August 14, 2017

Department of Transportation & Works Corporate Safety Division PO Box 8700 St. John's, NL A1B 4J6

For the Attention of: Mr. Barry Fitzgerald

### Subject: Department of Transportation & Works Traffic Control Program Occupational Health and Safety Audit Report

Dear Barry,

Please find attached two (2) hard copies and one electronic copy of the occupational health and safety audit report conducted for the traffic control program of the Department of Transportation & Works.

If you have any questions or concerns on the attached, please do not hesitate to contact the undersigned in the first instance.

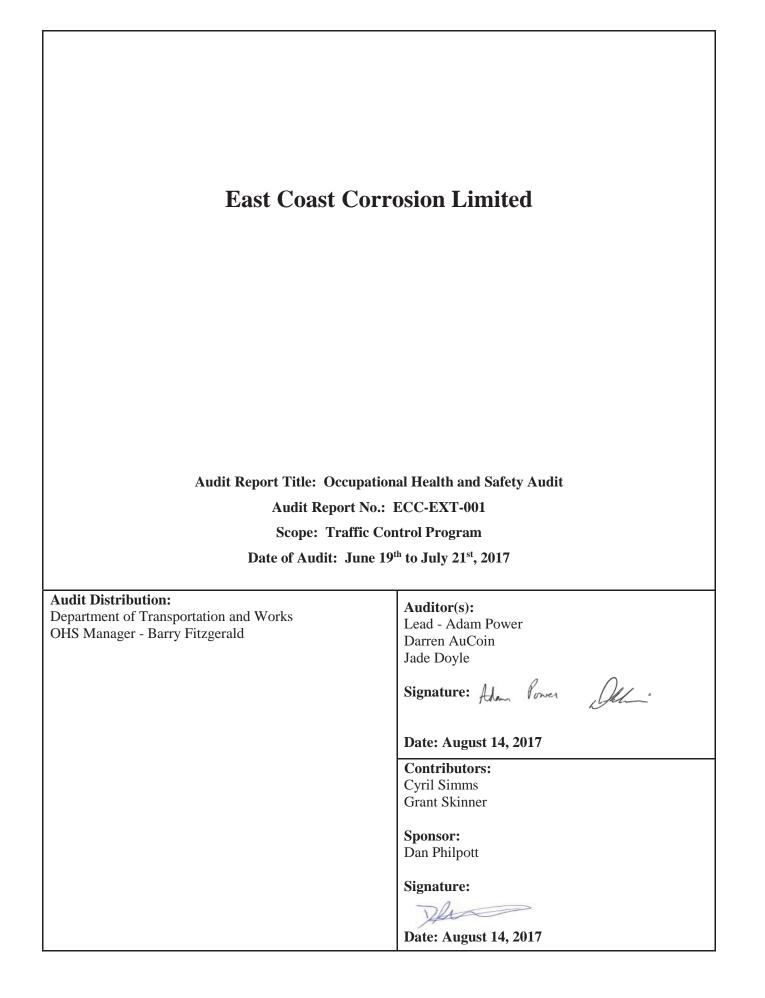
Yours truly,

lina

Adam Power Lead Auditor

Cc: Dan Philpott DAU

Attachment Occupational Health & Safety Audit Report



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## **1.0 EXECUTIVE SUMMARY**

This report summarizes the findings and observations from the external Occupational Health and Safety (OHS) audit undertaken by East Coast Corrosion Ltd. from 19th June to 20th July, 2017 on the Traffic Control Program of the Newfoundland and Labrador Department of Transportation and Works (T&W). The audit covered all five regions within the province, with the primary focus being compliance with T&W's Traffic Control Manual, Occupational Health & Safety Program as well as the safe execution of work at various field locations.

We would like to thank all personnel involved for their openness and honesty throughout the process which enabled auditors to be effective in covering all five T&W provincial regions, within the required timeline.

The following is a summary of the findings detailed within this report. These findings are supported by notes taken along with objective evidence viewed and gathered throughout the course of the audit.

Incidents	1
Positive Practices	9
Nonconformances	21
Areas of Concerns	42
Opportunities for improvement	41
Observations	76

The report contains 61 recommendations which the audit team feel shall remedy issues, provide for compliance to current requirements and therefore help prevent future incidents.

A trend identified during the audit that underpin the findings is the fact that Management commitment and involvement in the Health and Safety Management System is lacking leadership and active participation in the program relating to the development and monitoring of targets and objectives, communication and implementation of the OHS program and resources. Contributing to these trends, which result in system gaps, is inadequate training for supervisors, support personnel availability, and communication of current guidance required to execute the work.

Personnel believe that safety was improving a few years ago however, recently safety performance appears to be declining and continuous improvement now has plateaued. There is some evidence through corporate communication that the focus of Health and Safety is attempting to shift to proactive safety management however this shift has not yet penetrated all levels of the organization, Furthermore, with the recent decline in resources, personnel throughout the organization feel that it will be a significant challenge to keep people engaged and committed to Health and Safety.

While there are no findings identified at the time of the audit that appear to put personnel in imminent danger, the auditors feel that if the recommendations within this report are not acted upon, potential exists for future incidents within the organization.

### 2.0 SCOPE OF AUDIT

This report summarizes the findings and observations from the external Occupational Health and Safety audit undertaken by East Coast Corrosion Ltd. from 19th June to 21st July, 2017 on the Traffic Control Program of the Department of Transportation and Works. The audit focused on compliance to the Department of Transportation and Work Traffic Control Manual, the Occupational Health & Safety Program for Department of Transportation and Works and applicable legislations, as well as an assessment of the effectiveness of the program to safely execute their work.

### 3.0 ACRONYMS / DEFINITIONS

Acronyms

ADM	Assistant Deputy Minister
AOC	Area of Concern
CLD	Centre for Learning and Development
CSO	Contractor's Safety Officer
DAT	Design Approval Technician
ECC	East Coast Corrosion Ltd.
ER	Emergency Response
FLRA	Field Level Risk Assessment
H&S	Health and Safety
KPI	Key Performance Indicators
LTI	Lost Time Incident
MEPS	Mechanical Engineering Production Supervisor

MOC	Management of Change
NC	Nonconformance
PENG	Professional Engineer
POS	Positive
OBS	Observation
OFI	Opportunity for Improvement
OHS	Occupational Health and Safety
OPS	Operations Supervisor
SWP	Safe Working Practise
T&W	Transportation and Works
TBT	Tool Box Talk
ТСН	Trans-Canada Highway
TCM	Traffic Control Manual
ТСР	Traffic Control Person
TCPS	Traffic Control Person for Supervisors

## Definitions N/A

## 4.0 AUDIT CONCLUSIONS

The following is a summary of the findings highlighted by category:

- 9 Positive
- 1 Incident
- 21-Nonconformance
- 42 Areas of Concern
- 41 Opportunities for Improvement
- 76-Observations

The report contains 61 recommendations. A summary of these recommendations can also be found within Appendix E.

## 5.0 AUDIT RESTRICTIONS

Audit restrictions included:

- Geographical isolations of many of the work sites / depots.
- Limited overall timeline reducing the time available within regions.
- Personnel availability for interviews in certain regions.
- Availability of various work activities (i.e. line painting, ditching, etc.). Primarily pothole patch maintenance work ongoing.

### 6.0 PROCEDURE / CONTRACT / PROJECTS AUDITED

The audit included a review of the following documentation

- 1. Traffic Control Manual (TCM)
- 2. Transportation and Works Occupational Health and Safety Program Manual
- 3. Various Safe Working Practices
- 4. Traffic Control Persons (TCP) Training
- 5. Traffic Control Person for Supervisors (TCPS) Training
- 6. Project No. 17-011 / 132-16 PHC (#4 Brook Culvert Rehabilitation)
- Project No. 130-16THP [Trans-Canada Highway (TCH) Asphalt Repair Near West Brook toward Springdale]
- 8. Highway 230A Project
- 9. Old Bay Bulls Road Overpass Route 1 Project
- Project # 3-17PHC (Reline Culverts on Route 1; Trans-Canada Highway at Little Pond Near Foxtrap Access Road)
- Project # 55-16 THP Paving Route 510, Trans Labrador Highway from Lodge Bay towards Cartwright Junction for approximately 80 km

### 7.0 DOCUMENTS & RECORDS REVIEWED

- 1. Tool Box Talks (TBTs)
- 2. Hazard Assessments
- 3. Field Level Risk Assessments (FLRA)
- 4. Emergency Response Plans
- 5. Training Matrices
- 6. Training Records
- 7. Various Traffic Control Layouts

- 8. Depot Site Inspection Checklists
- 9. OHS Committee Minutes
- 10. OHS Committees Review Agenda
- 11. Pre-Summer Meeting Agenda
- 12. Employee Orientation Records
- 13. Incident Summary
- 14. Incident documentation
- 15. Pre-construction Meeting Agendas
- 16. Project Specific Site Safety Plans
- 17. Contractor Monthly OHS Performance Reports
- 18. Contractor Performance Evaluations
- 19. WorkplaceNL Clearance Letters
- 20. Contractor Safety Records
- 21. Various Work Permits
- 22. Various Training Presentations

### 8.0 POSITIVE PRACTICES

- Communication
  - **POS** Every few months the Western Superintendent of Operations would email the hazard assessments, incident forms, etc. around to supervisor(s) as a reminder of the information and requirements to comply with policies and procedures.

### • Hazard Assessment Process

- POS Central Region Depots complete a TBT every morning in addition to completing a hazard assessment. According to the T&W OHS Program Manual they are only required to complete a TBT once a week.
- POS Eastern Region Supervisor and workers complete a TBT every day. This includes discussing the job, reviewing the hazard assessment, and reviewing the traffic control layout. While the T&W requirement is only once a week it is good practice to complete a TBT daily prior to work.
- POS When reviewing hazard assessment documentation there was a comment on an additional hazard being present which was noted on both the TBT and hazard assessment. This comment pointed out an additional hazard which was controlled by adding a truck turning sign. Additional documentation in the package also included right to refuse and TC layout used.

## • Contractor Management

• **POS** – The layout required for an Avalon Region Contractor site set-up was not a typical layout from the manual. It was developed using lessons learned from a previous project set-up last year in a similar area, using discussions in the pre-construction meeting, and setting up traffic control and observing the traffic prior to proceeding with the work. This is a very positive initiative to make the worksite safe.

### • Accident / Incident / Near Miss Investigation and Reporting Findings

• **POS** – New electronic accident / incident report form was automatically updated onto all supervisor's CPUs for use. This was confirmed throughout the audit.

### • Auditing / Site Inspection / Visits

• **POS** – T&W technician at a Western Region Contractor site had kept all training certificates in an application on his phone for easy viewing, Card Mate. With the majority of people now carrying smart phones, this could potentially be looked at to store certification documentation for employees.

### General Operations

- POS Central Region Management have developed a simple daily activities checklist which includes Tool Box Meeting, Hazard Assessment, Emergency Response, Training Certificates, Traffic Control Layout, Permits and information on the work scope. This must be provided to the superintendent of operations every morning and is a good tool to put the responsibility on the MEPS to ensure all the appropriate processes are followed.
- **POS** When used properly, and as per instructions, the use of a crash continuous trailer (crash attenuators) can provide an additional level of safety to the workers and the public. The intent of the trailer is to fold up on impact and act as an energy absorber.

## 9.0 FINDINGS AND RECOMMENTATIONS

### 9.1 General Training Findings and Recommendations

### 9.1.1 New Employees / Transferred Employees / On-boarding Process

• NCR – An employee took eight months leave and did not receive an orientation upon returning to the office. In addition, an employee transferring into the T&W engineering department did not receive a site/job orientation for the new position being filled as required by the T&W OHS Program Manual, Section 3.4 Orientation.

- NCR Superintendent of Operations noted that for on-boarding of a new MEPS they would use an informal process. Managers and supervisors should be familiar with, and utilize, the on-boarding checklist in the OHS manual, as a minimum.
- **OBS** MEPS developed a new hire package based on the T&W OHS Program Manual which was a good tool, however, this did not include completing the "Site Safety Orientation form" as provided in the OHS Manual.
- **OBS** –MEPS utilized an on-boarding form process that was found on the Government Website and not the on-boarding site orientation checklist identified in the T&W OHS Program Manual.

## 9.1.2 Training Requirements

- **OFI** Management Personnel are not aware of the specific training required for each role but did note that there were core training requirements. Various regions are looking at each position and the required training to complete their job. All training is captured within the local training matrices identifying a certain number of required courses. It is suggested to update all roles and responsibilities to include the required training to be completed for each role.
- **OBS** It was communicated during the audit that Centre for Learning and Development (CLD) has concerns about the lack of training requirements for night-time work and have posed the question to the Assistant Deputy Minister (ADM). It was communicated that the specification for night time traffic control includes a requirement for the contractor to provide training for night time work. At the time of the audit the training package had not been received from the contractor or provided to the CLD.
- **OBS** CLD is currently developing a list of required safety training for Contractors.

## 9.1.3 Training Records

- NCR Compliance with the requirement for employees to have certificates on their person at worksites is very low. This was confirmed throughout the audit. Many employees interviewed thought that the new CLD process (PS Access) would keep all copies of certificates online and therefore were not required to be in their possession.
- AOC Each location has their own local spreadsheet matrix used to track training. The content and accuracy varied from location to location and most supervisory personnel were not aware of whose responsibility it was to maintain the training spreadsheet. It was also noted that there are issues with employee training certificates with employees frequently moving locations. The record keeping reviewed during the audit also varied. Many times, auditors were not provided with training documentation requested or records and certificates were expired.

- AOC T&W require all workers to have TCP training prior to going on worksites. However, it was communicated to the auditors by a Regional Engineer that T&W hire co-op students which are constantly used on-site and they may not have all the required training.
- **OBS** There are noted discrepancies in CLD confirming training of employees. Compliance training and training completion records were previously managed and held by the local departments. However, CLD noted that there were many inconsistencies, inaccurate and missing records. Therefore, CLD has said they do not want any regional training data anymore as they are tracking all the training from one centralized location. It was communicated during the audit, by multiple regions, that there have been instances of workers having completed a training course, via CLD, but there is no record online of the training (No record on PS Access). It is noted that the new CLD training and certification process will be kept online but that depots will still generally keep a local training matrix.
- **OBS** CLD has developed the PS Access program around certification and notification of expiry of certification. The CLD strategy is to use PS Access to track training completed, expiry of certification and notification to employees and supervisors of upcoming expiry. The goal is to achieve and maintain zero (0) employees with expired certification within the Government. PS Access will also show upcoming courses which are available and provide an avenue to register online. CLD are of the assumption that it will take a three-year cycle using PS Access (requesting training and documenting training completed and expiry dates) for the system to be reliable and accurate and to achieve their goal of zero (0) employees with expired certification.

## 9.1.4 Communication on CLD programs and Responsibilities

- AOC CLD have implemented computer based training which has been communicated to T&W. This program was to be taught from the College of the North Atlantic campuses across the province and was being offered for PS Access, Outlook and general computer use. It was communicated by CLD that no employees have requested or completed this training to date. Numerous times during the audit the issue of general computer knowledge was brought up from management. It is not clear if the availability of the computer training has been communicated to all employees.
- AOC T&W safety training only came under CLD remit in May 2016 and requires computer access for employees to self-register and view completion records through PS Access. It was noted in multiple regions, that some depots have issues with computer availability and general computer knowledge.

- AOC Some individuals on the Management Team were not aware of the CLD database to centralize training.
- **OBS** With the new CLD training program all compliance-based training is coordinated and recorded through the CLD. Previously, this training would be mostly conducted by an in-house trainer within a short time frame (e.g. powerline hazards, TCP, etc.) but it was communicated to the auditors, by a former in-house trainer, that now third parties are being used more for training purposed.
- **OBS** It was noted by Senior Management, in a specific region, that there is a new training database (PS Access) within CLD which keeps track of individual training. The specific manager noted that the program is still in development and that they were not aware of the status of the program. He communicated that training registers are generally kept at the depot level and was not sure if this included equipment related training. Their understanding is that CLD would capture all of this.
- **OBS** Superintendents interviewed during the audit were under the impression that the new training process will allow for all employee's certificates to be held in a central database for easy access. There are growing pains with this system and most people are still more comfortable with a card based system. Further discussion with CLD revealed that PS Access is not to keep certificates but rather maintain records of course completion and notify on upcoming certification expiration, certificate management is to be at the worker, depot, and regional office level and it is a legal requirement that employees keep their certifications on their person and that their worksite maintain a copy to be provided upon request.
- **OBS** CLD is not responsible for the content of the TCP and TCPS training, only the organization and facilitation. The curriculum was developed by the department of T&W (equipment inspectors) and approved by WorkplaceNL. WorkplaceNL also approved trainers to deliver the course content. CLD believes there are issues in the training but that it is the responsibility of WorkplaceNL to audit the training to confirm it is sufficient and update if required.
- **OBS** There is a perception from CLD that Management within T&W do not accept their accountability for training their employees.

## 9.1.5 General Training Recommendations

• Management and Supervisory personnel are not familiar with the on-boarding processes that exists for hiring / transferring / orientating employees into a job position. They are using either informal processes and / or information that they searched on the Government website. It is

recommended to remove the process from the OHS manual and make one standard on-boarding process for the Government. Where necessary, on-boarding can be tailored to the particular department to ensure that all OHS aspects and training requirements particular to a department are reviewed and addressed. This should provide the consistency of process and record keeping across the Governmental organization.

- It was identified during the audit that there is a gap in the knowledge and understanding of the standard and required training for Traffic Control Personnel, maintenance crew, engineering personnel, etc. It is recommended that the job descriptions and roles and responsibilities for each position be updated to include the mandatory training. This could be potentially linked to a position in PS Access for ease of training identification and monitoring.
- There is a gap in the communication and understanding of training certificate management within the department, especially concerning the responsibility of the worker and accountability of the supervisors and managers of the regions. There is a perception that the training records are now in PS Access or on line at Workplace NL and personnel cannot access them. Recommend a communication campaign on training access, availability, roles and responsibilities of the workers, supervisors and managers within. Employees need to understand how, but more importantly why, these protocols are in place. These campaigns can be followed up and monitored by the OHS consultant through guidance and coaching of personnel on the ground.
- Further to the previous bullet point, a simple Leaning and Development process or Training Completion process flowchart should be established and published on the intranet for ease of reference, which management and supervisors can refer to for guidance on training completion. This process would reflect the use of PS Access and eliminate the need for Training Matrices and the general feeling that training needs to be tracked at the regional and depot level.
- Even though night time work was a pilot project and not a focus of the audit, it is evident that there would be some additional training requirements that would accompany this work. CLD indicated that they have reached out but have no responses regarding this matter.
- It was noted by the CLD that PS Access was rolled out and that various computer training skills were offered to help individuals complete the computer training and other tasks required as a part of their job. CLD also noted that there are various government centres and sharing of computers at offices that can allow personnel to complete this work. Based on discussions with CLD and Region Management teams, there is a difference in opinion in training accessibility and resources for such activity. Certain depots lacked the proper infrastructure (e.g. Computer availability, intranet access). Further, it is unreasonable to suggest that personnel travel to

another office or utilize the open government building to complete leave request or online training (course dependant). As a result of multiple communications throughout the audit, it is noted that there is some misunderstanding or lack of acceptance and willingness for collaboration between the CLD and the regional management teams within the province. A suggested recommendation would be that if computer access is required for an employee's task, then it should be available within reason (minimum of one in each depot to be shared) so the employees can complete their task as a part of their daily work.

### 9.2 TCP and TCPS Training Findings and Recommendations

### 9.2.1 Traffic Control Person (TCP) Training

- **OFI** –TCP training does not have a section on fatigue management. Fatigue can pose exceptional operational and safety risks and it is vital to identify. Identifying the risk associated with fatigue can aid in developing mitigations to reduce the risk exposure.
- **OBS** Supervisors have expressed that a one-day training course does not give a worker an adequate level of understanding of traffic control and more practical training is required. This could include practical examples of sign set-up. TCP Training is a classroom setting which allows for questions and discussions but this could still have more practical components.
- **OBS** TCP Training completed for contractors is done by external companies and primarily focuses on how to be flagman. There needs to be consistency in the content of the TCP training which is provided to Government workers and contractors. Course content is developed by the 3rd party training company and approved by WorkplaceNL.

### 9.2.2 Traffic Control Person for Supervision (TCPS) Training

- AOC The virtual TCPS training does not provide the practical information and knowledge required to have a good understanding of the traffic control process and does not easily allow for questions. The perception from T&W employees is that the current TCPS training only works as a refresher based and needs to be more interactive, practical and hands on. This is especially important with the influx of new, younger personnel who only have the training to rely on. It was noted that the previous classroom based TCPS training had workers in groups to complete exercises, which seemed to work well.
- AOC There is a lot of redundancy within the TCP, TCPS and OHS e-learning training.
- **OFI** There is very little information included in the TCPS presentation on the SWP's section of module 5 (only 1 title slide). This is an extremely important aspect and should include focus on how and when the SWP's are required.

