Chapter 7 (Investigation). c. Develop a framework to document processes for the timely update of Inspector Manual standards. 	July 2015	Safety and Security
4	ADM Safety and Security should ensure that the review of the follow-up standard is completed to ensure it provides clear direction as to when follow up is required and improvements are made to the severity index calculation to ensure follow-	<ul style="list-style-type: none"> a. A working group was established in July 2014 to conduct a comprehensive review of the criteria and calculations used for determining whether a follow-up inspection is required. Recommended updates to the Inspector Information System (IIS) application (and consequently, the Follow-Up Standard) will be presented to TDGSMC. b. Complete a broader review of the Follow-Up Standard, focusing on all follow-up activities (not 	March 2015	Safety and Security

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	<p>up priorities are appropriately determined.</p>	<p>just inspections). Recommended updates to the Follow-Up Standard will be presented to TDGSMC.</p> <p>c. Provide training for the inspectorate on the updated Follow-Up Standard and implement recommendations from the working group once approved by TDGSMC.</p>		
5	<p>ADM Safety and Security should ensure:</p> <p>a. Clear direction and guidance is provided to regions to promote a consistent approach to inspection planning, conduct and reporting; and</p> <p>b. The recently developed quality assurance program for compliance oversight and follow-up is fully implemented including establishing review teams and</p>	<p>a. Based on implementation of action plan in 3(a) and (b), finalize ‘Inspector Standards’ documents related to planning, conducting and documenting inspections.</p> <p>b. Complete the implementation of the Quality Assurance Program for Oversight and Follow-Up (including the organization changes, the establishment of review teams and a QA review schedule).</p>	August 2015	Safety and Security

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	scheduling the quality assurance reviews.			
6	ADM Safety and Security should ensure that data collection supports full implementation of the Compliance Performance Measurement Strategy.	<p>Existing Data</p> <ul style="list-style-type: none"> a. Provide training to the Inspectorate at the September 2014 Inspector Bootcamp on the importance of quality data collection including CEP sites in support of full implementation of the Compliance Measurement Strategy. b. Providing training to remaining inspectors not at Bootcamp. <p>Additional Data</p> <ul style="list-style-type: none"> c. Refine MOAs with Marine and Civil Aviation to obtain data for full implementation of the TDG Compliance Measurement Strategy. d. Refine MOAs with Provinces/ Territories to obtain data for full implementation of the TDG Compliance Measurement Strategy. 	March 2016	Safety and Security
7	ADM Safety and Security should ensure that the ERAP process is timely, efficient and effective and its performance is monitored. A plan should be developed and implemented to eliminate	<ul style="list-style-type: none"> a. Develop and initiate the implementation of a plan to eliminate the current ERAP backlog. b. Supported through a Lean Exercise, develop, implement and monitor service standards for the ERAP approval process to avoid new backlog. 	March 2015	Safety and Security

#	Recommendations	Detailed Management Action Plan	Completion Date (for each action)	OPI direct report for each specific action
	the current backlog.	c. Incorporate ERAP service standards into the TDG Program Performance Measurement Strategy being developed.		
8	ADM Safety and Security should ensure that roles and responsibilities for TDG functional authority, Regional TDG Managers and RMS are clearly defined and communicated to all TDG staff.	a. In consultation with the Regions, identify a structure for the response stream – Functional Authority, Regional Directors Surface (RDS) and Regional Manager, through to Remedial Measures Specialists (RMS). b. Based on approved structure identified in a. above, confirm roles and responsibilities for all parties in the response stream and communicate to staff.	June 2015	Safety and Security
9	ADM Safety and Security should fully implement national activity reporting by ensuring: a. A complete set of tasks for inspectors is collected; and	a. Complete implementation of Inspector Information System (IIS) activity reporting-related upgrades and establish a process to ensure consistency of	March 2015	Safety and Security

#	Recommendations	Detailed Management Action Plan	Completion Date (for each action)	OPI direct report for each specific action
	b. All regions are using the activity reporting component of IIS consistently.	task-reporting for all TDG inspectors. b. Provide functional direction to all inspectors and managers and provide training in the use of IIS time tracking.		