- **OFI** In the TCPS training presentation it did not show the actual incident form being used. Also, when the instructors went through the steps of the incident investigation process the first step was to report to supervisor. The first step should always be to provide aid or get support for IP, if incident resulted in an injury.
- **OFI** To have an appropriate understanding of training, the supervisors need to be trained in the use of traffic control layouts (e.g. why you have tapers, what the lengths are based on, why certain signs are used vs others, etc).
- **OBS** Trainer experience in traffic control is extremely important to ensure there is a knowledgeable presenter who can answer questions and provide guidance.
- **OBS** The TCPS Training presentation indicates reference to a participant manual, however, this was not provided or used in the training.
- **OBS** All eight core WorkplaceNL courses are required to be completed in a classroom setting. TCP is included in the core eight courses but TCPS is not. TCPS is not a required training but was developed following T&W incidents.
- **OBS** The training states to complete a hazard assessment, however, it did not elaborate on the process. (e.g. Supervisor review worksite and then complete hazard assessment based on work scope and worksite review). This process is extremely important and is the primary avenue used to discuss and communicate the hazards and provide hazard mitigations. Also, the hazards listed in the TCPS training were generally office based (e.g. did not see road traffic listed as hazard in traffic control training program).

## 9.2.3 TCP and TCPS Recommendations

- It is recommended to review the content of the TCPS training course and utilize experienced personnel (in particular, those who have both worked in the field and were previously an internal training provider) to assist with enhancing the course content. Some items for consideration are; develop hands-on practical group exercises requiring TCM layout selection and set up, exercises on developing a Hazard Assessment, etc.
- Consider incorporating some Fatigue management information in the TCP course to make personnel aware of the hazard.
- Consider using experienced trainers who are familiar with the tasks such as experience in Traffic Control and the Traffic Control Manual, Hazard Risk Assessment and Emergency response. This experience will allow for queries and discussion which will provide confidence for the trainees.

- It is the auditor's opinion, which was supported by the results of the audit process, that the TCPS training did not have the right focus nor delivery method which resulted in a course with minimal value to the trainees. Further to this, the auditors completed both the TCP and TCPS training within a week and it did not provide any level of confidence to utilize the TCM in the field. Recommend having the TCPS course focus on two or three key topics which are: TCM use, TBT in conjunction with Hazard Risk assessment and SWP's. It is suggested that this be completed over a 2-day time frame so that a deep dive can be completed on each of these topics to give the Supervisors and lead hands the knowledge and competency to lead their teams with confidence.
- During the audit, it was pointed out on multiple occasions that the in-house TCP training and the third-party TCP training is inconsistent. Thus, there are two different levels of training provided for in-house personnel vs the contractors hired for construction projects. It is recommended that the training provided to contractors to be the same standard training developed and approved for use in T&W. This would benefit the flexibility of Government to use both in-house and external training providers for the TCP course.
- Recommend that CLD work with WorkplaceNL on course content and training criteria for trainers to ensure consistency between internal and external training.
- If the intent is to keep the TCPS training in the current format, then the following recommendations should be considered:
  - Update content on steps of incident response and information on the forms to be used,
  - Expand the content of Safe Working Practices,
  - o Increase the time spent on TCM and include scenario exercise work,
  - Provide the reference material such as the TCM, sample SWP's and forms utilized in the processes discussed,
  - In addition, the course should be moved to a classroom based approach to allow interaction, queries and discussion which will enhance learning and understanding.

## 9.3 OHS Communication Findings and Recommendations

## 9.3.1 OHS Communications

 NCR – The Health and Safety (H&S) Policy posted on the first floor in Central Region main depot is dated 2006. It was communicated to management to update the policy as per the Newfoundland and Labrador Regulation 5/12, Section 13 Occupational health and safety policy.

- NCR During a depot visit in Labrador, it was noted that the last OHS committee meeting was completed on Dec 02, 2016. The OHS committee was not seen to be functioning properly and is required to have another worker representative, which the deport is struggling to keep this position. Training will be required for any new member joining the OHS committee.
- AOC A higher focus needs to be put on OHS communications within the province. This can include hazard alerts, safety alerts, lessons learned, safe working practices, etc. It is also suggested to have quarterly meetings between provincial management specifically to focus on OHS accidents, incidents, alerts, etc. Numerous Regional T&W Management interviewed during the audit believe that currently there is little OHS information shared / communicated within the T&W Department. Usually only provided information based on OHS directives (e.g. suspend working on highway). OHS communications have previously been provided to each region from the central headquarters in St. John's, via the local OHS Committee or the local OHS consultant. There was little evidence provided during the audit outside of the OHS committee minutes. It was noted that the Deputy Minister has recently had a safety stand down with workers across the province on important of incident reporting.
- AOC –There is no real process observed during the audit of sharing information including accident / incident info and lessons learned.
- AOC MEPS at Western Region Depot do not have a worker representative for the OHS committee. He has offered this to all worker's multiple times but no one wanted "responsibility" of the role. The OHS committee is extremely important, with the workers' rep being arguably the most important role. This role also provides an additional level of communication for workers in the field.
- **OFI** There has recently been an appointment of a new OHS Manager. This should be communicated to all regions included MEPS. This was not communicated to certain MEPS locations.
- **OFI** It was the opinion of numerous in-field labourers, lead hands and MEPS that the general public awareness of traffic control signage and processes is very low. It is suggested to consider avenues to increase public awareness (e.g. add campaigns, radio announcements, include info on driver's exams, etc.). An example suggested during the audit by a painting crew was to have a radio announcement made prior to operations to notify the public of painting operations, pothole patching, large road work, etc.
- **OBS** MEPS noted that there was no MEPS meeting either monthly or quarterly (within regions) to discuss OHS issues or concerns and share lessons learned. The only meetings currently held for maintenance are spring and summer meetings.

- **OBS** There is very little shared on OHS communication outside of an occasional letter from the Deputy Minister. According to a MEPS interviewed during the audit, their Superintendent of Operation will share information between the local MEPS but, with recent department changes, the regular communicators are occurring less often. In previous years, there were T&W central meetings attended by workers from across the province which were a good avenue to discuss safety issues, lessons learned, etc.
- **OBS** A MEPS interviewed during the audit was unsure on the purpose of the Supervisor signature on the Hazard Assessment form. Does this imply approval, agreement or responsible for ensuring hazards are captured? All workers need to know their responsibilities.
- **OBS** T&W management have communicated to their employees that if they do not have the resources to safely complete the job then do not attempt the work. It was noted multiple times during the audit that work did not proceed that day as there were not enough personnel to complete work scopes safely.
- **OBS** It was communicated to that auditors that in the past, T&W completed "road shows" which were a good opportunity for conversations and opinions between different areas of the province. Also, discussed safety issues, lessons learned and this helped provide consistency with traffic control across the province.
- **OBS** For traffic control layouts and general safety there does not seem to be consistency in what is required for the T&W crew and what is required for municipalities. There appears to be a different standard. This was noted on PPE use, sign set-up and traffic control.
- **OBS** OHS manager communicated that there is to be some clarity provided for T&W on a path forward with respect to the implementation of a government wide safety management system.

## 9.3.2 Management Communications / Meetings

- AOC Regional Engineering meetings were conducted annually with the director of highway and design. These meetings provided a good avenue to discuss safety issues, traffic control issues, and a good opportunity to communicate general information to ensure consistency across the province. Provincially there has not been meetings or regular communication with other regional engineers in 2 years.
- AOC OHS manager communicated that they have regular meetings with OHS consultants to get a status update on OHS orders, incidents, investigations and informal discussions on OHS topics. The consultants were also required to provide a weekly summary on tasks. It was noted by the OHS consultant that they communicate informally but no corporate safety meetings have

occurred in months and they do not have regional meetings with management (Regional Director, Superintendent of Operations and Regional Engineer). The consultant was also unaware of the hazards / safety alerts being communicated but understood it was the responsibility of headquarters to communicate lessons from incidents, but was told not much of this is being completed.

- **OFI** Regional Directors have weekly scheduled meetings with the Assistant Deputy Manager. This typically does not have an agenda but is more of a round table discussion. It is suggested to prepare an agenda prior to with a specific segment to be on OHS issues and initiatives. Here you could discuss accidents / incidents / safety flashes / OHS committee outputs, etc.
- **OBS** OHS Manager has a regular monthly meeting with all executives but does not have regular meetings with Regional Directors on OHS.
- **OBS** There are no regular meetings schedule with the Superintendent of Operations across the province. There is informal communication between regional management (Regional Manager, Superintendent of Operations and Regional Engineer) daily.

### 9.3.3 OHS Communications Recommendations

- Throughout the audit, it was identified that there are significant gaps in communication between all levels of the Transportation and Works Department. This includes sharing of OHS information as well as scheduled communications and meetings. It is suggested to develop a process specifically around OHS communications which will be rolled out to all senior management within the province. This process would also outline responsibilities surrounding OHS communications as there seemed to be confusion as who was responsible for OHS communications (e.g. hazard alerts, lessons learned, SWP's, etc.).
- The T&W Department cover a significant portion of Newfoundland and Labrador and because
  of that the importance of communication cannot be emphasized enough. Regular scheduled
  meetings between regional supervision can ensure OHS issues and lessons are being
  communicated to all levels of Traffic Control. This includes Regional Directors, Regional
  Engineers, Superintendents of Operations, OHS Consultants and Site supervision (MEPS /
  OPS). This can also help to ensure a consistent approach is provided across the province with
  respect to health and safety. It is not the intention of the auditors to recommend weekly
  meetings but to highlight the fact that meetings which were previously noted have been
  discontinued and / or seriously lacking. It was noted by numerous auditees that the "Road

shows", which were completed in the past, provided a great opportunity for conversations and discussions province wide.

- The biggest risk to traffic control employees is the traffic from the general public so any methods which can increase awareness must be considered. Ad campaigns on traffic control, radio announcements, Traffic Control signage within NL driver's exam are suggested tools which can educate the public in their responsibility. This concern was highlighted specifically by the traffic control workers working on the roadways.
- There did not seem to be any evidence of a process to share information including accident / incident info or lessons learned. The T&W OHS Program Manual briefly mentioned hazard alerts however, there was no evidence during the audit of sharing of hazard alerts within the T&W department. Most management were not aware of the process. These are an extremely important communication tool which can provided an illustrated summary highlighting OHS related issues in an understandable and quick manner, with the objective to share lessons learned within the department.
- It is suggested for the OHS Manager to send out an email communication to all provincial site supervision advising them on the OHS Managers role and responsibilities surrounding safety in the workplace.

## 9.4 Hazard Assessments Findings and Recommendations

## 9.4.1 Hazard Assessments

- NCR An Eastern Region Depot does not complete hazard assessments for yard maintenance. The hazard assessment process should be utilized for all jobs, especially for those we consider to be day-to-day as many injuries occur when completing everyday tasks. T&W Occupational Health and Safety Program, Section 6.0, Hazard Recognition, Evaluation and Control.
- NCR T&W does not sign on TBT or hazard assessments of the contractor when coming on to the site. It is suggested to make a best practice of reviewing and signing on to contractor TBT to ensure everybody on site is aware of work ongoing and associated hazards. According to the department of transportation and works specifications book Division 1 Section 190.8, authorized visitors shall not access the work site until they have been explained the risks, hazards and programs in place on site. This was not completed at any time during the audit.
- NCR During a Western Region site visit, workers were asked to provide the hazard assessment for the ongoing task which was sign maintenance. Workers were utilizing a hazard assessment from a previous job which was pipe cleaning and was in no way related to the task being completed. Workers stated that they were going to mark up the assessment with

information based on the new job. According to the T&W OHS Program Manual, Section 6.0 a unique hazard assessment needs not be performed for each workplace if the job faces the same hazards at multiple workplaces, and the safe work practices to be followed are identical at each workplace. This was not the case for these two distinct jobs in two separate locations, as the hazards and controls were completely different.

- **AOC** The quality of Hazard Assessments reviewed would vary depending on employee competence relating to hazard recognition and mitigation but in certain areas the competence level was low. An example, review included a scope of work to complete pot hole patchwork using machinery. However, there was no mention of working around or using small equipment (roller), working around heavy equipment (asphalt truck), working with asphalt. Furthermore, one of the controls on the hazard assessment was PPE however multiple workers on site were not wearing safety glasses during operations and some personnel were wearing hard hats incorrectly (i.e. backwards and on top of ball cap).
- AOC OHS Consultants are currently working with risk assessment teams to develop Job Hazard Analysis (JHAs) for specific scopes of work as well as helping to develop and / or update SWP's. This process is being completed by the two provincial OHS consultants however the consultants were not provided guidance on the structure of the talks (e.g. track SWPs being updated, what is left to complete, process on when completed, how to communicate when updated, etc.). Additionally, an OHS Consultant interviewed during the audit communicated that the OHS consultants selected risk management team participants without the consultation of local supervision. This leads to confusion relating to why certain employees were selected as local supervision could have recommended employees which were more suited for the team (e.g. choosing employee with limited experience in specific tasks).
- **OFI** TBT / safety meetings are not completed every day, specifically if completing the same topic back to back days. According to T&W Occupational Health and Safety Program, Section 4.4 Communication Methods, Toolbox Talks are to be held periodically, usually weekly (such as first thing Monday morning), at the work site, but may be held daily if indicated by workplace requirements. While not required, it is best practice to complete a TBT every morning at the start of a shift.
- **OFI** When reviewing hazard assessments, it was noted that the "actioned by" and "date/name" sections were not always completed. A MEPS interviewed stated that the responsible person would be the lead hand of his/her crew and they did not see the need to complete this section of the assessment. Also, the current format of the Hazard assessment form is restricted to three separate lines for hazards and three for controls. Typically, the workers are

only filling out these areas and consider this to be a complete assessment. It is suggested to review format of the Hazard assessment form and update. If certain sections are not being completed or the format is limiting information, then an update is required. This situation was noticed at multiple depots and sites throughout the province.

- **OFI** Further emphasis needs to be placed on the Field Level Risk Assessment (FLRA) and the process on which to carry this out when you reach the site. During the audit, we did not see any examples of the FLRA being used with MEPS noting they typically do not see many. Furthermore, the FLRA form shown during the audit is not provided in T&W Occupational Health and Safety Program. The auditors were shown a book which included copies of the form which can be filled out in the field but it is not clear on how to use the information or the provided form. It is suggested to include the current FLRA form on the back of the current Hazard Assessment form.
- **OBS** According to the OHS Manager, the hazard and risk assessment process is currently being revised. The new process would contain pre-filled hazard tables filled out based on the task and then use the current hazard assessment process (used by supervisors now) as more of a field based process.
- **OBS** The hazard assessment process described in the T&W OHS Program Manual does allow for generic hazard assessments if employees demonstrate that they have discussed and understand the hazards and controls associated with that activity. Generic hazard assessments were noted to be used at multiple locations during the audit.

## 9.4.2 Hazard Assessment Recommendations

- The Hazard assessment process is the main tool used by the workers to discuss and communicate the hazards and control measures associated with their tasks. It would be a good practice to develop fundamental training and workshops around the hazard assessment process including the Field Level Risk Assessment and Toolbox talks.
- To ensure all employees and / or visitors attending contractor work sites are aware of the scope and associated hazards it is recommended to make it a best practise to review and sign onto the contractors TBT forms and / or hazard assessments. It is an OHS requirement to ensure that everyone is aware of the hazards of the site and actions taken to mitigate these hazards.
- While not required by the T&W OHS Program Manual, it is considered a good safety practice to complete a TBT every morning at the start of a shift. Auditors did note that the Hazard assessment were required to be reviewed every morning which essentially covers the hazards

to be present that day. To avoid monotonous TBTs it is suggested to discuss different safety topics each day and / or looking for suggestions from the labourer's.

- It wasn't clear during the audit how the new risk assessment process mentioned above was being managed or tracked. Further information around this process should be communicated to all regions. This includes the objectives of the process (to develop new SWP's) and the current status. This is of increasing importance since one of the OHS Consultants has taken a year's leave.
- As per the conversation with the OHS Manager there is a new hazard and risk assessment process being developed using pre-filled hazard tables in combination with a field risk assessment piece. It is suggested to also review the current Tool Box talk form utilized within this process and update. It is suggested that for the Tool Box Talk form include, general info, work activity / task, hazard categories, biggest risk to people, stop the job triggers, who is doing what and work declaration.

### 9.5 Traffic Control Manual Findings and Recommendations

### 9.5.1 Traffic Control Manual (TCM)

- AOC The traffic control manual states that a qualified professional engineer is required to certify changes to the traffic control layouts. However, it was communicated by various managers and supervisors that adjustments can be made if it is based on increasing safety or sound technical judgment. The introduction section in the TCM considers both. The training did not provide any clarity on the above statements. The process for changes and modifications of layouts needs to be communicated throughout the province.
- **OFI** Previously, there was a T&W resource who was an overall owner of the Traffic Control Manual and process. It wasn't clear during the audit if this resource still existed or was just not filled at the time. There should be a central location and resource available to provide clarifications and answer questions based on the Traffic Control Manual and share new and developed layouts. This will also allow consistency across the province.
- OBS During TCPS training, when asked by the facilitator if attendees used the decision matrix most responded "no" as typically there are only 4 layouts used for the majority of work. It was noted that the table is confusing and decisions based on layout selection are done by experience.
- **OBS** According to the personnel interviewed, there are 2 main issues with the current TCM. There are too many layouts within the manual that are not utilized and they do not have specific

layouts which they encounter frequently. An example was noted of the TCM not having a layout for 3 lane work other than 752-27/28. Much of the NL TCH is a 3 lane highway.

• **OBS** – It is the opinion of a Contractor that, when working on the TCH with 2 lanes the large tapers can cause traffic congestion. Congestion leads to agitation which can provide an additional level of risk to the traffic control workers.

## 9.5.2 Update of TCM (Status)

- AOC Various personnel interviewed believe that the TCM is very outdated. Personnel were aware that any updates to the manual are to go through Head Office in St. John's which is viewed as a very slow process. However, the status of the new traffic control manual and person in charge of this work is not well known among the Management Team. A specific example noted during the audit was an employee who was on the most recent Traffic Control committee and provided a draft revision of a 2015 version to review.
- **OBS** Various regionally management highlighted there is outdated information in the current TCM and that a revision to the TCM is required. It was also noted that the applicable federal guidance (around signage distances) has been revised and not implemented locally.

### 9.5.3 TCM Update Suggestions

- **OFI** Field management and Supervision should be engaged in the process when revising the traffic control manual. (e.g. MEPS review).
- **OFI** The work zone dimensions' table listed in Traffic Control layouts highlights the maximum delineator spacing required in taper zones and work zones within the same box therefore causing confusion regarding which value directly correlated to the item it represents. To avoid confusion, it is recommended to separate the values in the table.
- **OFI** The Fundamental Principles section on page 13 of the Traffic Control manual has a specific statement regarding use of a dedicated traffic observer under certain circumstances (point #13). It is suggested to create a simple layout as this observer is not currently being utilized.
- **OFI** It is recommended that the addition of acceptable variances, tolerances and ranges be included in the manual relating to sign set-up options.
- **OFI** It is suggested to update the TCM layout to be more user friendly and highlight the decision matrix.
- **OFI** For short term work, "high speed high volume" or "high speed low volume" will generally be completed in less than 30 minutes (e.g. pothole patch work). It was noted by the

workers that there is a greater risk of setting up several signs relation to the time required to complete the task of pothole patchwork. It was suggested by in-field supervision from all regions across the province on the development of a more simplified layout with less signage and with 2 control vehicles. This would allow you to complete the work safely and in a timely manner. For extended areas, the use of electronic signage (pothole patchwork ahead for next X kms), in addition to the above, can also be considered.

- **OFI** There are alternate traffic control plans being requested and completed with approval in the different regions. It has been communicated that new or revised plans are not being communicated or shared. New TCM layout updates should be issued to all regions and posted on the intranet for use.
- **OBS** It was communicated during that audit that many layouts in the TCM have too many signs included within their set-up. Putting up and taking down signs is typically the highest risk operation of traffic control.
- **OBS** The traffic control manual does not have layouts for the following: 1) working in intersections, 2) pothole patchwork, 3) coming up to or working on bridges (cleaning), 4) plans for working in major interchanges.
- **OBS** A Western Region Depot was using a TCM layout from TCM 2016 Manual, which had been signed off and stamped by an engineer (753-2). While the layout was signed off by a PENG it was noted that the depot was technically using a layout from a revised manual that hasn't been released.
- **OBS** Where there are consecutive construction zones, no layout design exists to efficiently allow for continuation, rather it is confusing to the general public and motorists when they see multiple "construction ahead" and multiple "50km ahead" signs.

## 9.5.4 Managing Change within the TCM and TCM Layouts

- **OFI** Typically the traffic control manual does not allow for the introduction of additional signage or signage modifications. The process for introducing change should be reviewed and determined if site supervision (MEPS / Lead Hand) should be given the flexibility to modify a layout and note the differences and additions on the hazard assessment. The training does not currently cover this topic.
- **OFI** The change management process is not well understood. The new risk assessment process used to develop SWP's could be used to develop new layouts. The MOC process needs to be defined for both maintenance and engineering.

• **OBS** – It was noted by a Superintendent of Operations that you can use multiple traffic control layouts in conjunction with each other (i.e. using 2 separate layouts together). This may not be completely understood across the province. Confirmation of the acceptability of this process shall be confirmed by Management and communicated to employees (Auditors observed example from Maintenance project setup utilizing 752-2 and pg. 36 in TCM).

### 9.5.5 Traffic Control Manual Recommendations

- It is evident that there is confusion regarding the ability to change and modify the Traffic Control layouts to suit a particular traffic control situation while keeping the employee's safety in mind. The TCM itself is unclear about the process to follow to assess and implement change. Recommend a Management of Change process be developed and implemented to allow the flexibility and efficiency in making low risk modifications and changes to an existing traffic control layout. This process would need to account for the identification, evaluation of safety and suitability along with approval requirements. This will allow the supervisors to make practical changes in the field and still maintain the safety of the personnel involved.
- As result of the "opportunity for improvement" items identified above, it is suggested for someone to be assigned accountability for the Traffic Control Manual. It is recommended that a dedicated focal point for management of the Traffic Control Manual, Traffic Control queries and clarifications for consistency of process. This will enable monitoring of change requests and ensure that manual revisions / updates are done more efficiently.
- It has been a common theme throughout the audit that there are key Traffic Control layouts missing from the manual i.e. Pot Hole Patching, working in intersections, etc. It is recommended that the Opportunities for improvement be implement as noted above. During the development of these layouts, it would be beneficial to utilize experienced field personnel to review and comment on layouts to ensure all key elements are considered before issuing for use.
- Suggestion to review and revise the TCM to be user friendly as it is poorly organized making it difficult to navigate to find particular items such as the decision matrix.
- Currently, there are TCM layout changes made at the request of an individual region and these changes are not being shared / communicated around the province. It is recommended that a process be adopted for development, issuance and storage of new TCM layouts for ease of accessibility and use in all regions until such time a manual update is completed.

- There are many observations noted throughout the audit:
  - Deploying and retrieving signs is high risk during maintenance work especially for short term work / slow moving operations scenarios,
  - Too many signs used in some setup situations,
  - Conflicting information across regions, and work groups,
  - Use of control vehicles, electronic signage and crash attenuators would provide a higher level of safety versus deploying multiple signs.
- It is recommended that these observations noted above be reviewed and assessed as this is direct feedback from personnel executing the work. Working with front line personnel to arrive at a final product will also have a higher probability of adherence because they were involved in the process.

### 9.6 OHS Reporting Findings and Recommendations

### 9.6.1 OHS Objectives

- **AOC** During the audit it was noted that there are no goals / objectives provided by the department. There is currently no requirement for Key Performance Indicator (KPI) reporting including accident/incident rates.
- **OFI** There is no direction provided by headquarters with regards to H&S objectives, targets, etc. Auditee could not determine what statistical data is maintained, where and by whom. Each region should be provided with a set of H&S objectives and targets which they are required to meet or exceed. This could include a target of a low incident rate, complete % training, 0 LTI, etc.
- OFI There are no objectives / targets established for the OHS Managers department for safety. These should be established early in the year and tracked throughout the year to ensure compliance with the key performance indicators. It was noted during the audit that OHS processes are still being developed and not considering how to track or generate metrics or key performance indicators.
- **OBS** According to Section 4.6 in the T&W OHS Program Manual, the program should be reviewed at least every three years and updated based on changes within the program. The last time the OHS program was updated was in 2014.

## 9.6.2 OHS Reporting / Statistics

- AOC There are no H&S statistics completed and / or analysed, aside from reporting of accidents / incidents and near misses as this is not a requirement from headquarters. There are no regional departmental statistics maintained for tracking or trend analysis purposes.
- AOC There are no goals or KPIs provided to each region on what H&S statistics are required to be tracked and reported. Incident rates are unknown. Regional Directors were not aware of the incident register. There is no monthly reporting required outside of informal ADM meeting.
- **OFI** Engineering contractors provide monthly reports to T&W engineering team which includes the HSE statistics (leading and lagging indicators), total hours worked, etc. This info is not being used by the department and should be captured as part of their reporting / KPIs.
- **OBS** H&S statistics / information is not shared throughout regions or from headquarters.

### 9.6.3 Site Reporting

• **OFI** – T&W does not have a hazard observation / identification system which can be utilized on site, aside from the form used to document accidents / incidents. Regional Management noted that there is potential benefit of having a system in place. There could also be an incentive program implemented to encourage participation if developing such a system is considered.

### 9.6.4 OHS Reporting Recommendations

- It is suggested that each region be provided with a set of H&S objectives and targets which they are required to meet or exceed. This could include a target of a low incident rate, complete % training, 0 LTI, etc. Objectives / targets should be established early in the year and tracked throughout the year to ensure completion.
- Engineering contractors provides monthly reports to T&W including H&S statistic. This information is not being used by the department and should be captured as part of their reporting / KPIs and to complete trend analysis to highlight areas requiring focus and improvement.
- H&S statistics and information is not shared throughout regions or from headquarters. It is
  suggested that when an accident / incident / near miss occurs, that information be sent out to
  all regions as a safety alert to prevent reoccurrence in another region. Additionally, it is
  recommended that there be an avenue for employees to discuss concerns and issues and lesson
  learned sharing with regards to health and safety (quarterly meetings, annual conference etc.).

• T&W does not have a hazard observation / identification system which can be utilized on site, aside from the form used to document accidents or incidents There could also be an incentive program implemented to encourage participation if developing such a system is considered.

### 9.7 Contractor / Subcontractor Management / Selection Findings and Recommendations

### 9.7.1 Contractor Management

- **INCIDENT Near Miss** During a site visit, a vehicle stopped and pulled between traffic delineator posts. When the vehicle realized they could not proceed through the work zone due to man lifts and barricades blocking its path, the passenger exited the vehicle to move a delineator post so the vehicle could back up and leave the worksite. It was mentioned by the Contractor supervisor that the Audit team and Contractors may have distracted the vehicle by their presence. There were also multiple instances of vehicles going down one lane and then backing up to go into the other lane.
- NCR / AOC Central Region Contractor Site Visit
  - PPE not being worn by contractors not wearing glasses and hard hats on site
  - 2 workers up in the cab of a roller with one worker smoking while the equipment was being moved.
  - During a drive through of the site, our vehicle (we were driving with a T&W employee) as well as other public vehicles, were caught between a roller in operation and a flag person who was controlling traffic. Fortunately, the department vehicle was the head vehicle and could control those behind us, but this could have been serious.
  - Flag persons observed on cell phone while working.
  - TCM layout was incorrect and missing signs, sign obstructing other signs, signs blown over, etc. (Using 752-3 – instead of flag person sign using truck turning sign, soft shoulder sign blocking off signage as per layout, No construction zone ends sign for multiple work zones, Incorrect sign usage and spacing).
- NCR / AOC Western Region Contractor Site Visit
  - While reviewing training certificates for a contractor labourer he commented that he did not have the TCP training, however did have it in the past. He commented that he helped set up the traffic control signs and also acted as a flag person to help equipment movements around work site. This is against the TCM and T&W OHS Program requirements. He did advise that he mentioned this to the CSO and was going to be trained shortly. This does

not meet the requirements of T&W Spec Book Division 1 Section 190.3.6 Instruction and Training or TCP training requirements (pg 3 in training handout).

- Training certificates for the site manager not kept on his persons but he commented that these were provided in the bid to T&W.
- NCR / AOC Eastern Region Contractor Site Visit
  - Town municipality working within the Eastern Region contractor controlled site but not under control of T&W or contractor. Municipality coordinates work with prime contractor but it was not clear to the T&W engineer or the auditors who is responsible to manage their safe work practices.
  - During the site visit, when asking the employees which traffic control layout was being used, the auditor was told by the on-site technician that they were using 753-1. Auditor was then told after that they were using 752-3 within 753-1, 752-3 was the principal signage and 753-1 for progressive signage. It was not clear at any time during the audit which layout was required to be utilized.
  - While reviewing the traffic control signs, the following was noted:
    - There were no 50km signs installed (Noted by T&W that they have reduced the speed of the construction road to 50km so they did not use the 50km signs outlined in the traffic control layouts.)
    - No "no passing" signs installed
    - No "construction zone begins" signs at the entrance to work site
    - No "construction zone ends" signs installed at the end of the work zone
    - No "lane closed" taper sign installed.
  - The sign spacing on site was closer than indicated in TCM. Also, did not see any pylons being used or delineator spacing around work zone.
  - When a copy of the ER plan was requested from the CSO, it was noted that they did not have a copy. Auditor was advised that they go over ER in all orientations and that all contractors have ER numbers available.
  - The following concerns were noted with contractors working on site:
    - Flaggers leaning against cars,
    - Contractor supervision not wearing safety glasses,
    - Contractor working on the edge of the roadway with back to traffic.

- During the visit, the technician on site advised that they weren't following the layouts included in the manual but if OHS came on site, they would explain that they were adding additional levels of safety, this practice is introducing risk to the worksite and increases potential for incidents to occur. Knowingly accepting such deviation to process is deemed to be negligence on behalf of supervision and such practices shall be investigated further and corrected.
- NCR / AOC Avalon Region Contractor Site Visit
  - When reviewing an Avalon Contractor site, auditor was told the Traffic Control Layout used for the site was 752-2. However, the layout used was actually a modified version of this layout with additions interpreted as increasing the level of safety (reduced speed on ramp to 30, 3 different sign set-ups, signage distances, etc.) however these changes were not signed as approved by supervision / Engineering.
  - Contractor Supervisor did not have an emergency response plan on site and auditors could not determine the plan to be utilized in the event of an emergency.
  - Contractor Forman who is responsible for the site set-up and overall jobsite did not have Traffic Control training. This does not comply with the requirements of T&W Specification Book Division 1 Section 190.3.6 Instruction and Training or TCP training requirements (pg. 3 of training handout).
  - T&W technician on site did not have Traffic Control training certificate available. This does not meet the TCP training requirements.
  - Contractor did not have a copy of Site Specific Safety plan on site. It was noted that the safety manual was on site.
  - Contractor had only two (2) persons on site who had TCP training, which were flagging at the time of the audit. Auditors were told there was no other person on site with TCP training and no one available to relieve flaggers. There is a risk of having untrained personnel doing Traffic Control in the event a current flags person should leave or take a break, etc.
  - Three (3) contractors were observed standing close to an edge of the worksite. When questioning foreman on requirements afterwards auditors were told the distance to edge should be 4 to 5 ft, which was not being following initially.
- NCR / AOC Labrador Region Contractor Site Visit
  - Not all the employees in the survey crew had their training certs available, when requested.

- Contractor Flag personnel were not in the correct location to control traffic. During the site drive through both flags personnel were standing on the same side of the road. T&W supervision notified the Flags person and they corrected their positions.
- Observed a contractor flag person sitting on the opposite side of the road on a bucket. The flags person moved to the traffic control position when traffic was approaching the work zone.
- Flags personnel engaged with the travelling public motorist. The flags person was observed to be standing at the driver's side door and in the traffic lane on the outboard side of the flag. This was highlighted to the contractor for correction / discussion in their TBTs.
- AOC T&W Spec Book Division 1 Section 190.18 PERSONAL PROTECTIVE EQUIPMENT. In addition to those requirements set forth in the Occupational Health and Safety Act and Regulations, all persons, including those employed by the contractor or sub-contractors, working on projects for The Department of Transportation and Works shall wear the following mandatory Personal Protective Equipment at ALL times while working on the project.
  - 1 CSA approved safety boots
  - o 2 CSA approved hard hat meeting the 1992 standard
  - o 3 vest with retro-reflective stripes (High Visibility)
  - 4 other personal protective equipment, as may be required from time to time by the engineer, depending on duties being performed, shall also be worn

Eye Protection should be a mandatory PPE requirement as well as the required CSA standards being stated with the latest revisions of the standard reflected.

- AOC Engineering contractors are awarded from St. John's office. Specific region(s) where
  the work is occurring do not have any input into proposal review. Contractor selection is
  awarded solely on lowest bid. Auditee was not aware of OHS being involved in bid process.
  Typically, the contractor is selected by the tendering group and assume all reviews are
  completed prior to. Bid packages do not contain any H&S information and H&S is not
  considered during the bid evaluation process. Contracts are awarded based on technical and
  commercial submission only.
- AOC All Contractors provide a site-specific safety plan which outlines the safety processes to be used on that site. The only person which reviews the plan is the resident engineer assigned to the scope and this is not a thorough review (double check against the specification). Also, no safety personnel review the site safety plans.

- AOC During an Avalon Region Site Visit the auditors were advised that the CSO was shared between different sites and was currently on the west coast.
- AOC Contractors progress payments are based on the reporting requirements to T&W. This includes H&S statistics, TBTs completed, hazard assessments completed, etc. There is a risk that many of the contractor's safety programs are not being confirmed / reviewed periodically but rather at the end of the month when reviewing the monthly report. Much of the information on accidents / incidents and near misses could go a full month without the information being provided to T&W. The H&S statistics provided are not compiled and / or analysed but rather kept just as record by project. These should be kept as part of overall engineering department hours and safety statistics and potentially sent to headquarters for analysis.
- AOC Even though it was requested the day prior, the Central Region contractors were not made available to the auditors during the site visit, therefore, no objective evidence on the contractors H&S program could be verified. Contractor Management audits should be conducted on all contractors.
- AOC Regional Engineer noted that they complete contractor evaluation forms based on contractor performance within a job. These forms are provided to T&W headquarters but not sure on what, if anything, is done with them afterwards. It was communicated during the audit that in the past contractors have been given a failing grade on past scopes of work and the same contractor was included on future tenders. Contractor evaluation and approval process should be communicated to all regional engineering management. Contractors receiving a failing performance review should have to demonstrate improvements before being consider for future tenders.
- **OFI** The Engineering department utilize contractor evaluation forms to evaluate contractor's performance following a scope of work. These evaluations are based on quality of workmanship, timeliness and management / administration. Safety should be a main topic evaluated and considered for future contractor selection. It is suggested to update the form to include a safety evaluation.
- **OFI** It was noted that some of the contracts / engineering projects may span over a couple of construction seasons. When asked how are they are evaluated it was stated that they are not evaluated until the contract is complete. Suggest a Lessons Learn process be implemented and information gathered after the construction season to be incorporated into the next construction season with Health and Safety being the primary topic in those discussions.

- **OBS** It was communicated during the audit that the CSO requirement is based on dollar value (i.e. needs to be allocated for in tender submission) rather than on safety requirements of jobsite. However, the new amendment to the T&W spec book states that the CSO is mandatory for all contracts.
- **OBS** When reviewing contractor's documentation, it was noted that TBTs are completed weekly as per T&W requirements. It is always good practice to complete TBTs/safety meetings prior to the start of every shift.
- **OBS** There is no formal process for capturing and reporting hazards observed on site. Other than the pre-construction meeting, there is no discussion on how hazards will be captured and addressed.
- **OBS** The CSO position is filled by a contractor resource. As this is not a T & W position, personnel in these positions may not be willing to stop a job or raise safety concerns out of fear of discipline. Currently, T&W does not have an equivalent dedicated safety counterpart or contact that the CSO can communicate with regarding safety issues, monitors H&S on site not from an enforcing point of view but rather as a support / continuous improvement role.
- **OBS** The T&W responsible person for a specific contracted site was the Senior Engineer. Typically, there would be a technician on-site to manage the day-to-day responsibilities which includes logistic management between the T&W crew (surveyors, labours) and the contractors and sub-contractors. There didn't appear to be enough resources for T&W to effectively manage and confirm the contractors H&S System is implemented and effective.
- **OBS** It was noted during the audit if a radar sign / electronic sign is required on site, that it can't be obtained unless it had been included in the commercial contract. Use of this signage should be based on the site and risk assessment. Given the fact that this equipment it utilized to make a worksite safe then there should be a means to ensure that it gets captured in all commercial agreements or have a means internally to obtain as required during a task. Site personnel were not aware of a process to obtain such equipment.

## 9.7.2 Contractor Management Recommendations

• It is recommended that the T&W spec book be revised to include eye protection as a mandatory PPE requirement. When completing road work, it seems evident that eye injuries are of high potential and probability, and eye protection would be the last line of defence in preventing an injury.

- It is recommended that the T & W Spec book be revised to capture all applicable codes and standards referenced or required and ensure that the latest revisions of the codes and standards are utilized. As example, the spec book references a 2012 CSA standard for P.P.E which was revised in 2015. A process shall exist to ensure new standards are utilized and implemented.
- It is recommended that Contractors be required to submit health and safety information along with a technical and commercial submission for bid packages. Health and safety should be a focus during the bid evaluation process. Additionally, the regional employees will be working with the contractors and should be involved in selection, specifically if there are any issues related to past experience. It is also suggested to update the contractor evaluation form to include a safety evaluation, and include this in the bid evaluation process. This contractor evaluation process should be rolled out and communicated to all personnel.
- There is no formal process for capturing and reporting hazards observed on site. It is suggested to have contractors implement / utilize a program such as an observation card program to formally document issues and measures taken to mitigate and close out.
- An observation during the audit highlighted that there is a lack of resources to be responsible for contractor management from a health and safety perspective. There is no dedicated resource to ensure that the Contractor Site Safety Plan is adequate for the operations, or to ensure that they are following the standards set out in the plan. This role could also be beneficial to communicate safety issues, monitor H&S on the site, and as an educational / continuous improvement perspective.

### 9.8 Safe Work Practices (SWP's) Findings and Recommendations

### 9.8.1 SWP Findings

- AOC During the audit it was unclear how the SWP's are being utilized in the Traffic Control process. More guidance on the use and purpose of SWP's needs to be provided to supervisors. The process of updating and approving SWP's is unknown and this should be communicated to all supervisors as well as the current status of the SWP's updates.
- AOC The SWP's are typically developed with input from site supervision. Once developed, these go into St. John's to be reviewed and signed off. This is an informal process and not properly documented about how to obtain approvals, to whom, where they go, etc. Section 5.0 in the T&W OHS Program Manual lists all steps to complete SWP's but this was not typically known by supervision during the audit.

- AOC The SWP's for a Central Region depot were kept in a binder which the MEPS had available to all employees, however the MEPS was unaware of where the master copies were stored online. Additionally, most of the SWP's reviewed were last updated in 2009. The general SWP's are typically only reviewed in the pre-summer meeting with specific SWP's reviewed if a unique / different scope of work.
- **OFI** The SWP's are at times noted on the hazard assessment forms but regional management advised that these have not been updated in a long time. Most management / Supervision were not aware of the new committee for updating the SWP's or the status of such. All management should be consulted and updated on the SWP's revision process and how this is to be communicated. It is also suggested to review the more common SWP's in the pre-meetings each year with the workers.
- **OBS** It was noted during discussions with the MEPS that the system for reviewing and updating documents is difficult to utilize effectively. It was communicated that the site where the SWPs are stored online is not user friendly and that it could take up to an hour to locate SWP's. Therefore, the MEPS kept copies of the SWP's on a jump drive which would be used for printing SWP's when required for use or review. No notification on updates to SWP's provided to the MEPS and it was up to the MEPS on site to review the online copy. Suggest that all site supervision by notified when SWP's are updated or new ones released for use.
- **OBS** SWP's are not typically reviewed every day but reviewed if it is the first time completing that task in a long period.
- **OBS** During site reviews of SWP's it was noted that many of the SWP's are last dated 2009 revision.
- **OBS** The SWP for "Backing of Mobile Equipment" states to use a guide person "if available" rather than ensure / shall. Wording of the SWP's and what is required vs what is suggested need to be clear in all practices.
- **OBS** Auditor was advised during Avalon site visit that workers do not use the SWP's on site nor are they brought to site for reference.

## 9.8.2 SWP's Recommendations

• The process for use of SWP's needs to be rolled out to all employees as it is not typically understood how and when they should be used instead of only being available in the system for reference when needed.

• All management should be consulted and updated on the SWP's update process and how this is to be communicated. Additionally, after an update has been made to SWP's, a notification should be sent to all site supervision. It is also suggested to review the more common SWP's in the pre-meetings each year with the maintenance workers and in the pre-construction meetings with the engineering team and contractors.

### 9.9 Accident / Incident / Near Miss Investigation and Reporting Findings and Recommendations

#### 9.9.1 Accident / Incident / Near Miss Investigation and Reporting Findings

- NCR Avalon Region Management have participated in accidents / incident investigations however they have not been provided any root cause analysis training. Investigations were completed using examples of previous reports. Western Region MEPS are also after leading investigations into incidents but did not have any specific training nor aware of training available to them.
- AOC Accident / Incident notification process involves completing an electronic form which
  is submitted first to your supervisor and then directly to the Deputy Minister. It is the Deputy
  Minister who reviews the initial notification and then will assign personnel to review and
  investigate. A gap exists as local regional management (e.g. Superintendent of Operations,
  Regional Engineer, Regional Director) are not notified of the accident / incident (outside of
  his/her direct supervisor) prior to Deputy Minister being notified at headquarters. Also, this
  revised process does not align with the current documented Accident / Incident Investigation
  process as written in the T&W Occupational Health and Safety Program, Section 8.6.3
  Reporting the Findings of an Investigation.
- AOC Regional Management were not aware of the requirement to complete accident / incident investigations. It was suggested that it was the OHS consultant's responsibility to complete investigations with management sign-off depending on severity. Regional Management are also not trained in incident investigation process nor aware of training but Regional Management did note they are required to report accidents / incidents to St. John's headquarters. It was also noted that Regional Managers generally do not receive feedback regarding incident reports submitted to headquarters. Auditors were advised that information / feedback has been requested without response.
- AOC There were conflicting reports noted during the audit regarding the amount of reporting completed in relation to accidents / incident / near misses however, it was noted that this has been recently highlighted by management (e.g. Teleconference with Deputy on importance of

reporting). The consensus is that the reporting has improved but there is still little to no near misses being reported. This could be attributed to it being generally seen as a paper exercise and employees not seeing the reason for completing. Also, it was communicated that some feel there are negative consequences which come from reporting near misses if they involve a breach of protocol / processes (punishment associated). There have been previous examples of personnel being sent home / losing pay following an incident. This leads to a culture of workers not reporting incidents and near misses due to negative consequences being associated with this.

- AOC During the audit, a Western Region MEPS discussed an example used in reporting of accidents / incidents where vehicle damage incident occurred when a piece of equipment ran over / into a garbage box. At the time of the audit the MEPS was unsure if this incident had been reported or what the current status of the investigation was. It was noted that the MEPS had taken vacation for a week and was not 100% sure on the new accident / incident process to be used. It appears that there is no mechanism for tracking incident investigations and associated mitigation measures to closure.
- OFI An OHS Consultant interviewed during the audit was not aware of the accident / incident spreadsheet which was shared with audit team. The Consultant was also not aware of the incident rate for the region (incident rate does not exist). It is common for headquarters to call the consultant asking information on an incident and the OHS consultant not be aware of the incident. It is suggested for the OHS consultant to be on the initial notification, as in many incidents the consultants are responsible for the investigation. The function of the OHS Consultant position as well as roles and responsibilities for this role shall be reviewed.
- **OFI** The regional management team should be copied on all incident reports within their area and there should be a mechanism that all reports are shared with regional management once they are received and investigated. It is also suggested to have an immediate incident notification that all authorized personnel receive a note / brief description of an incident / accident that has occurred.
- **OBS** The process for investigations is not clearly understood and / or outlined within the T&W OHS Program Manual, Section 8.6.
- **OBS** Regional management were not aware of any spreadsheets used to track accidents / incidents.

#### 9.9.2 Accident / Incident / Near Miss Investigation and Reporting Recommendations

- The Current process in the T&W OHS Program Manual does not align with the new Accident / Incident / Near Miss Reporting process outlined during the audit. It is recommended for T&W to update the process within the OHS Program Manual. It is also suggested to review the process flow to ensure the correct personnel are involved at the right steps. Potentially, the local regional supervisor should be notified, then the OHS Manager or delegate should be the first person to action the report at headquarters with the Deputy Manager being notified accordingly.
- The process for investigations is not clearly understood and / or outlined within the T&W OHS Program Manual, Section 8.6. Some employees noted they have completed a one-day training course for conducting investigations, while other haves no training. It is suggested to develop a structured / formal process to ensure all OHS incidents occurring at T&W sites are classified, notified, investigated, analyzed and reported, to the same standard using consistent definitions and reporting format.
- It is suggested to develop a HSE communication matrix for accident / incident / near misses which will determine the type of response / communication as well as the reporting lines (e.g. Regional Management, Site Management, etc). The results of investigations, specifically the lessons learned, should also be shared, as appropriate, to each region. As noted in OHS Communication findings, there is no evidence of a process to share information including accident / incident info and lessons learned. See recommendations above on the sharing of accident / incident info and lessons learned (e.g. Hazard alerts).
- It was noted during the audit that T&W management have recently communicated the importance of accident / incident / near miss reporting to all employees however improvements are still required. Workers need to be educated on the importance of reporting and why they need to report all near misses and incidents. Also, a disciplinary culture around investigation findings will only lead to less information being reported.
- It is recommended for all employees who are responsible to conduct an investigation into an accident / incident / near miss are to be trained appropriately. This training should have an emphasis on how to find the root cause, conduct an investigation and make effective recommendations to prevent similar occurrences from happening again.
- Refer to the OHS Reporting section for recommendations around reporting and tracking of accident / incident / near misses.

### 9.10 Emergency Response Findings and Recommendations

#### 9.10.1 Emergency Response Findings

- NCR During a discussion on emergency response drills it was noted by multiple personnel that the white hills facility has not had a fire drill in recent memory.
- AOC During the audit there were instances where supervisors and personnel interviewed on the worksite were not familiar with the emergency response roles identified on the emergency response plan.
- **OFI** Not all engineering or maintenance field personnel have in-reach devices for emergency situations. During TCPS training it was communicated that all employees who work in areas that have no radio or cell service will have these devices or SAT phones where necessary, to be utilized during an emergency. This was not the case for all employees interviewed during the audit.
- **OFI** The emergency response plans reviewed during the audit had incorrect contact details as the previous OHS Manager was still listed as a contact. This should be updated to reflect the new OHS Manager. Additionally, now with province wide 911, this should be listed as the primary number for emergencies.
- Emergency Response Drills:
  - OFI No emergency response drills conducted. Impractical to complete drills at the worksite however suggest adding a table top communications drill during contractor orientation / pre-construction meetings to test numbers, roles and responsibilities and ensure all parties are familiar with protocols in the event of an emergency. It was noted that for a recent engineering project following an incident the correct Emergency Response (ER) protocols were followed.
  - OFI Each hazard assessment for a scope of work will contain an associated emergency response plan. These emergency response plans are not typically tested / trialled for effectiveness. It is suggested to complete a table top exercise / communication drills on the emergency response plan.
- **OBS** A supervisor interviewed during the audit has developed his own form to indicate who was responsible for ER roles which included a contact list for the various areas of operation within the region. This form looks to meet the intent of the program but does not follow process provided to supervision for provincial use.

### 9.10.2 Emergency Response Recommendations

- It is recommended to develop an ER process which governs site response and corporate notification protocols for guidance and support. This process should also provide guidance on roles and responsibilities so that personnel can be trained on these roles for confidence of execution in the event of a real emergency. This process should also define ER training and exercise protocols to ensure compliance and competency in the event of a real emergency.
- Complete an emergency response /fire drill at all locations, as required by legislation.
- Update emergency contact information contained within the emergency response plan to reflect current contact personnel and emergency numbers.
- Recommend conducting ER table top exercises specially to test all communications to emergency services. This is particularly important in more remote areas where we are relying on Sat phones, in-reach or 2-way radio to contact the main depot or regional office to relay the need for ER services.
- Typically, a supervisor will appoint personnel to the roles on the ER form but noted during the audit that most employees are not sure what the role is responsible for. ER training is required with supervisors and front line personnel to ensure that they understand the roles defined on the emergency response plans utilized in the field.

#### 9.11 Document Control

#### 9.11.1 Document Control Findings

- NCR During a review of an MSDS binder at Western Region Depot and it was noted that first 3 MSDS sheets required revision (2010 was validation date). This was noted to the MEPS.
- AOC Generally, the SWP's provided to employees are stored in a binder on site. Once a copy is printed it becomes uncontrolled information and required to be updated periodically to ensure the correct information. There are issues with access to computers, access to government servers, or high speed internet so many locations are unable to access the information online to ensure they have the most up-to-date copy. In these situations, the locations typically would depend on their supervision (e.g. Superintendent of Operations) to send them new or revised information via email.
- **OBS** Throughout the audit it wasn't communicated nor were people aware of a document control structure within the region.
- **OBS** A Regional Engineering Department was using a traffic control set-up from a shared layout previously designed for another project in another region. This was approved by the

local engineer (Not engineering stamp but signature and date) but still references the old project number without reference to the current project.

- **OBS** All forms and documentation are stored on M:Drive locally if the location has access to the government servers. Also, document updates are normally communicated via email. We were advised that Traffic Control Manual, T&W OHS Program Manual and SWP's is available on intranet website.
- **OBS** The T&W OHS Program Manual was distributed as printed copy on release. This causes potential to have uncontrolled copies on worksites.
- **OBS** A Western Region Depot MEPS developed a universal safe work manual which the workers can take to site. This includes information from the T&W OHS Program Manual, Safe Working Practices, and the Traffic Control Manual. Also note that this is uncontrolled information which would periodically need to be updated to ensure the correct information is included.
- **OBS** The OHS Program for T&W provides a health and safety policy for all employees in T&W. However, the OHS Manager believes each department should not have a separate policy but one policy statement under the Human Resources Secretariat. It was noted during the audit that this has been communicated to department management but not officially rolled out.

### 9.11.2 Document Control Recommendations

- Revision control was an issue noted throughout the audit. It is recommended to remind all employees on the important of using the proper information. It is also suggested to review the Documentation and Records Review Section 4.5 in the T&W OHS Program Manual and update as per current processes.
- As stated in the OHS Records findings, the T&W OHS Program Manual has not been updated since 2014. In addition, it has been communicated by the OHS Manager that the Government is looking at creating a standard OHS Policy which will apply to all departments. As the OHS Program needs to be revised it is strongly suggested to progress this update by the end of the year.
- There were issues noted when accessing the SWP's online as some were not available and many of the SWP's reviewed during the audit were last updated in 2009. As mentioned within the SWP's section, the current review process needs to be communicated to employees and the proper resources need to be allocated to ensure completion.

• It wasn't clear during the audit if a new / revised layout required an engineering stamp approval or just a signature and date. It is suggested to update the TCM if this is considered a requirement.

### 9.12 Resources / Tools and Equipment

### 9.12.1 Resources / Tools and Equipment Findings

- AOC PPE
  - Noted that PPE is not provided in a timely manner i.e. Chain Saw Safety Gear.
  - PPE not being maintained. i.e. Safety Harnesses for fall arrest not being regularly inspected / maintained.
  - When asked about prescription safety glasses a labourer was told that the funding has run out and these could not be provided.
- AOC Currently there is restructuring ongoing within the T&W management for traffic control which effects the position of the Regional Director. These positions are being made redundant and T&W are creating 2 new positions: Director of Highway Design and Construction and Director of Highway Operations. The director of highway operations will be responsible for Winter / Summer Maintenance and the Traffic Control Manual. At the time of the audit it could not be determined how the reporting structure will be changed or how the new responsibilities for the Director of Highway Operations will affect the traffic control program and ultimately the Health and Safety of the employees.
- **OFI** It was highlighted that the Regional directors do not have time to travel to various depots under their remit and currently they require a journey authorization approval from headquarters. Management engagement at the work sites and depots will help further build a positive safety culture and communicate management commitment to safety.
- **OBS** The traffic control layout signage for sites is extremely important however the electronic signage boards provide an additional level of safety that the typical signs do not. It is the opinion of majority of site personnel that arrow boards, message boards, radar boards, control vehicles with flashing arrows, etc. are great tools to highlight traffic control operations and notify the public of ongoing work.
- **OBS** CLD training process requires all workers to have access to computers. It should be noted that not all depots have access to computers, government servers, or high speed internet. There is a process underway to ensure all depots are provided with computers but also noted

that some workers will require computer training. Certain Depot locations have had the OCIO come to provide training on how to use computer / access emails / find certificates.

- **OBS** There are a couple of regions where the Superintendent of Operations and Regional Director roles are being performed by the same person. Employees have left and the department has not had their positions filled.
- **OBS** The perception of the OHS Consultants is that with previous OHS Management there was more of a policing approach which affected how the employees responded to the OHS consultants. With the new OHS Manager there has been more focus on coaching and safety support, including:
  - Safety investigations
  - Site visits (support not policing)
  - Developing checklists for supervisors
  - Promote safety over schedule
  - Less site visits but more phone calls / support
  - Heading up risk assessment teams
  - Delivering training
- **OBS** During a site visit it was noted that workers are not always provided the basics in varying weather conditions i.e. water for hot humid days as required by the manual.
- **OBS** Difficult getting lead hands / supervisors Personnel do not want the responsibility for the site / safety of the crew due to the hazardous nature of the work and a lack of confidence using the TCM manual.
- **OBS** There are not enough engineering resources in some regions to properly manage all the contractor sites. It was noted in one region that the Regional Engineer was directly responsible for managing multiple sites.
- **OBS** Currently the organizational structure in government is undergoing change. The OHS Manager (and consultants under the manager) will still be primarily reporting to the ADM of Corporate Services, however will also will be supporting all branches of Transportation and Works.
- **OBS** Leaving traffic control signage on the roads while no work is taking place sends the wrong message to the public and further compounds the issue of public awareness when working on the roadways.

• **OBS** – A MEPS pointed out that sometimes for traffic control setup they are using is limited as they do not have many vehicles (trucks) available. Was noted by MEP that current truck he is using has 410,000kms.

### 9.12.2 OHS Consultant / Safety Resource

- AOC Originally the province had 4 OHS consultants but now only have 2 which are generally used more for coaching and training. During the audit this was further reduced to 1 current OHS Consultant for the entire province as the other consultant has taken a year's leave with the position to be filled. The OHS consultants do not have time to do what is required and most locations only see or hear from consultants when something happens, therefore resulting in a reactive culture.
- AOC OHS Consultants struggled with lack of direction and communication coming from headquarters. Many times, the strategy, directives and desired outcomes have been requested to ensure the consultant role would support the overall plan but these were not communicated. The plan seemed to change daily / weekly depending on the current goals. Noted example of consultant developing a Fatigue Management Plan which was submitted and no response or feedback provided afterwards.
- AOC It was noted that the some of the regional management team and supervisors have not met the local OHS consultant for the region. It was confirmed that the consultant is available for help but would not typically be around depots/sites.
- AOC The regions do not have a region-specific H&S resource. There is significant work required with respect to safety and documentation and to support existing processes to efficiently manage, provide direction and consistency within the safety program across the region. It was noted that contractors are required to have a specific CSO on larger projects but the local OHS consultant is shared across multiple regions and a large area. Regional Engineering has also lobbied for a region-specific H&S resource. Support could include: reviewing safety plans, visiting worksites, confirming contractor safety programs, helping with safe work practices, and providing general safety support to the Engineering team.
- **OFI** All management personnel interviewed during the audit believe that there should be a region-specific safety resource which would support all engineering and maintenance operations within the region.
- **OFI** There are no hard roles and responsibilities for the OHS consultants to follow and typically they are given a lot of autonomy on day to day activities. The consultants need defined roles and responsibilities (e.g. site / depot visits, review site safety plans, lead TBTs, conduct

audits, etc.) with specific targets they are expected to meet. This role should be based on coaching / teaching rather than policing. Also, the OHS consultant should have a good background in operational safety to be truly effective.

- **OBS** With the restructuring in the department, the OHS Consultant's team was reduced to 2 for the entire province. According to an OHS consultant, the workload increased to the point where it was extremely difficult to ensure all tasks were being completely efficiently and to keep up with the work load. Covering such a large area was difficult as the consultant was cautious when giving advice on certain areas of the province where they were not familiar.
- **OBS** OHS Consultant does not complete a lot of self-auditing but do attend WorkplaceNL audits. Also, it was not clear to the OHS consultant who was responsible to complete the self-audits but suggested it could be the OHS committees.

### 9.12.3 Resources / Tools and Equipment Recommendations

- It was evident that there were some gaps in the supply and maintenance of PPE. It is recommended that a PPE program be put in place to ensure the supply and more importantly the correct maintenance of PPE.
- It should be noted that in a number of incidents where PPE was not being worn as it should be (i.e. hard hats being worn backwards or on top of ball caps, no glasses). Education in the correct use and care of PPE is important to ensure that the particular piece of equipment will perform and protect the worker as designed.
- Health & Safety support and guidance has been a major item of discussion throughout the audit. It is evident that the support resources have diminished which makes it extremely difficult for the existing resources to complete their tasks and offer any type of guidance and support to field operations. Recommend that the H&S resources be reviewed and consider providing enough positions to adequately support T&W activities. It is the opinion of the auditors that there is a need for at least one resource per region.
- It has been noted that the role of the consultant has changed over the recent past due to new OHS management and that it is not always clear to the consultants or the management team what the role and responsibilities of the OHS consultant is within T&W. Recommend OHS consultants roles and responsibilities be defined and communicated. A set of goals or targets to support the Health and Safety strategic direction or the focused areas identified for improvement based on past Health and Safety performance. This will enable the OHS consultants to support guidance of engineering and maintenance with a positive and focused approach.

### 9.13 Auditing / Site Inspection / Visits

### 9.13.1 Auditing

- NCR According to Regional Management there are no audits completed locally other than informal site inspections and there are no Health & Safety audits completed by the region or headquarters. T&W Occupational Health and Safety Program, Section 4.6 states that different sections of the program will be audited on different time tables, but the whole program should be reviewed at least every three years, as required by the Act.
- AOC OHS consultants do not typically complete audits and many of the auditing is done via WorkplaceNL. T&W also does not have personnel trained in auditing.

#### 9.13.2 Site Inspections / Visits

- NCR When reviewing a contractor TBT (only required to be completed once a week) in a Western Region Contractor site, it was noted that it had 2 contractor signatures on the TBT. When visiting the site there were 4 contractors and 2 T&W personnel present. According to the department of transportation and works specifications book Division 1 Section 190.8 Authorized visitors shall not access the work site until they have been informed of the risks, hazards and programs in place on site. It was not evident that this was completed prior to all work.
- NCR / AOC During an interview with a painting crew and reviewing records of training and certification, the auditors questioned if there was any training provided on the painting system or operations. They were told that there was no training, or training certs, and that any training would be on-job training. It was communicated within the closing meeting that there is training on those systems. The auditors also asked for the TCM layout which was being used and were told that this was a slow-moving operation which did not required a TCM layout. We also asked for a SWP's on the operation and was told that no one existed. The workers did describe the process used which provided a sufficient level of safety for the operations however the TCM layout and SWP's should be used and provided on-site.
- NCR During review of a maintenance set-up it was noted that the beginning of the worksite included a 3-sign set-up as indicated in 752-2. However, the distance between the flags person sign (TC-21) and the work zone / flags person was approximately 1.5 km.
- **OFI** It was noted by numerous Regional Management personnel that they do not complete site inspections / visits or do not have time to complete site inspections / visits due to office requirements. It is suggested for management to visit depots and sites on a regular basis to

emphasize and demonstrate to employees on management's commitment to and engagement in the OHS program.

- **OFI** It was noted by site supervision (MEPS and Lead Hands) that management (i.e. Regional Directors, Site Superintendents) are typically not seen at the depot or on site. A good safety culture requires frequent management involvement in all levels of the work.
- **OBS** Eastern Region Visit to Route 204 When reviewing the traffic control layout workers pointed out that they would use 3 flaggers in direct communication with each other through radios for the work site. This was noted in the hazard assessment due to the nature of the winding roads and exceeded the layout requirements.
- **OBS** It is the opinion of some site supervision (MEPS and Lead Hands) that safety has gotten much better over the years but now has now slipped a little and plateaued. There is still much room for improvement.
- **OBS** For contractor sites the T&W responsible person for the site will complete daily checks to make sure signage is properly in place. This is a documented process which was confirmed during the audit.

### 9.13.3 Safety Boards

- NCR OSH minutes for an Eastern Region depot were not posted on the safety board. This was noted to the MEPS.
- **OFI** T&W OHS Policy not posted on the Western Region depot safety board. This was noted by the MEPS and he committed to posting it on the board.
- **OFI** The H&S policy included within the OHS manual was not posted on the bulletin board within the Eastern Region main office. This was communicated to the site management.
- **OBS** Was noted to an Eastern Region supervisor that the depot safety board needed to be cleaned up and ensure only relevant safety information is posted for employees.
- **OBS** Safety alerts provided from the Deputy Minister were reviewed and endorsed by the workers as confirmed during the audit, however all the alerts were not posted on the safety boards.

### 9.13.4 Auditing / Site Inspections / Visits Recommendations

• The T&W OHS Program Manual states that auditing of the Occupational Health and Safety Program will be the responsibility of the Human Resources division in conjunction with the T&W Department and that each location will be required to perform a self-audit. There was no evidence of this being completed throughout the audit. It is recommended to develop an auditing program for each region. The purpose of the program is to verify that the organization is conforming to the T&W OHS Programs and Processes. Additionally, it is suggested for T&W to have employees trained in an auditing process. The reliability and applicability of audit findings is directly related to the competence of the person(s) completing the audit.

- Similar to the recommendation above in the Hazard Assessment section, it is recommended as best practise to review and sign onto contractor TBT forms and / or hazard assessments prior to entering the site. All employees and visitors are to be aware of the hazards of the site and actions taken to address these.
- There is little to no management presence noted during the audit on T&W worksites. Most Management / Supervision interviewed did agree with the benefits of management engagement on site and that it is hard to champion safety without visiting the employees in the field, but noted that their current work requirements did not allow for many site visits. It is suggested to conduct management visits, participate in toolbox talks, etc. which will further emphasize management's commitment to a positive safety culture. Suggestions also include developing a management schedule either provincially or regionally and development of a management / supervisor site visit form. This would also be a good opportunity to provide positive feedback to workers as well.

#### 10.0 FOLLOW-UP

Audit corrective action management and support shall be determined by T&W management. However, the Audit Sponsor can make arrangements to assist in remedial activity, provide monitoring of corrective actions and reassessment as required. ECC Ltd. support can be made available as required.

### APPENDIX A AUDIT NOTIFICATION / AGENDAS

(6 Pages including this page)

AUDIT NOTIFICATION / AGENDA			
AUDIT LOCATION:	Western Region (Region	4)	
AUDIT DATE:	Tuesday June 27 <sup>th</sup> – Thur	sday June 29 <sup>th</sup> , 2017	
AUDIT TYPE:	External OHS audit		
AUDIT CRITERIA:	Department of Transporta Traffic Control Manual Safe Work Practices	tion and Works OHS Safety Program	
LEAD AUDITOR:	Adam Power		
ASSOCIATE AUDITORS:	Darren AuCoin		
AUDIT SCOPE:	Health and Safety Audit o	f Transportation and Works Traffic Control Program	
AUDIT AGENDA:	See Below		
Time:	Item	Suggested Topics:	
Day 1 - June 27 <sup>th</sup>			
8 /8:30 am – 8:55 am	Meeting with Regional Director	General Discussion on Audit agenda / plan	
9:00 am – 9:20 am	Opening Meeting	Introduction of Audit Team and confirmation of audit objectives, scope, and criteria.	
9:30 am – 12:00 pm	Audit Interviews and Documentation review	General Safety Management / Communications / Training	
12:00 pm – 1:00 pm	Lunch		
1:00 pm – 2:00 pm	Audit Interviews and Documentation review	General Safety Management / Communications / Training	
2:00 pm – 3:30 pm	Audit Interviews and Documentation review	Hazard Assessments and Safe Work Practices	
3:30 pm – 5:00 pm	Site Visit / Interviews	Deer Lake Depot	
Day 2 – June 28th			
9:00 am – 3:00 pm	TCPS Training		
3:30 pm – 5:00 pm	Audit Interview and documentation review	Interview with Western Region OHS consultant.	
Day 3 – June 29th			
7:00 am – 12:00 pm	Depot / Site Visit	Site TBD based on Work Activity	
12:00 pm – 1:00 pm	Lunch		
1:00 pm – 4:00 pm	Depot / Site Visit	Site TBD based on Work Activity	
4:00 pm – 4:30 pm	Auditor Debrief	Review of findings	
4:30 pm – 5:00 pm	Closing Meeting	Deer Lake Depot (To be Confirmed during opening meeting)	

AUDIT NOTIFICATION / AGENDA				
AUDIT LOCATION:	Central (Region 3)			
AUDIT DATE:	Tuesday July 4 <sup>th</sup> – Wedne	sday July 5 <sup>th</sup> , 2017		
AUDIT TYPE:	External OHS audit			
AUDIT CRITERIA:	Department of Transporta Traffic Control Manual Safe Work Practices	tion and Works OHS Safety Program		
LEAD AUDITOR:	Adam Power			
ASSOCIATE AUDITORS:	Jade Doyle			
AUDIT SCOPE:	Health and Safety Audit of	Transportation and Works Traffic Control Program		
AUDIT AGENDA:	See Below			
Time:	Item	Suggested Topics:		
Day 1 – July 4 <sup>th</sup>				
8:30 am – 8:55 am	Opening Meeting	Introduction of Audit Team and confirmation of audit objectives, scope, and criteria.		
9:00- am – 12:00 pm	Audit Interviews and Documentation review	General Safety Management / Communications / Training		
12:00 pm – 1:00 pm	Lunch			
1:00 pm – 2:00 pm	Audit Interviews and Documentation review	Continue with General Safety Management / Communications / Training		
2:00 pm – 3:30 pm	Audit Interviews and Documentation review	MEP - Main Depot Central		
3:30 pm – 6:30 pm	Site Visit / Interviews - Maintenance	Review of Traffic Control Site set up and OHS documentation review		
Day 2 – July 5 <sup>th</sup>				
7:30 am – 9:00 am	Audit Interviews and Documentation review	MEP - Depot #2 TBD based on work activity		
9:00 am – 12:00 pm	Site Visit / Interviews - Maintenance	Review of Traffic Control Site set up and OHS documentation review		
12:00 pm – 1:00 pm	Lunch			
1:00 pm – 3:30 pm	Site Visit / Interviews – Engineering project	Review of Traffic Control Site set up and OHS documentation review		
TBD at kick-off meeting	Closing Meeting	Central Main Depot – location TBD at opening meeting		

AUDIT NOTIFICATION / AGENDA			
AUDIT LOCATION:	Eastern (Region 2)		
AUDIT DATE:	Thursday July 6 <sup>th</sup> – Monda	ay July 10 <sup>th</sup> , 2017	
AUDIT TYPE:	External OHS audit		
AUDIT CRITERIA:	Department of Transporta Traffic Control Manual Safe Work Practices	tion and Works OHS Safety Program	
LEAD AUDITOR:	Adam Power		
ASSOCIATE AUDITORS:	Jade Doyle / Darren Auco	in	
AUDIT SCOPE:	Health and Safety Audit of	f Transportation and Works Traffic Control Program	
AUDIT AGENDA:	See Below		
Time:	Item	Suggested Topics:	
Day 1 – July 6 <sup>th</sup>			
8:30 am – 8:55 am	Opening Meeting	Introduction of Audit Team and confirmation of audit objectives, scope, and criteria.	
9:00 am – 12:00 pm	Audit Interviews and Documentation review	General Safety Management / Communications / Training	
12:00 pm – 1:00 pm	Lunch		
1:00 pm – 2:00 pm	Audit Interviews and Documentation review	General Safety Management / Communications / Training	
2:00 pm – 3:30 pm	Audit Interviews and Documentation review	MEP - Main Depot Eastern	
3:30 pm – 5:30 pm	Site Visit / Interviews - Maintenance	Review of Traffic Control Site set up and OHS documentation review	
Day 2 – July 7 <sup>th</sup>			
7:30 am – 10:30 am	Site Visit / Interviews – Engineering project # 1	Review of Traffic Control Site set up and OHS documentation review	
10:30 am – 1:30 pm	Site Visit / Interviews – Engineering project # 2	Review of Traffic Control Site set up and OHS documentation review	
Day 3 – July 10th	TO BE DISCUSSED AT		
9:30 am – 10:30 am	Audit Interviews and Documentation review	MEP - Depot # 2 Eastern	
10:30 am – 12:00 pm	Site Visit / Interviews - Maintenance	Review of Traffic Control Site set up and OHS documentation review	
12:00 pm – 1:00 pm	Lunch and auditor review		
1:00 pm – 1:30 pm	Closing Meeting	Eastern Main Depot – TBD at opening meeting	

AUDIT NOTIFICATION / AGENDA			
AUDIT LOCATION:	Avalon (Region 1)		
AUDIT DATE:	Wednesday July 12 <sup>th</sup> – Fr	iday July 14 <sup>th</sup> , 2017	
AUDIT TYPE:	External OHS audit		
AUDIT CRITERIA:	Department of Transporta Traffic Control Manual Safe Work Practices	tion and Works OHS Safety Program	
LEAD AUDITOR:	Adam Power		
ASSOCIATE AUDITORS:	Jade Doyle / Darren Auco	in	
AUDIT SCOPE:	Health and Safety Audit o	f Transportation and Works Traffic Control Program	
AUDIT AGENDA:	See Below		
Time:	Item	Suggested Topics:	
Day 1 – July 12 <sup>th</sup>			
8:30 am – 8:55 am	Opening Meeting	Introduction of Audit Team and confirmation of audit objectives, scope, and criteria.	
9:00 am – 12:00 pm	Audit Interviews and Documentation review	General Safety Management / Communications / Training	
12:00 pm – 1:00 pm	Lunch		
1:00 pm – 2:00 pm	Audit Interviews and Documentation review	General Safety Management / Communications / Training	
2:30 pm – 3:30 pm	Audit Interviews and Documentation review	MEP - Foxtrap Depot	
3:30 pm – 5:30 pm	Site Visit / Interviews - Maintenance	Review of Traffic Control Site set up and OHS documentation review	
Day 2 – July 13 <sup>th</sup>			
8:00 am – 9:30 am	Audit Interviews and Documentation review	MEP - Depot #2 TBD based on work activity	
9:30 am – 12:00 pm	Site Visit / Interviews - Maintenance	Review of Traffic Control Site set up and OHS documentation review	
12:00 pm – 1:00 pm	Lunch		
1:00 pm – 3:30 pm	Site Visit / Interviews – Engineering project	Review of Traffic Control Site set up and OHS documentation review	
4:00 pm – 5:00 pm	Closing Meeting	TBD at opening meeting	
Day 3 – July 14 <sup>th</sup>			
Available for Engineering Pro	jects as determined by aud	it schedule	

AUDIT NOTIFICATION / AGENDA			
AUDIT LOCATION:	Labrador (Region 5)		
AUDIT DATE:	Monday July 16 <sup>th</sup> – Tuesd	ay July 17th, 2017	
AUDIT TYPE:	External OHS audit		
AUDIT CRITERIA:	Department of Transporta Traffic Control Manual Safe Work Practices	tion and Works OHS Safety Program	
LEAD AUDITOR:	Darren AuCoin		
ASSOCIATE AUDITORS:	N/A		
AUDIT SCOPE:	Health and Safety Audit of	f Transportation and Works Traffic Control Program	
AUDIT AGENDA:	See Below		
Time:	Item	Suggested Topics:	
Day 1 – July 16 <sup>th</sup>			
8:30 am – 8:55 am	Opening Meeting	Introduction of Audit Team and confirmation of audit objectives, scope, and criteria.	
9:00 am – 12:00 pm	Audit Interviews and Documentation review	General Safety Management / Communications / Training	
12:00 pm – 1:00 pm	Lunch	Lunch and Travel to Project Site.	
1:30 pm – 5:30 pm	Site Visit / Interviews – Engineering project	Review of Traffic Control Site set up and OHS documentation review	
Day 2 – July 17 <sup>th</sup>			
7:30 am – 9:30 am	Audit Interviews and Documentation review	MEP – L'Anse au Loup	
9:30 am – 12:00 pm	Site Visit / Interviews - Maintenance	Review of Traffic Control Site set up and OHS documentation review	
12:00 pm – 1:00 pm	Lunch		
1:00 pm – 2:00 pm	Auditor Prep		
2: 00 pm – 2:30 pm	Closing Meeting	TBC at opening meeting	

### APPENDIX B ATTENDANCE LISTS (PER REGION)

(6 Pages including this page)

Audit Report Number:	Western Region Da	te of Audit:	27-Jun
Auditee(s): Adam	Power, Darre	n Au	6010
NAME	TITLE / ORGANISATION	Initi OP	and an and a second
Adam Power	Lead Auditor / ECC	Ltd Ad	An
Durgen AnCom	Andita /ECC	Q	L'A
Dan Hypes	Regional Freques	· 6	Tele confort
Cercil McCathy	Regional Director	- CW	11 Teleconference
Terry o'brien	Sopt. of Equipment	t To:	B.
Terry Coutes	Senior Engineri	1	[ Tele confere
Imis Morris	Superintent of open	Him CI	M Tric Conferra
Solma Pike	OHS Consultant		Teleconferr
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Audit Report Number:	Central Keylon	Date of Auc	dit: 4-	- July -17
Auditee(s): Adam Pow	er & Jode Doyle			7
NAME	TITLE / ORGANISATIO	N	Initials OPEN	Initials CLOSE
Jade Doyle	Auditor		120	Ado
Adam Power	Aud tor	Q	Ad	AP
Wade Waterna	Regional En	gineer	WW	w
Sherman Sprignell	Senier Engineer		5.5	5.5
Chris Hiscoct.	Super (A)		c.H-	C.H
			and the second second	

Audit Report Number:	Ewtorn Region	Date of Au	udit:	-July-17
Auditee(s): Adam P				/ /
NAME	TITLE / ORGANISATION		Initials OPEN	Initials CLOSE
Adam Power	And, tor		Adp	Al
Dairy 1 Bisic	STW Clannille		SB	Teleconterne
Glen Groves	hegind Director, To	Ŵ	Ø	Teleconferrer
Selma Pike	OHS Consultant			Telecufree

Audit Report Number:	Avalon Resion	Date of Aud	lit:	h, 12/17
Auditee(s):	Avalon Resion Transportation - War	ks Avo	lon R	egin 1)
NAME	TITLE / ORGANISATIO		Initials OPEN	Initials CLOSE
Davaren Anlen	Andita		Ø3	
GARRY SPEACER	Regional Direc	tor (	R.	pp top
A	Auditor		Ad	Af
Mistion Morris	Sup't of Operations	0	Ch	PRAP
5	Regional Enginer			PP AP
	PP - Teleconference			

Audit Report Number:	Labrador Regio,	Date of Au	dit: Qu	ly 12/19
Auditee(s):	Region (5)	Dorren	Aucoi	2
NAME	TITLE / ORGANISAT	TION	Initials OPEN	Initials CLOSE
KEUT RANDELL	Reg. ENG.	BYPHENE	/	$\checkmark$
Burry Elisworth	ST OB B	y plane		
Derson Anconi	Auchita			$\checkmark$
Ewart Linstead	MEPS		-	
	·			

### APPENDIX C AUDIT TERMS OF REFERENCE

(9 Pages including this page)

# **Traffic Control Audit Process**

# **Terms of Reference**

Document Title:		Date (DD-MM-YYYY):	Total # of Pages:
Audit Terms of F	eference	23-06-2017	08
Document No.:	Accepted By:	Signature:	Date (DD-MM- YYYY):
	Joe Dunford / Barry Fitzgerald	B. Figuale	

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### 1.0 Introduction

The provincial court of Newfoundland & Labrador (NL) has issued a sentence order for the Department of Transportation of Works pertaining to violations of the Occupational Health and Safety Act and the Occupational Health and Safety Regulations. This order states that the Department of Transportation and Works shall complete a third-party safety audit of its Traffic Control programs.

To align with the above the Department of Transportation and Works has commissioned an independent occupational health and safety audit to evaluate the understanding of, and adherence to, the roles and responsibilities of Transportation and Works employees at various levels, associated with its traffic control program. For this purpose, an independent audit has been commissioned to be conducted by East Coast Corrosion Ltd.

### 2.0 Audit Description

The audit will be province wide in scope including site visits to each of the Transportation and Works five regional areas. Due to the complexity of the audit and large area to cover, the audit scope will cover the following:

Week 25 (June 19<sup>th</sup>) – Audit prep, TCP training and development of Terms of Reference.

Week 26 (June 26<sup>th</sup>) – Western Region: Audit Traffic Control Processes, including site visits to two separate subdivisions depots and /or work sites. Complete TCPS training.

Week 27 (July 3<sup>rd</sup>) – Central and Eastern Regions: Audit Traffic Control Processes, including site visits to two separate subdivisions depots and /or work sites.

Week 28 (July 10<sup>th</sup>)- Avalon Region and Labrador Region: Audit Traffic Control Processes, including site visits to two separate subdivisions depots and /or work sites in each Region (Avalon and Labrador)

Week 29 (July 17<sup>th</sup>) – Review of audit findings and drafting of audit report.

Week 30 (July 24<sup>th</sup>) – Submission of Audit Report and implementation of comments.

Please note that the total number of depots visited should not exceed 50% of the field visits (depots and work sites) total.

In addition to the activities laid out in the schedule above, interviews will be conducted with TW executive and other stakeholders (CLD) at the Departmental Headquarters in Confederation Building.

The audit team shall provide formal notification to each region in the form of an audit agenda. The agenda will provide a tentative schedule for the audit activities but the times and elements covered are approximate and subject to change depending on the results of on-site activities. This will be confirmed and discussed at the opening meeting prior to commencement of the audit.

All site visits will be as agreed between the audit team and the Regional Manager. It is not the intention of the audit team to complete site visits without prior notice to the site supervision or Management.

As timelines are very tight, the audit team request the appropriate personnel be available, as required, for each region. This includes, but is not limited to, the Regional Manager (or delegate), Engineers, OH&S Consultants, Superintendent of Operations, Department Coordinators, Contractual personnel, Site Administrators, MEPS, and site team members.

### 3.0 Objectives

The objectives of the audit are as follows:

- Determine conformity of the Traffic Control program, or parts of it within the audit criteria, and its ability to ensure applicable legislative requirements are met.
- Get a representative sample of the department's five regional areas operational traffic management processes.
- Assess traffic control contractor management process.
- Review training programs.
- Review implementation of lessons learned.
- Identify as applicable areas for potential improvement.
- Document the findings in an audit report

The audit report shall be supported by relevant documentation such as the terms of reference, audit agendas, audit checklists and auditing records.

The audit shall consider compliance with Transportation and Works policies, procedures and applicable legislation as well as assessment of the effectiveness of these processes to safely execute their work.

### 4.0 Approach and Process

The following approach and activities shall be undertaken:

- The assessment shall be conducted utilizing proven auditing protocols.
- Assessment shall focus on processes and opportunity for improvement and NOT fault findings.
- Review of relevant policies, procedures and manuals to determine level of compliance with current traffic control program.
- Interviews with Transportation and Works personnel and other non-Transportation and Works personnel such as representatives from the Centre for Learning and Development (CLD) shall be conducted either individually or in a group where documentation and records shall be reviewed and verified.
- All interviews shall be conducted face to face with the audit team to the extent practical. It
  is anticipated that face-to-face interviews shall be made with all personnel in their current
  working region.
- Analysis of evidence collected in the form of documentation and records.
- Review of the existing incident reports and supporting materials.
- Complete and review relevant traffic control related training.
- The auditors shall be provided access to all relevant information related to the matter as vetted through the Senior Occupational Health and Safety Manager.
- Active site visits to confirm compliance / implementation of procedures and processes.
- The auditors will liaise with applicable stakeholders throughout the audit to provide updates as required.
- The auditor's findings shall be provided in a written report to the Department of Transportation and Works.
- Any nonconformities, areas of concern, opportunities for improvement or observations shall be discussed and evaluated against evidence obtained. Any observations considered to be immediately dangerous to life and health will be reported immediately by audit team.

### 5.0 Timing

Project initiation – 19 Jun 17

Audit kick-off – 26 Jun 17

Data collection - no later than 18 Jul 17

Draft report – no later than 21 Jul 2017

Final Report – Issued following receipt of comments no later than 31 Jul 2017

Terms of Reference

23 Jun 2017

#### 6.0 Sponsor

The sponsor for this project is Barry Fitzgerald, Senior Occupational Health and Safety Manager.

### 7.0 Audit Team

The audit team will be comprised of the following:

- Dan Philpott, P.Eng. Project Director and Audit Expert Support
- Adam Power, P.Eng. Lead Auditor
- Darren Aucoin Auditor and Project Manager
- Grant Skinner Audit Expert Support
- Jade Doyle Associate Auditor
- Cyril Simms (RNC Ret'd) Audit Expert Support

Should additional support be required, these shall be communicated to stakeholders within a day of their involvement.

### 8.0 Use of the Report

A thorough report shall be provided defining the audit findings. The report and all associated findings and recommendations are the property of the Government of Newfoundland and Labrador. No materials shall be published or shared without the explicit written permission of the Government of Newfoundland and Labrador.

### **Contacts**

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### APPENDIX D AUDIT NOTES

(53 Pages including this page)

### TRAFFIC CONTROL AUDIT NOTES

### TRAINING

#### Western:

- New employees / transferred employees / onboarding process not aware of the new training required for specific role but that there were core training requirements. Section 3.4, Orientation. i.e. after 6 months' leave, or transfer to a new position.
- Training on accident / investigation no structured / formal process on this. Not sure on training requirements. Needs to be a proper investigation method. Section 8.6.2
- Superintendent of Operations(SO) was not aware of any training on PPE or maintenance confirm with OHS
- SO sends out a list of training available and noted that MEPS responsible to ensure workers keep training up-to-date. Onboarding process MEPS oversee this and is signed off at this level. New employees are not allowed in the field until all training completed.
- Believes there should be a central database for all training, was not aware of the CLD database.
- SWP development developed with input from MEPS. Once developed these go into St. John's to be reviewed and signed off. This is an informal process and not properly documented on how to complete, regarding approvals, to whom, where they go, etc. Section 5.2 lists all steps to complete SWP but this was not typically known.
- SO was gone from the office for 8 months but did not get re-orientated on his return as per Section 3.4, Orientation.
- Regional Eng. did not receive orientation is transfer of position as indicated in Section 3.4, Orientation.
- Sr. Eng. has completed courses and these training certs should be up on workplace NL.
- Road signage education could be included in the driver's education course.
- Trying to develop a spreadsheet to track training at the Deer Lake depot. All records were kept
  in paper copies in MEPS office. Numerous examples of employees not having up to date power
  line hazard training. Not sure on workers who had WHIMIS training. Reviewed certificates for
  lead hand but could not find TCPS training certs or updated Power Line Hazards cert (proof of
  registration in Power Line hazards course in Jan but not cert).
- CLD have emails set up for all workers, and Deer Lake Depot does include a computer for all workers to complete online training. CIO provided training on how to use computer / access emails / find certificated. However, this is a growing process. Cold Lake Depot have been requesting a CPU for his workers for training / email purposes.

- MEPS developed a new hire package based on the T&W OHS Program Manual which was a good tool however this did not include completing the "Site Safety Orientation form" as provided in the OHS Manual.
- Aware of the new CLD training process seems to be trying to do a lot of training online however some should only be completed in person. Growing pains with this system.
- Training certs for the site manager not kept on his persons but he commented that these were provided in the bid to T&W.
- T&W technician on site had kept all training certs in an application on his phone for easy viewing. Card Mate.
- When reviewing the training certificated for the painting crew the auditors questioned if there was any training provided on the painting system or operations. Was told that there was no training, or training certs, and that any training would be on-job training.

# Western TCPS Training

- Observation on training:
  - Overall the training method is a good tool to ensure you can offer the training to a large number of participants across the entire province.
  - Very difficult in getting started, confirming who is in attendance, or waiting on attendance
  - Same exampled used in both the TCP and TCPS somewhat repetitive
  - From Cold Brook EPS Not sure how applicable to in-field work. More practical based training for the TCP would be more beneficial.
- Started meeting with both a good safety moment (pre-use checks on vehicle) then first point discusses was on everyone's responsibility and accountability for H&S in the workplace.
- Module 2 Hazard Assessments Hazards listed were generally more office based (e.g. did not see road traffic listed as hazard in traffic control training program).
- When asked by the facilitator if attendees used the decision matrix most responded with no and typically there is only 4 tables used for majority of work. It was noted that the table is confusing.
- Comment from attendees on why there was no high speed low volume table when this could apply to many areas in NL.
- Both presented acknowledged that the TCM manual was in the process pf being updated, however, they were not aware of when this update would be completed or provide any details on this.

- Need to have all SWPs in one manual for all trucks when filling out hazard assessments. Also, was there were issues with all the SWP being available on the online database.
- Trainers were not aware of which SWP were currently online or how many there were, how many under review, etc. Response was to check with BFI or link on intranet.
- Training outlined was a hazard assessment was and how to complete but did not elaborate on. (e.g. Supervisor review worksite and then complete hazard assessment based on work scope and worksite review).
- Module 3 was just on the use of the TCM manual for the selection of tasks per scopes of work. Since the training is completed via teleconference it seems difficult to talk much out of these examples but most of the training will come from in field experience. Also, the presenters constantly reminded attendees that they were available anytime for questions or help.
- Very good review in presentation on the right to refuse work and how that process works.
- Very little included in presentation on the SWP section of module 5 (only 1 title slide). This is extremely important aspect and should be elaborated on.
- It was communicated in the training that TBT are only required once a week. While not required it is good safety practice to complete a TBT every morning at the start of a shift. Auditors did note that the Hazard assessment was required to be reviewed every morning which essentially covers the hazards to be present that day. Cold Lake Depot also only completed TBTs weekly.
- Training presentation indicates reference to a participant manual however this was not provided or used in the training.
- In the training presentation, it did not show the actual accident / incident form being used. Also, when they went through the steps of the incident investigation process the 1<sup>st</sup> step was to report to supervisor. The 1<sup>st</sup> step should always be to provide aid or get support for IP, if accident resulted in an injury.

### Central:

- Not confident on what value is received from TCPS online training. It is felt that the trainer having good knowledge and experience of traffic control would be very beneficial in the delivery. A high percentage of this course (75%) should be based on the traffic control layouts and set ups, particularly for the supervisory course.
- The process for incident investigations is not clearly understood. Some individuals received a one-day training course for conducting investigations, and the personnel are conducting investigations based on the training they've received and not a documented process

- CLD training program is recently launched. This new process will allow for all employee's certificates to be held in a central database for easy access. There are growing pains with this system and most people still are comfortable with a card based system. Also, many workers not have easy access to, or actively use, computers.
- It was noted , the current TCP and TCPS training only works as a refresher based training with experienced personnel. The training programs need to be more interactive, practical and hands on, especially for the Supervisor training. Also, previously the equipment inspectors for each region were the main trainers which enabled each region to provide training quickly to new employees. With the new online-line based training this process has now changed.
- According to MEPS a one day training course does not give a worker a good level of understanding of traffic control and more practical training is required. This could include practical examples of sign set-up. It was also noted that the current on-line training is not a good avenue for training of employees.
- The TCP and TCPS training is good for overview purposes only but not practical for real life work scenarios. This is especially important with the influx of new younger personnel who only have the training to rely on.
- Comment on more requirement for hands on training

#### Eastern:

- Currently they are looking at each position and required training to complete their job. All Training is captured per the training matrix with a certain number of required courses to take. It is suggested to update all roles and responsibilities to include the required training to be completed for each role.
- It was noted that there are issues with employee training certificates with employees frequently moving around. It is suggested for employees to retain copy of their own certification. It was also noted that the CLD training program and this transition is still ongoing.
- Noted that the CLD process for training is a new process to track and monitor employee training. However, the older local training matrix is still being used based on training attendance forms. Also keep a copy of records in file.
- New CLD training process required computer access for employees. Some depots have issue with computer access and general computer knowledge.
- Current TCPS course is completed virtually. This requires brining workers into local training area with no face-to-face contact with the trainer. It is also hard to tell how engaged employees are with the training.

- Previously equipment inspector was a local trainer. Had since left this position. It was communicated during the audit that the previous trainer did not feel confident with the material and that the workers were getting the proper information from this course. When questions came up the typical response would be to check with you supervisor.
- The current TCPS training is ok for a fresher training but does not provide the first hand practical knowledge required for traffic control if this was your first exposure. The presenter should be fully knowledgeable in the process and be able to answer questions and provide directions on what and how to do. General feeling was it is not practical, not enough exercises and hard to determine effectiveness.
- In order to have a good understanding of training the supervisors need to be trained in the use of traffic control layouts (e.g. why you have tapers, what the lengths are based on, why certain signs used vs others, etc).
- The TCPS training should provide the workers of a good understanding of the principles of traffic control presenter by a knowledgeable presenter in the course material and principles. The current virtual based training does not allow for this. Additional there is not enough practical based training and exercises in the course.
- With the new CLD training program all training has to be requested from the CLD. Previously this training would be typically completed by an in-house trainer within a short time frame (e.g. powerline hazards, TCP, etc.). Within the new process, it is harder to set-up training and takes longer to complete.
- The previous TCPS training had workers work in groups, complete exercises, given multiple scenarios which seemed to work well. The virtual training does not provide the practical information and knowledge required to have a good understanding of the traffic control process. Noted that the old training method seemed to work better.
- Current training is seen as repetitive and more maintenance based than engineering based
- Was noted by the contractors CSO that the traffic control training is only 5 hours long and not much is actually taken away from the training.
- The depots have issues with tracking of all training completed for employees. In the past, workers have completed the course but no record online of the training (CLD training). Also, there is issues with new employees coming from other depots and confirming the training they have. It is suggested for a master list to be located at the main eastern region depot. Noted that the new CLD training and certification process will be kept online but depots will still generally keep a local training matrix.
- The TCPS training is considered okay as a refresher based training but is not sufficient for new employees.

• TCP and TCPS training which was previously always done in a classroom setting, was much better than the current TCPS virtual training. The virtual based training does not easily allow for questions and is okay for a refresher but not for new employees.

### Avalon:

- Originally the province had 4 OHS consultants but now only have 2 which are generally used for more coaching / training.
- TCP Training is a classroom setting which allows for questions / discussions but this could still have more practical components.
- TCPS Training
  - Stated that if you were a new MEPS starting you would not feel comfortable picking out a set-up and signing off.
  - Needs to be completed in person
  - Online virtual based training does not work
  - At least 50% of the course if very similar safety info covered in TCP
  - Need more examples of set-up
  - Need a knowledgeable presenter on traffic control, answer questions, provide guidance, etc
  - Previously have MEPS / OPS camp
  - Suggested TCPS training focus specifically on the traffic control manual and its use including practical work.)
- CLD training process requires all workers to have access to computers. It should be noted that not all depots have access to computers, government servers, or high speed internet so many times the workers are still required to travel for training to the larger centres. There is a process underway to ensure all depots are provided with computers but also noted that some workers are not computer literate.
- Training now considers more to be a "paper exercise" and not about competency of the workers. Was told that CLD was not interested in concerns of the workers on the training. SO has had numerous employees come up after training stating there were confused with what they were trained in. The typically T&W employees are "hand-on" type workers which require more practical based on classroom training which the TCPS course does not provide.
- There are discrepancies in CLD confirming training of employees. Regional records vs CLD records.
- It was noted that there are job descriptions for roles but not sure if these include the training requirements for the role.
- It was noted that onboarding of a new MEPS would take a while uses an informal process. SO should be familiar with and utilize that onboarding checklist in the OHS manual as a minimum.

- It was noted that the SO has been involved and led an accident investigation however they have not been provided any training. Investigation was completed using examples of previous reports.
- Acting MEPS / Lead Hand did not have traffic control training certificates on site. Lead Hand did not provide any documentation but was noted to be in lunch box.
- It was noted that the TCPS training considers "a waste of time". Not practical. Was pointed out only 40 mins of 7-hour training was on the TCM. Presenters were not able to answer questions on material.
- RE had recently completed TCPS training with the following comments:
  - RE pushed for employees to complete in a classroom together to ensure effectiveness and confirm who attended from his team
  - Training very lacking for actual traffic control
  - According to RE only 47 mins of entire training involved the traffic control manual with 2 small examples
  - Focused more on safety scenarios than traffic control
  - No information on how to pick out a layout, merging 2 layouts
  - More practical based teaching needed
- Noted that T&W require all workers to have TCP training prior to going on worksites. However, it was noted that T&W hire co-op students which are constantly used on-site and do not have all the required training.
- TCP Training completed for contractors by REL comment on training on how to be flagman.
- Foreman on-site and responsible for the site set-up and overall jobsite did not have Traffic control training. RE was unsure if this was a requirement but did assume it was.
- T&W technician on site did not have Traffic control training on person.
- Contractor had only 2 persons on site who had TCP training, which were flagging at the time of the audit visit. We were told there was no other person on site with TCP training and no one available to relieve flaggers.

### Headquarters:

- Safety training only came to CLD in May 2016 and responsible to centralize training.
  - Strategy used to track training completed, track expiry of certification and notify employees and supervisor of upcoming expiry. Goal of zero (0) employees with expired certification within the government.
- CLD is not responsible for the content of the TCP and TCPS training, only the organization and facilitation. The curriculum was developed by the department of T&W (equipment inspectors) and approved by WorkplaceNL. WorkplaceNL also approved trainers to deliver the course

content. CLD believes there are issues in the training but that is it the responsibility of Workplace to audit the training to confirm it is sufficient and update if required. Where the standard of delivery of training is below what the CLD would believe to be as a requirement then would contact WorkplaceNL and request more auditing.

- The department record keeping was generally very poor with inaccurate records, unable to find, conflicting records, etc. So CLD developed a program around certification and notification of expiry of certification. Has been a lot of effort into getting all employees trained in TCP and TCPS but there was a high degree of resistance to CLD asking questions on records with the majority (in CLD opinion) coming from T&W management.
- TCPS is not a required training but was brought into effect after T&W incidents.
- CLD believes there is a huge amount of redundancy with the TCP, TCPS and OHS e-learning training. The CLD has not intervened on the content as wanted to review the current training process before suggesting improvements. Their analysis concluded that there is much TCP and OHS e-learning redundancy in the TCPS and do not see the purpose for the course as it currently exists and would suggest removing this course altogether.
- Standard for employees having certification on personnel at worksites it very low. This was
  confirmed throughout the audit. This process needs to be reiterated to all employees as some
  were of the understanding that this new CLD process would keep all copies of certificated online
  and they were not required to keep certs on persons.
- It is the internal trainer's responsibility to issue the certification following training not CLD. Psaccess does not actually hold the certification records and it is the managers / supervisor's legal responsibility to provide the certification.
- Psaccess role is to provide course completed, completion date and status. It also shows upcoming course which are available and provides avenue to register online.
- All core 8 WorkplaceNL courses are required to be completed in a classroom setting. TCP is included in the core 8 but TCPS is not.
- TCP training does not have a section on fatigue management. Fatigue can pose exceptional operational and safety risks and it is vital to identify the risk. The identified risk can aid in developing mitigations to reduce the risk exposure.
- It was noted that Management in T&W have a cultural failure in completing training and management do not accept their accountability for training their employees.
- It was noted that CLD have also put computer training in place which has been communicated to T&W but have not received one response. This program was to be taught from Collage of North Atlantic campuses across the province. Training offered in psaccess, outlook and general computer use. This was a result of the comments from local supervision on certain employees being computer illiterate.

- It was noted that CLD does not want any region training data anymore as they are tracking all the training from one centralized location and the regional data is often seemed as flawed.
- It was noted that CLD has concerns about the lack of training requirements for nighttime work and has went to ADM asking what the training requirements are but have received no response.
- It was noted that CLD is currently developing a Contractor Obligations training for safety requirements.

### Labrador:

- MEPS creating a binder for the work crew with TBT, HA, ERP with additional numbers for the area, training certs but it does not have the main SWPs associated with the work. May want to include in the work binder for reference.
- General discussion with the MEPS noted that the OHS was given to the office. Needs to be manual specific training so they can use the program and the tools to assist with safety and protection of the personnel.
- MEPS utilized an onboarding form process that was found on the Government Website and not the onboarding site orientation checklist identified in the OHS Manual
- Training certificates kept on site. No spreadsheet for tracking this was done by the regional headquarters and clerk usually notifies MEPS when training is due.
- MEPS is aware of PS access and has completed training but is not aware of the full potential of the system i.e. tracking and notification of training.
- Have a computer available for personnel to complete training, leave request... etc.
- Not much difference between TCP and TCPS training Should have personnel who are very, very familiar with the TCM. TCPS training should focus on TCM, complete exercises, have multiple scenarios to complete while working in groups to allow discussions and transfer of knowledge and experience. The virtual training does not provide the practical information and knowledge required to have a good understanding of the traffic control process.
- Decision matrix is not quite clear further training is required. It was noted that they only need a few key layouts but would have some difficulty if the area /roads were more complex.
- Accident investigation training is required. Do not have any expertise in investigation in the event a serious incident occurs.

- One of the personnel did not have PLH training and one individual did not have their training certificates with them. Note available in the binder but this is not in accordance with the OHS manual.
- Consider the training to be adequate but noted that some specific layouts are required for pothole patching.
- Resident Engineer did not have a current PLH certificate. Not really required in their area but it is required by the OHS program.
- 2 of the four personnel did not have their training certs on the person as required by the OHS manual.
- Reviewed site orientation and training records for several personnel and one orientation record could not be produced.
- Training certification is in order Note that FA training was 1 in 15. Due to the personnel
  movement may be difficult for the contractor to guarantee that a trained first aider is on each
  work site. T&W to consider this increasing the spec requirement for first aid training to be above
  and beyond the OHS requirement.
- It was noted that training is required for the positions i.e. TCP, TCPS, PLH and WHMIS etc. and that new equipment is often purchased with training for operators and maintenance prior to deploying to the field for use.
- All training is captured per the training matrix with a certain number of required courses to take. It is suggested to update all roles and responsibilities to include the required training to be completed for each role. SO under the impression that this will be controlled by PS access.
- SO was well versed on PS access i.e. the intent however did not realize it was capable of training expiry notification. Consider a reinforcement of the P.S. access rollout within the management and MEPS personnel.
- The hazard alert process is not completely known. Personnel not familiar with the contents and processes within the OHS manual. A communication by email and a sign off of receipt is not a roll out and comprehension of the information / requirements.
- Current TCPS course is completed virtually. This requires brining workers into local training area with no face-to-face contact with the trainer. It is also hard to tell how engaged employees are with the training. Low value – greatly affects a worker's ability to comprehend and transition to on the job site.

- It was noted that in order to have a good understanding of training the supervisors need to be trained in the use of traffic control layouts (e.g. why you have tapers, what the lengths are based on, why certain signs used vs others, etc).
- PS access requires further roll out and training It was noted that RE was not fully versed in the capability and intent of PS access. RE finding it tough to get things done in the database.
- It was noted that TCPS training has little value and it is repetitive i.e. nothing of any value over and above the TCP course. This course should focus on Supervisory training and an indebt look at the TCM possible hands on scenarios and discussion on the manual.

# COMMUNICATION

### Western:

- Not aware of Safety flashes/alerts being shared between regions. Section 4.4 communications.
- Every couple of months he emails the hazard assessments, incident forms, etc. around to supervisor to make sure they are reminded to follow policies and procedures Have to Confirm
- Quarterly hold meeting with H&S first topic on agenda. Need to confirm evidence of meeting.
- It was noted that it is constantly communicated to his employees that if they do not have the resources to safely complete the job then do not attempt.
- Not aware of a hazard alert process. Shared lessons learned are typically done through directives not through hazard alert process.
- Used to have district meetings to get together to discuss OHS issues / concerns and important business. This has been cancelled and / or not completed in approx. 3 years. Have not have regional engineering meeting in 2 years.
- List of first aiders at Deep Lake Depot not posted on Safety Board, however this is posted on the first aid kit on the other side of the room
- T&W OHS Policy not posted on the Deer Lake Depot safety board. This was noted by the MEPS and he committed to posting on the board.
- MEPS noted that there was no MEPS meeting either monthly or quarterly (within the region) to discuss OHS issues and any other concerns. This could be a good opportunity to share lessons and discuss any H&S issues. Also, noted by Cold Lake MEPS. Only meetings are spring and summer meetings.
- SWPs are not typically reviewed every day but reviews if this is the first time for completing that task in a long period.
- In house they share information on lessons learned but not across the region or province.
- Safety alerts provided from the Deputy Minister were reviewed by the workers with confirmation on review confirmed during the audit, however all the alerts were not posted on the safety board.
- Responsibility of OHS Consultant was not entirely clear. Suggest providing list of responsibilities.

- H&S communication seems to be lacking
  - Was told it was resp of St. johns to communicate lessons from incidents but was told not much of this being completed.
  - Not aware of hazard / safety alerts being communicated
  - OHS's communicate but no corporate safety meetings in months and no regional meetings with Regional Directors
- Cold Lake Depot MEPS questions on the purpose of the Supervisor signature on the Hazard Assessment form. Does this imply approval, agreement or responsible for? All workers need to know their responsibilities.
- There has recently been an appointment of a new OHS Manager. This should be communicated to all regions included MEPS. Was told by Cold Lake MEPS this was not communicated to his location.
- Public awareness for traffic control is very limited. It was suggested that a radio announcement could be made prior to operations to notify the public that painting operations, pothole patching, large road work, etc.
- It was noted that the signage for sites are extremely important however the electronic signage boards provide an additional level of safety that the typical signs do not.
- MEPS at Cold Lake Depot does not have a worker rep for the OHS committee. He has offered this to all worker's multiple times but no one wants "responsibility" of the role. The OHS committee is extremely important, with the workers' rep being arguably the most important role. This role also provided an additional level of communication for workers in the field.
- OHS Consultant not aware of the accident / incident spreadsheet which was shared with audit team or the incident rate for the region (incident rate does not exist). Also, situations where headquarters call consultant asking information on an incident and the OHS consultant not aware of the incident. As the OHS consultant they should be either in charge of this information or consulted with. This would also be a good topic to be discussed in weekly / bi-weekly meetings with OHS's and Headquarters.
- It was noted that there was feeling that corporate headquarters want most of the safety leadership to come from St. Johns

### Central:

• Work using T&C layouts previously designed for another project in another region but were shared across other regions. This was approved by the local engineer (Not engineering stamp) but still references the old project number without reference to the current project. Also, it is not clear on the process for obtaining approved changed layouts.

- Provincially there has not been meetings / regular communication with other regional engineers. This could be implemented to be used as a tool for information sharing with regards to H&S (lessons learned, near miss / incident information)
- H&S statistics / information is not shared throughout regions or from headquarters.
- More communication needs to be provided when the new T&C manual is expected to be released and process for review and comment, who will be involved in development etc.
- The general public awareness of traffic control signage and processes is very low. It is suggested to consider avenues to increase public awareness (e.g. add campaigns, include info on driver's exams, etc.).
- Health and safety communications have previously been provided to each region from the central headquarters in St. John's. There has been little to no communications shared recently.
- H&S Policy posted on the first floor is dates 2006. Update to most recent version
- The MEPS had completed an additional TBT in response to a recent incident which was shared with the whole team.
- There is very little shared on Health and safety communication outside of an occasional letter from the DM. According to the MEPS the Superintendent of Operation will share information between the local MEPS but, with recent department changes, the regular communicators are occurring less often. In previous years, there were T&W central meetings attended by workers from across the province which were a good avenue to discuss safety issues, lessons learned, etc.

#### Eastern:

- The H&S policy included within the OHS manual was not posted on the bulletin board within the office. Suggest posting the most recent policy.
- Safety Alert communication was previously provided from the central headquarters but this communication has been occurring less frequently. Also, noted that when is it communicated is it discussed with the workers.
- Regional Engineering meeting were yearly held with the director of highway and design. These meetings provided a good avenue to discuss safety issues, traffic control issues, and also a good opportunity to communicate general information to ensure consistency across the province. The last of these meetings was Dec 2015.
- Was noted to the MEPS that the depot Safety Board needed to be cleaned up and ensure only relevant safety information is posted for employees.

- Once or twice a year they complete pre and post meetings where they discuss issues mainly due to operations. Safety is a topic of discussion but not the main focus. Also, there are no meetings province wide to discuss safety issues, lessons learned and to help provide consistency with traffic control.
- In the past, T and W completed road shows which were a good opportunity for conversations, opinions and discussions between different areas of the province.
- OSH minutes for the depot were not posted on the safety board. This was noted to the MEPS.
- Previously had regional meetings and meetings across other districts to talk to other supervisors. This was a good way to provide consistency across the province.
- Public awareness on traffic control signs needs to be increased.

#### Avalon:

- For traffic control layouts and general safety there does not seem to be consistency in what is required for the T&W crew and what is required for municipalities. Seems to be a different standard. Noted on PPE use, sign set-up and traffic control.
- Used to have regular meetings with RD around the province, these are no longer happening regularly. It was noted that HS was only discussed when something happened or there was a need to discuss. It was not a regular topic on the agenda.
- There are no regular meetings help with SOs or management across the province. There is informal communication between regional management (RM, SO and RE) daily.
- It was noted that the RE does not see much information communicated around H&S. Usually only provided information based on OHS directives (e.g. suspend working on highway). Has not been shared any hazard alerts from his recollection but information is shared informally within the region between management. A higher focus needs to be put on H&S communications within the province. This can include hazard alerts, safety alerts, lessons learned, safe working practices, etc.
- Engineering used to have quarterly meeting with all regional engineers across the province. But this has not occurred since 2015. These meetings provided a good avenue to discuss safety issues, traffic control issues, and a good opportunity to communicate general information to ensure consistency across the province.
- There seems to be discrepancy in what the intent of the traffic control layouts. Engineering department believes that modifications can be made with the layouts while the maintenance department believes that no changes can be made without official approval and signature from a PENG. The process for changes and modifications of layouts needs to be communicated throughout the province.

#### Headquarters:

- It was noted that the OHS Manager does not have regular meetings with Regional Directors on H&S.
- It was noted that the OHS manager has regular meeting with OHS consultants to get a status update on OHS orders, incidents, investigations and informal discussions on H&S topics. The Consultants also provided a weekly summary on tasks.
- It was noted that the OHS manager was unsure on whose responsibilities it was to update the OHS manual, the Department of T&W or Human Resources.
- There is no real process of sharing information including accident / incident info and lessons learned.

#### Labrador:

- It was noted to the MEPS that the depot Safety Board needed to be cleaned up and ensure only relevant safety information is posted for employees.
- Safety Policy as provided in the Department of Transportation and Works OHS Manuel is not posted / communicated with employees.
- Management commitment No regular meetings being held with RMT of other MEPS or direct supervisor with a focus on Safety and continuous improvement. Sometimes have spring and fall meeting concerning spring and winter operations in which safety is discussed. Meetings are not happening regularly.
- MEPS noted that R&R are not communicated may be in the Job description for the position no emphasis placed on safety other than the be safe. no safety focused goals or targets required by MEPS and maintenance team.
- Regular contractor meeting (biweekly) with the top item on the agenda is a recap of safety.
- T&W has an OHS committee rep due to the size of the crew. Suggest that the minutes to be posted on site for communication actions item and progress on closure.
- Site personnel have the in-reach communication equipment in the truck. This is used in conjunction with SAT phones for communication / emergency communications as required.

- The H&S policy included within the OHS manual was not posted on the bulletin board within the office. Suggest to post the most recent policy.
- It was the SO opinion that we (government and its leaders) are to be stewards of safety but the resources i.e. support personnel are being diminished and it is unreasonable to think that we can implement safety in this vast area through email communication.
- No safety focused meetings / targets and objectives provided to RE for the year. No regular meeting with management to focus on Safety other than when directives and memos are emailed for communication.

# HAZARD ASSESSMENT

#### Western:

- Management / Supervision site walkthroughs typically only completed visually with little to no interaction. Will intervene if they something is dangerous but otherwise not. OFI could be to introduce site work site visit / inspection form for management / supervisors / MEPS. Could also be a good opportunity to provide positive feedback to workers as well.
- SO not aware of the hazard / safety alert process
- OHS Consultant currently working with their risk assessment team on JHAs for each task to ensure SWP are updated with info. This process is being completed by the two provincial OHS consultants however they were not provided guidance on the structure of the talks. (i.e. 200 SWPs, track ones being updated, what is left to complete, process on when completed, etc.)
- Typically at the Depots the MEPS will print the hazard assessment forms for the workers to fill out. IT was noted that when filling out Hazard assessment form that there typically is only enough area on the printed forms to list 3 hazards and 3 controls.
- During the same site review we asked the team to see the hazard assessment and was provided with the hazard assessment from the job which was completed that morning on pipe cleaning but this new job was sign maintenance. Was told by crew that they were going to mark up the assessment with info based on the new job. A new hazard assessment must be completed for a new scope as the hazards and controls can be completely different.

### Central:

- The structure of the Hazard assessment form typically only allow room for a certain number of hazards and controls to be written in. Review format of the Hazard assessment form.
- During the audit we did not see any examples of the FLRA being used. The MEPS noted that he typically does not see many.

#### Eastern:

- The hazard assessment process works well with the main obstacle being to combat complacency as typically very similar jobs being completed every day. Further emphasis needs to be placed on the Field Level Risk Assessment (FLRA) and the process on which to carry this out when you reach the site.
- Clarenville Depot does not complete hazard assessments for yard maintenance. The hazard assessment process should be utilized for all jobs, especially for those we consider to be day-to-day as many injuries occur when completed everyday tasks.

- The MEPS keeps all copies of generic Hazard assessments electronically on local drive. Reviewed multiple hazard assessment which had good mitigations put in for all listed hazards.
- When reviewing hazard assessment documentation for that day there was a good comment on an additional hazard being present which was noted on both the TBT and hazard assessment. This comment pointed out an additional hazard which was controlled by adding truck turning sign. Additional documentation in package also included right to refuse and TC layout used.
- When reviewing hazard assessment, it was noted that the actioned by and date/name sections
  were not filled out for the hazard assessments reviewed. Was pointed out by MEPS that the resp
  persons would be Lead Hand and the crew so they did not see the need to complete every day.
  Suggested to review the hazard assessment forms and update. If certain sections are not being
  completed by workers then need to understand why.

### Avalon:

- The Hazard assessment process is the main means used by the workers to discuss and communicate the hazards and controls of their work. It would be a good practice to develop fundamental training / workshops around the hazard assessment process including the Field Level Risk Assessment piece.
- Quality of Hazard Assessment reviewed seemed low. Was for pot hole work using machinery however no mention of working around or using small equipment (roller), working around heavy equipment (asphalt truck), working with asphalt.
- One of the controls on the hazard assessment was PPE however it was noted that multiple workers on site were not wearing safety glasses during operations. Personnel wearing hard hats incorrectly i.e. backwards and on top of ball cap.

### Headquarters:

• The hazard and risk assessment process is currently being revised. The new process would contain pre-filled hazard tables filled out based on the task and then use the current hazard assessment process (used by supervisors now) as more of a field based process.

### Labrador:

- HA reviewed and in place for the work to be completed. Only using three lines on the form. Further hazards could be identified and controls put in place for the hazards. i.e. heat, manual lifting / handlings, exiting and climbing into the work truck, etc.
- Hazard assessment is always lead by the MEPS consider having the lead hand / supervisor or work crew perform the TBT / HA it will hopefully encourage the participation and engagement in Health and Safety.

- MEPS noted that the personnel will complete page 2 of the HA form. He was not aware of the FLRA guidance form available in the OHS manual for guidance to the FLRA process.
- HA does not address manual handling, flying debris i.e. rocks and cold patch being picked up and thrown from tires, use of manual tools climbing and exiting the back of the pick -up truck.
- 2 page rarely used on the HA form. Typically, things are complete before the crew leaves the depot in the morning. However, they do monitor the site and if traffic has increased due to ferry traffic the crew will pull off the road until traffic returns to normal volume.

# TRAFFIC CONTROL MANUAL

### Western:

- Wasn't aware of JHA outlined in Section 5.5. Seems as they just have Safe Work Practices (SWP) not JHAs.
- Outdated manual as many things have changes since last 2014 update. Any update to manual has to go through St. John's (JMO) which is a slow-moving process
- It was noted nothing in manual on pothole patch work.
- It was noted to involve the front line worked in the TCM sign set up and table development.
- Short term work high speed high volume work takes place in less than 30 minutes (e.g. pothole patch work). Suggest having a table with less signage and with 2 control vehicles to complete the work safety and in a timely manner and / or electronic sign pothole patchwork ahead for next X kms. Noted by Cold Lake Depot at well.
- There is an alternate Traffic Control outline completed in the western region for survey works which has been approved by an Engineer. This should be updated in the manual and shared province wide.
- Many plans have too many signs. Putting up and taking down signs is the most dangerous operation.
- Pull over law should be enforced when setting up and dismantling the traffic control signs. Unsure on what the process is for notifying enforcement for violations?
- The Cold Lake Depot was using a TCM layout from TCM 2016 Manual, which had been signed off and stamped by an engineer (753-2). Using a layout for a book that hasn't been released.

### Central:

- For smaller jobs the T&C manual works well, however with more complex work scopes it may not be ideal or include all relevant layouts.
- Where there are consecutive construction zones, there is no layout design to efficiently allow for continuation, rather it is confusing to the general public / motorists when they see multiple construction zone begins signage and multiple 50km ahead signs.
- They are using additional, pre-approved layouts and variances an updated manual should be issued to include other setups.

- It was noted that the work zone dimensions' table listed in the Traffic Control layouts list the max delineator spacing in taper zones and work zones in the same box using a / to separate. To avoid confusion, it is suggested to include these in two separate parts in the table.
- The Fundamental Principles section of the Traffic Control manual has a specific point on using a dedicated traffic observer under certain circumstances. It is suggested to create a simple layout as currently no such one exists.
- The decision matrix in the traffic control manual is not generally used. Mainly based on experience.
- Was noted by the MEPS that there is no flexibility for supervisor to modify the sign layouts (e.g. add signage, adjust spacing, etc.) based on the site and field risk assessment.
- The development of the new traffic control manual should include field supervisor comments in addition to management.
- Previously there was a role in Headquarters who was an overall owner of the Traffic Control Manual and process. There should be a resource which can provide clarifications / answer questions based on the Traffic Control Manual and / or layouts contained within.

### Eastern:

- Typically, the traffic control manual does not allow for the introduction of additional signage or signage modifications. Should review the process to see if site supervision (MEPS / Lead Hand) should be given the ability to modify and note the differences and additions on the hazard assessment. The training does not answer this question
- Regional Engineer was previously on the most recent Traffic Control committee and was provided a draft copy of a 2015 version to review. Currently the status of the new traffic control manual and who is person in charge is unknown.
- Clarification needed on changes / variations to traffic control layouts in the TCM. Eastern Region noted that you require a professional engineer while Central Region noted you can use sound technical judgement. The introduction section in the TCM confirms both. The training (TCPS) also did not clarify when and if variations can be made.
- Site supervisor should be given discretion to modify traffic control layouts if sound technical judgement is used which also considers the H&S of the workers. The additions or modifications of the layouts are done with safety in mind.
- The traffic control manual does not have layouts for the following: 1) working in intersections, 2) pothole patchwork, 3) coming up to or working on bridges(cleaning).
- Traffic control manual should be used as a guideline with discretion to supervisors.

- Currently, according to the traffic control layout, when working on the TCH with 2 lanes the large tapers can cause traffic congestion. Congestion leads to agitation which can provide an additional level of risk to the traffic control workers.
- The traffic control manual states within the Introduction that a qualified prof engineering is required to certify changes to the traffic control layouts. However, it was communicated by the RD to the MPES that adjustments came be made if it is based on increasing safety. This contradicts the OFI from the RD and not sure if this conforms to manual requirements.
  - RD Typically the traffic control manual does not allow for the introduction of additional signage or signage modifications. Should review the process to see if site supervision (MEPS / Lead Hand) should be given the ability to modify and note the differences and additions on the hazard assessment. The training does not answer this question.

If the Supervisor (MEPS) believe that an addition will increase the safety then they will photocopy the layout and mark up with the addition. This will also be noted on the hazard assessment.

- Clarification needed on changes / variations to traffic control layouts in the TCM. Eastern Region
  noted that you require a professional engineer while Central Region noted you can use sound
  technical judgement. The introduction section in the TCM confirms both. The training (TCPS)
  also did not clarify when and if variations can be made
- It was noted that there are 2 main issues with the current TCM. There are too many layout within the manual that are not used which can be confusing but also, they do not have specific layouts which they encounter frequently in the manual. Example of not having a layout for 3 lane work other than 752-27/28 and much of the TCH is a 3 lane highway. Also, example noted the TCM does not contain a layout on working within an intersection.
- According to site workers the traffic control manual can be too confusing to be used practically on site.
- For major interchanges within regions, it would be beneficial to have pre-planned layouts.

### Avalon:

- As far as the RD is concerned you need a PENG stamp to change layouts in the TC manual. The RD has both stamped new layouts in the past and just signed and approved. It is the opinion of the RD that modification of the TC layout should be based on sound technical judgement (with safety in mind) and not require a PENG stamp.
- Changing of Layouts Supervisors would discuss changes with the SO or RD who would then come up with a plan. The draft unsigned plan would be provided to the supervisors to review who would provide comments (if any) back to the RD who would revise and then sign off. (Suggest that changes to the manual be in accordance with a defined process i.e. MOC This

can outline clearly how TCP can be modified and implemented quickly while keeping safety TOP of Mind.

- RD was unsure where the status of the TCM update was but was told that a full overall is again required due to update in the signage distances provided from a federal document. Note that the TCM does not provided variations / range of distances indicated within the TCM but many times it may not be practical to have to stick to those distances.
- SO was unaware of the status of the Traffic Control Manual update and was under the impression that this was due to be updated and released numerous times of the last couple years but this never happened. John Morrissey apparently in person in charge of the update.
- Was told by the SO that you can use multiple traffic control layouts in conjunction with each other (i.e. using 2 separate layouts together). Not sure if this is completely understood across the province.
- TCM issues:
  - Needs to be more variances / ranges built into the manual
  - Example of flagman set-up for survey work vs that of 752-1. Survey allows flagman to move with the worksite while the other layout you have to be a certain distance from the flags person sign.
  - Supervision should be given the discretion to make changes based on tech judgement and safety.
  - Even the SO does not have the ability to make changes to layouts (not PENG)
  - Decision matrix needs to be highlighted within the manual
  - Update Manual layout to be more user friendly
  - Does not include work for 3 lane roads
  - More information provided for quick work set-ups (pot hole work)
- 2 separate layouts used in conjunction with each other 752-2 and pg 36 in TCM.
- Nothing in the TCM on working in an intersection
- They do not make any changes to the sign layout without a signed off version from a PENG
- Changes to the TCM i.e. Layouts requested are being received but these should be shared province wide for use. Example Page 39 TCM calls for 60 X 60 signs but needs to be 90 X 90 for visibility. New plan received but not shared with other regions.
- Was told Traffic Control Layout used for site was 752-2. However, layout was actually a modified version of this layout with additions based on increasing safety (reduced speed on ramp to 30, 3 different sign set-ups, signage distances, etc there was no modified layout signed by a PENG.

### Labrador:

• The traffic control manual does not have layouts for pothole patchwork.

- MEPS noted that the Pot hole patching layout is supposed to be in the new TCM which was to be released last year but have not seen it yet.
- Key definitions which accompany the layouts are confusing and contradictory. Clarification required.
- Site supervisor should be given discretion to modify traffic control layouts if sound technical judgement is used which also considers the H&S of the workers. The additions or modifications of the layouts are done with safety in mind.
- TCPS no different that TCP. Do not get much value. TCPS needs to be improved to focus on TCM and its use.
- Survey site, Guide Rail site and Grading site had all required signage as per the TCM. It was a project decision i.e. spec that the speed signs utilized in the layout be reduced to 30 km instead of 50kms to enhance speed and dust control thru the work zones. Utilizing TCM layout 752-3 which was specified in the Tender Document.
- SE suggest to consider updating the TCM to allow 100 m between signage to allow contractors to be more accurate in their sign placement.

# REPORTING

#### Western:

- According to Section 4.6 in the OHS Program Dept T&W Different Potential sections of the program will be audited on different time tables, but the whole program should be reviewed at least every three years, as required by the Act. The program should also be reviewed, and the manual updated, where there is a change of circumstances that may affect the health and safety of workers, or where an officer requests a review. For a complete description and the requirements of this review, please refer to Section 11.16, "OHS Program Self-Audit". Not sure if this has been completed
- OHS Program manual was distributed as printed copy on release. This causes potential to have uncontrolled copies on worksites.
- Struggling on how to document and audit contractor controlled worksites to ensure proper management and controls are in place.
- Generally weekly scheduled meeting with Regional Managers and ADM. This typically does not have an agenda but more of a round table discussion. It is suggested to prepare an agenda prior to with a specific segment to be on H&S issues. Could discuss accidents / incident / safety flashes / OHS committee outputs, etc.
- It was noted that there is now a training database which CLD has and keeps track of individual training but still in development and RD not aware of where this currently sits. Master training register is generally kept at the depot level but was not sure if this included equipment related training. Understanding is that CLD would capture all of this.
- No goals or KPIs provided to each region on what H&S stats should be reported. Incident rate not known. RD not aware of the incident register. No monthly reporting required outside of informal ADM meeting.
- RD believes that all incidents are being reported.
- For change they develop a plan, meet on the plan, approve, execute then control. These are one off plans and are site specific. Not sure on where they go after this.
- It was noted that there was no robust system to report and implement near misses and actions from near misses.
- No structure for HSE documentation that RD is aware of.
- SO was not familiar with field level risk assessment (FLRA) form. Form 11.17
- SO noted he did not have time to complete site visits due to office requirements. His responsibilities do not allow him time to complete but he did agree that it was hard to lead safety without visiting the worksites.

- SO wasn't aware of site inspection forms outside of the ones completed for buildings. Wasn't aware of site inspection form available. New forms are done and used with engi.
- It was believed it was OHS responsibility to complete investigations and he only signed off depending on severity. SO not trained in incident / investigation process or aware of training however he may sit in on interviews of personnel. Not sure on responsible of sign-offs for incidents.
- SO has not safety reporting requirements to his management.
- No process of guidance on how to do but the process is typically known on how to complete. Process not indicated in manual as well.
- No process for improvement / hazard observations / card system in place that SO was aware of. No incentive based system.
- Collaborative approach rather than a policing based approach for site visits.
- No document control structure within the region that SO was aware of.
- Site safety plan submitted prior to 10 days of starting work.
- Review contracting requirements of Dept T&W Roads and Bridges Master Spec, Division 1 Section 190
- RE & SE not aware if TBT were completed daily or weekly
- Accident / investigation reporting outlined in Safety Plans HAVE TO CONFIRM
- RE & SE was not sure on responsibility on involvement for an accident / investigation outside of OHS. Never really had incident to be involved in.
- Review of MSDS binder at Deep Lake Depot and was noted that first 3 MSDS sheets was outdated (2010 was validation date). Section 6.5.1
- Deer Lake Depot MEPS developed a universal safe work manual which the workers can take to site. This includes information from the T&W OHS Program Manual, Safe Working Practices, and the Traffic Control Manual. Also note that this is uncontrolled information which would periodically need to be updated to ensure the correct information is included.
- Deer Lake Depot MEPS completed a Hazard Assessment for himself every day on supervisory role. Noted that he is not exempt from completed hazard assessments.

- System very cumbersome to review and updating / keeping documents up-to-date seems to be
  a challenge. Site for SWP is not user friendly and was noted could take him up to an hour to find
  the SWP. Therefore, MEPS kept copies of the SWP on a jump drive which he would use for each
  SWP. No notification on updates to SWP provided to MEPS and it was up to the MEPS on site to
  review the online copy. Suggest after updating SWP then notification should be sent to all MEPS.
- All Deer Lake Depot Hazard Assessments are stored on MEPS jump drive as they were sent by the SO.
- Accident / incident form plug in was automatically updated onto all MEPS CPUs for use.
- MEPS developed his own form to indicate who was responsible and to include contact lists. This form looks to meet the intent of the program.
- Was told that the field level risk assessment is completing by the lead hand as soon as they got on-site however during the audit we could not find one example where pg 2 (the FLRA) was filled out.
- Typically, the teams use generic Hazard Assessment forms for each job, however this does not allow for the ability to add information to the risk assessment, outside of it being noted in the TBT – we did not see evidence of this being noted in the TBT. They were not properly completing the TBT forms, this includes the "Description of safety topics" covered and the "other safety concerns" section.
- The MEPS typically completes the TBT and hazard assessment review every day at the dept. It is suggested for the lead hand to periodically complete TBT / hazard assessment as well.
- MEPS do not document their site visits on a site inspection form. Suggest on development of a site inspection form for supervision. New forms are done and used with engi.
- No observation / card system to report any field hazard observations. Suggest developing a card system for use on sites.
- MEPS does not believe that all incident / accidents / near misses are being reported only damage incidents. Workers need to be educated on importance of reporting and why they need to report all near misses and incidents.
- MEPS is after leading investigations into incidents / accidents but does not have any specific training or was aware of training available to take.
- OHS Consultant does not complete a lot of self-auditing but do attend WorkplaceNL audits. Also, she wasn't exactly sure on who was responsible to complete the self-audits but suggested it could be the OHS committees.
- No KPIs or H&S reporting requirements for OHS consultants to region or to headquarters

- Use of FLRA not specifically clear in manual Was mentioned on possibility of including info on the form in the second page of the hazard assessment or TBT form. Similar to TBT forms used in our industry.
- OHS Consultant opinion that most accidents / incidents are not being reported. However, is was noted that this is being pushed by management (e.g. Teleconference with Deputy on importance of reporting). Workers are still not seeing the important of reporting as nothing typically seems to come from reporting outside of additional paper work.
- DAT feels that all accidents are being reported but near misses and first aids are not (however reporting is being supported by management). It was opinion of the DAT that if NM is being reported then there are negative consequences.
- Daily checks completed by DAT / tech to make sure signage properly in place confirmed via records.
- The contractor provides a monthly report to T&W DAT which includes the HSE stat, total hours worked, etc. This info is not being used by the department and should be captured as part of their reporting / KPIs.
- During the audit the MEPS discussed an example used in reporting of accidents / incidents. The vehicle damage incident occurred when a piece of equipment ran over / into a garbage box. At the time of the audit the MEPS was unsure if this incident had been reported or where this currently stood. It was noted that the MEPS had taken vacation for a week and also was not 100% sure on the new Accident / incident process to be used.
- During interview with painting crew auditors were reviewing records of training and certification. The auditors asked for the TCM layout which was being used and were told that this was a slow-moving operation which did not required a TCM layout. We also asked for a SWP on the operation and was told that no one existed. The workers did describe the process used which provided a sufficient level of safety for the operations however the TCM layout and SWP should be used and provided on-site.

### Central:

- No system in place for capturing and recording hazard observations.
- Required to report accidents and incident information to St. John's however never receive any feedback on submissions. We were advised that information / feedback has been requested without response.
- Not felt that all incidents / near misses are being reported. This reporting may be hindered due to "paper work process" or the idea that disciplinary action may be taken should the individual have done something wrong

- No requirement for H&S reporting for the region or provincially. Only reporting is completing accident / incident / near miss reports to provide to headquarters.
- According to the MEPS, there is little to no near miss reporting being completed. Mainly due to 2 reason:
  - o generally seen as a paper exercise and do not see the reason for completed AND
  - some feel there are negative consequences which come from reporting near misses if they involve a break in protocol / processes (punishment associated)
- There have been previous examples of personnel being sent home / losing pay following an incident. This leads to a culture of workers not reporting incidents and near misses due to negative consequences being associated with this.

### Eastern:

- There is no H&S statistics completed and / or analyzed by the engineering department this is not a requirement from headquarters. No regional departmental stats.
- There is a big improvement seen on reporting of incidents.

#### Avalon:

- There is no direction provided by headquarters w.r.t H&S objectives, targets, etc. Wasn't sure on what historical data was or where (if any) was maintained. Each region should be provided with a set of H&S objectives and targets which they are required to meet or exceed. This could include a low incident rate, complete % training, review SWPs as examples.
- There is no H&S statistics or any Key Performance indicators completed and / or analyzed by the region this is not a requirement from headquarters.
- It is the opinion of the RD that not all incidents are being reported. Noted that there is a new electronic reporting system for all accidents / incidents and everything is sent to the DM and OHS manager. The regional management should be copied on all incident reports within their area. Should be a mechanism that all reports are shared with either all RD or SI once they are received and investigated. Could also have an immediate incident notification that all authorized personnel receive a note/brief description of an incident/accident that has occurred.
- Like the RD above, the SO noted that there are no goals / objectives provided by their department. No KPI reporting, incident/accident rate or known if this is communicated.
- T&W does not have a hazard observation / identification type form which can be used on site. Only form used if those to document accidents or incidents. SO noted could see the benefit of having a system in place. There could also be incentives based on observations and this could be considered if developing such a system.

- SO was unaware of any spreadsheet used to track accidents / incidents.
- It is the feeling of the Supervisor/Lead hand that safety has gotten much better over the years but now has slipped a little and plateaued. Still has much room for improvement.
- Engineering crew complete a safety talk every morning but typically only document 1 formalized TBT a week. Hazard assessment are completed daily but if completing the same task over multiple days then will just review and sign for the additional days.
- There are no H&S objectives which the Engineering team is requirements to meet and they do not compile H&S statistics.

### Headquarters:

- There are no numerical objectives / targets established for the OHS department for safety. These should be established early in the year and tracked throughout the year to ensure completion. Was noted by the OHS manager that they are still developing their OHS process and not looking at how to track or generate metrics.
- There is no real statistics tracked by the department. The incident rate is unknown. Only real tracking was done via an accident / incident spreadsheet.
- Accident / Incident notification process involves electronic form which is submitted to supervisor then directly to the DM who actioned in the local database to certain personnel. There may be a gap with local reginal management not being notified prior to DM at headquarters. Also, this new process is not outlined in a workflow or document. It is suggested to review the process flow to ensure the correct personnel are involved at the right steps. Potentially local regional supervisor should be notified, then the OHS Manager or delegate should be first person to action the report at headquarters with the DM being notified afterwards.

#### Labrador:

- Last meeting was completed in Dec 02, 2016 Currently 3 months past due. Note: OHS committee not functioning properly required to have another worker rep and the deport is struggling to keep the position. Training will be required for a new member.
- TBT / safety meetings are not completed everyday, specifically if completing the same topic in back to back day. It is always good practice to complete a TBT / safety meeting every morning prior to the start of the shift. To avoid monotonous TBTs suggest discussing different safety topics each day / review of SWP, etc. HA can be improved to include –
- MSDS binder could not be produced at the depot

- Biweekly checklist for the truck was not completed. The checklists were done up to the beginning of July.
- very little activity in incident / accident reporting. MEPS opinion is that reporting is ok but can be improved.
- SE advised that their crews / Team at site camp complete a tool box talk once a week, typically on a Monday. Risk assessment is reviewed daily for the activity they are doing. Suggest conducting a tool box meeting every morning and to coordinate info and make sure all hazards are identified and discussed daily.
- Not many incidents on site but when an incident occur the protocol is to immediately notify the SE. They do not wait until the weekly or monthly reports are submitted.
- Timeliness of incident / accident closure could be improved SE identified that they are still waiting on updates to the incident / accident reports specifically on the damage incident (roller colliding with a truck) and injury accident (rolled ankle)
- No Regular safety focused meetings with Management team or SO team to discuss performance
   / goals / objectives. Note: Spring and fall meetings held to prepare for the start of summer and
   winter ops in which safety and the importance thereof is discussed. Noted that there are regular
   one on one meetings with the MEPS to discuss issues and direction on safety based on
   communications / directives received.
- Noted that the underlying object is for all to go home safe no measurable objective given to support this goal.
- SO believes that the reporting is at a good level perception has changed even over the last 2 years moved from a discipline for reporting to a more supportive for reporting of incidents. i.e. vehicle damage. Etc... Near miss reporting can be improved.
- General feeling from the RE that the near miss reporting could be improved

# CONTRACTOR / SUBCONTRACTOR MANAGEMENT / SELECTION

#### Western:

- Contractor selection only depends on lowest bid. He was not aware of OHS being involved in bid process. Typically given contractors and assume all reviews completed prior to.
- Contractors are awarded from St. John's following a tender review. Region does not have no say on who gets awarded the work. They are the ones who work with the contractors the most and should be involved in selection, specifically if there are any issues related to past experience. Was noted again this was based on lowest bid
- Contract will select the TC plan and will review with the DAT prior to.
- Pre-construction meeting completed with all parties involved and with concerns are brought back to contractor based on what they see on site. This can be verbal or email. There is not a way to formally capture findings identified on contractor's sites. i.e. observation card program.
- DATs generally do not review / sign onto contractor TBT when going to sites. They did say they constantly communicate with contractors and where aware of what is happening onsite. However, all TBT / Hazard assessment should be reviewed prior to going on-site.
- SWP identified in the contractor safety plan. If new scope identified then new SWP and associated hazard assessment to be done properly. Contractors write their own SWPs and submit to T&W for review.
- Reviewed contractor TBT (only required to be completed once a week) and it had 2 contractor signatures on the TBT. When visiting the site there were 4 contractors and 2 T&W personnel present.
- DATs of technicians do not sign onto contractors TBTs of hazards assessments before going onto their sites. It would be a good practice to ensure they sign onto the assessment and / or TBT to ensure they are aware of all hazards present that day.
- Typically, just the DAT will review the Site Safety Plan with the OHS consultant there as a resource if required.

### Central:

- If contractor shuts down job for any reason, including health and safety, this is typically kept within the site, and reported at month's end with all required documentation for payment.
- T&W does not sign on TBT or hazard assessment of the contractor when coming on to the site Suggest making a best practice of reviewing and signing on to tbt/ha to ensure everybody on site is aware or work ongoing and associated hazards.

- Bid packages are not regionally, they are reviewed in St. John's, and interviewees are in favor of the current process as is.
- Bid packages do not contain any H&S information and H&S is not considered during the bid evaluation process. Contracts are awarded based on technical and commercial submission only.
- Regional Engineer does not complete site inspections rather leaves that responsibility with the engineer in charge of the operation to supervise the site. Suggest visiting sites on a regular basis to show workers management commitment and engagement with regards to H&S.
- Contractor H&S statistics are provided in a monthly report related to payment milestones however this information is not compiled and / or analyzed but rather kept just as record by project. These should be kept as part of overall engineering dept hours and safety statistics and potentially sent to headquarters for analysis.
- There is a CSO hired / required by the contractor however they may not be so willing to shut the job down and deal with safety issues if this position was a part of the department used to communicate safety issues, monitor H&S on the site, not from an enforcing point of view but rather as an education / continuous improvement role.
- Issues with Contractor Management and Site Set-up
  - PPE not being worn by contractors not wearing glasses and hard hats on site
  - 2 workers up in the cab of a roller with one worker smoking, while the equipment was being moved.
  - At one point our vehicle (we were driving with the Senior Engineer) as well as other public vehicles were caught between a roller in operation and a flag person who closed off traffic. Lucky enough we were in with the Senior Engineer and he was the head vehicle so could control those behind us, but this could have been serious.
  - Flags person seen on phone while working.
  - TCM layout incorrect and missing signs, sign obstructing other signs, signs blown over, etc.
    - Using 752-3 instead of flag person sign using truck turning
    - 752-3 soft shoulder sign blocking off signage as per layout
    - No construction zone ends sign for multiple work zones
    - Incorrect sign usage and spacing
- T&Ws does not participate in contractors H&S program on site. This includes not being involved in TBTs, hazard assessments and not typically being notified of a minor incident or near miss immediately. Mainly the only time they review contractor documentation is when it is provided a part of a payment milestone at the end of each month.
- The T&W responsible person for the contracted project was the Senior Engineer. He typically would have a technician on-site to manage the day-to-day responsibilities which includes logistic management between the T&W crew (surveyors, labours) and the contractors and sub-contractors. There didn't appear to be enough resources for T&W to effectively manage and confirm the contractors H&S System in place.

- Was noted by the SE that in order to include a radar sign / electronic sign on site then this has to be indicated in the tender documentation as it would have a monetary value. This use of this signage should be based on the site and risk assessment.
- Even though it was requested the day prior, the contractors were not made available to the auditors during the site visit, therefore, no objective evidence on the contractors H&S program could be confirmed.
- T&W does not sign on TBT or hazard assessment of the contractor when coming on to the site Suggest making a best practice of reviewing and signing on to tbt/ha to ensure everybody on site is aware or work ongoing and associated hazards.

### Eastern:

- It was communicated that since the CSO is hired / required by the contractor they may not be so willing to shut the job down and deal with safety issues.
- Typically, contractors provide month reports to T&W at the end of the month. These are
  provided mainly for payment milestones and include hazard assessments, TBTs, H&S stats, etc.
  There is a risk that many of the contractor's safety programs and not being confirmed /
  reviewed on a daily basis but rather at the end of the month when reviewing the monthly
  report. Additionally, many of the information on accidents / incidents / near misses could go a
  full month without the information being provided to T&W.
- The Engineering department complete contractor evaluation forms to evaluate contractor's performance following a scope of work. These evaluations are based on quality of workmanship, timeliness and management / administration. Safety should be a main topic evaluated and considers for future contractor selection. It is suggested to update the form to include a safety evaluation.
- Town municipality working within the contractor controlled site but not under control of T and W or contractor. Municipality coordinate with prime contractor but not sure on who is responsible to manage their safe work practices.
- T and W has reduced the speed of the construction road to 50km so they did not use the 50km signs outlined in the traffic control layouts.
- First when visiting site, question on what traffic control layout was to be used. Was told by the on-site technician that they were using 753-1. When reviewing the traffic control signs, it was noted that there was no 50km signs, no "no passing" signs, no "construction zone begins" signs at the entrance, no "construction zone ends" signs at the end and no "lane closed" taper sign. Sign spacing was also closer than indicated in TCM. Also, did not see any pylons being used or delineator spacing around work zone. Was told after that they were using 752-3 within 753-1. 752-3 was the principal signage and 753-1 for progressive signage. It was not clear at any time during the audit what layout was being used.

- There were several issues noted when reviewing the work site.
  - Flaggers leaning against cars.
  - Contractor supervision not wearing safety glasses.
  - Contractor working on edge of roadway with back to traffic.

#### Avalon:

- Currently there is restructuring ongoing within the management for traffic control which effects the position of the Regional Director. These positions are being made redundant and T&W are creating 2 new positions: Director of Highway Design and Construction and Director of Highway Operations. The director of highway operations will be responsible for Winter / Summer Maintenance AND the Traffic Control Manual. Not sure on how the reporting structure will be changed or what the new responsibilities for the director of highway operations will affect the traffic control program.
- RE noted that they complete contractor evaluation forms based on contractor performance within a job. These forms are provided to T&W headquarters but not sure on what, if anything, is done with them afterwards. There have also been times when they have given contractors a failing grade but then the same contractor was included on the next tender bidding list. Contractor evaluation and approval process should be communicated to all regional engineering management.
- All Contractors provide a site-specific safety plan which outlines the safety processes to be used on that site. The only person which reviews the plan is the resident engineer assigned to the scope and this is not a thorough review (double check against the Specification). Also, no safety personnel review the site safety plans.
- Contractors progress payments are based on the reporting requirements to T&W. This includes H&S stats, TBTs completed, hazard assessments done, etc. There is a risk that many of the contractor's safety programs and not being confirmed / reviewed daily but rather at the end of the month when reviewing the monthly report. Additionally, many of the information on accidents / incidents / near misses could go a full month without the information being provided to T&W. like previous findings
- The contractor Chief Safety Officer is responsible for the safety programs of the contractor. Was told that the CSO was actually shared between different sites and was currently on the west coast. Also, told that the CSO being on site is based on dollar value rather than on safety requirements of jobsite. It is suggested to remove the CSO requirement from the tender package and include in the specification book to ensure it is a 100% requirement.
- Contractor did not have copy of Site Specific Safety plan on site. Noted he did have the safety manual on site.

### **Headquarters:**

- With the restructuring in the department the OHS Consultant's role were reduced to 2 for the entire province. According to the OHS consultant the workload increased to the point where it was extremely difficult to ensure all tasks were being completely efficiently and to keep up with the work load. Covering such a large area was difficult as consultant was cautious when given advice on certain areas of the province where they were not familiar.
- To be effective in the OHS Consultant role you need a good background in operational safety.
- OHS Consultants struggled with lack of direction and communication coming from headquarters. Many times, it was asked for strategy / directives / outcomes to ensure the consultant role would correspond to the overall plan but this was not communicated. The plan seemed to change daily / weekly depending on the current goals. Noted example of consultant developing a Fatigue management plan which was submitted and no response / communications provided afterwards.
- For the risk management process the OHS consultants picked the risk management teams to be used without the consultation of local supervisor. This led to confusion on why certain employees were picked as the local supervision could have suggested employees which were more suited for the team.

#### Labrador:

- SE advised that all contractor safety plans are funnel thru one DAT for all the projects. This allows for a consistent review and safety planning / acceptance of Contractor safety plan prior to the start of the work.
- SE advised that the SPEC / Tender for the CSO requirement has been changed for Labrador project Updated to have a CSO on site full time for all projects. This is due to the size and nature of the projects concerning new road construction.
- While having a contractor CSO on site the SE believes that it would be far more effective /beneficial for the project to have a T&W supplied / employee safety consultant / CSO.
- Completes contractor evaluation once project is complete for all projects. Note: Safety evaluation is a minor line item in the admin section needs to be more prevalent in the process as this should be an item which affects the contractor status.
- Engineering project crew do not sign on the Contractor Tool Box Talk. They are is constant communication with the contractor so it is not seen as a need. Suggest reviewing and signing onto the Tool Box daily this will allow a first interaction with the contractor in the morning to be about safety and the planned activities for the day. SE suggested that the CSO could swing by the T&W trailer and give a brief on their TBT prior to the T&W personnel heading to the field.

- Contractor weekly and monthly reports which contain valuable information such as Leading and Lagging HSE Stats – however these are not compiled into useful stats for trending a contractor's safety performance. This should also be compiled and placed on the Contractors performance file or brought forward for Lessons learned.
- Flags personnel engaged with the motorist. Standing at the driver's side door and in the opposite lane/outboard side of the flag. This was highlighted to the contractor for correction / discussion in the TBT.
- It was noted that contractors are required to have a specific CSO on larger projects but the local OHS consultant is shared across multiple regions and a large area. Should be one for each region at a minimum.
- Contracts are awarded thru the Public Tendering act RE or team are not involved in the evaluation and selection of the contractors. RE not aware if corporate or department Safety personnel are involved in contractor review / evaluation / selection
- The Engineering department complete contractor evaluation forms to evaluate contractor's
  performance following a scope of work. These evaluations are based on quality of workmanship,
  timeliness and management / administration. Safety should be a main topic evaluated and
  considers for future contractor selection. It is suggested to update the form to include a safety
  evaluation.
- Contractors submit weekly and monthly reports containing safety stats this info just generally is placed in the project file. The stats are not compiled or used for evaluation purposes. The evaluation is on memory of the events and incidents that took place. The statistical data can provide support data for the selection or rejection of a contractor.

# SAFE WORK PRACTICES

### Central:

- Development of site orientation binder for seasonal engineering workers, including SWP's, OHS program, H&S Policy, and checklist completed upon review.
- Need to check and obtain the newest version of SWP's from online database as many of the copies reviewed at the time of the audit were of an older revision date (2009).
- During the audit, it was unclear on how the SWP were being utilized in the traffic control process. More guidance on the use of SWP needs to be provided to supervisor and what their purpose is.

### Eastern:

- The process of updating and approval of SWP is not completely known. This should be communicated to all supervisors as well as the current status of the SWP updates.
- The Safe Working practice for Backing of Mobile Equipment states to use a guide person "if available" not ensure / shall. Wording of the SWP and what is required vs what is suggested need to be clear in all practices.
- The Safe Work Practices are available to all workers via a binder held at the depot. They do not typically complete reviews at any specific time throughout the year. It is suggested to review the more common SWPs at the pre-construction meeting held at the start of each summer season.
- The SWP practices are sometimes noted on the hazard assessment forms but was pointed out that these have not been updated in a long time. SO was aware of the new committee on updating the SWP (through informal discussion) but not on the status or what is being done. All management should be consulted and updated on the SWP update process and how this is to be communicated. It is also suggested to review the more common SWPs in the pre-meetings each year with the workers.

#### Avalon:

• Was told typically do not use the SWPs on site or are they brought to site for reference.

### Headquarters:

- The manage change process is not really understood. The new risk assessment process used to develop SWP could be used to develop new layouts. The MOC process needs to be defined for both maintenance and engineering.
- The process for use of SWP needs to be rolled out to all employees as it is not typically understood how and when they should be used outside of available for reference.

- The Safe Work Practices are available to all workers via a binder held at the depot. They do not typically complete reviews at any specific time throughout the year. It is suggested to review the more common SWPs at the pre-construction meeting held at the start of each summer season.
- Viewed the binder utilized on site contained the TRT / HA / ERP / Training Certs / consider the SWP to be included for reference.
- Yearly comprehensive hazard Risk assessment completed for the upcoming construction activities. Review of the primary SWPs for the work are also reviewed.

# EMERGENCY RESPONSE

### Western:

• Not all DATs in the western region have in reach devices for emergency situations. Believe this was communicated during training that all personal have these devices or SAT phones.

### Central:

- No emergency response drills conducted. Impractical to complete drills at the worksite however suggest adding a table top communications drill during contractor orientation / pre-construction meetings to test numbers, roles and responsibilities and ensure all parties are familiar with protocols in the event of an emergency
- The emergency response plans reviewed during the audit had incorrect contact details as the previous OHS Manager was still listed as a contact. This should be updated to reflect the new OHS Manager. Additionally, now with province wide 911, this should be listed as the primary number for emergencies.
- Review of emergency response plans did not include 911 and had previous OHS Manager was still listed as a contact.

### Eastern:

- Each hazard assessment for a scope of work will contain an associated emergency response plan. These emergency response plans are not typically tested / trialed for effectiveness. It is suggested to complete a table top exercise / communication drills on the emergency response plan. It was noted that for a recent engineering project following an incident the correct ER protocols were followed
- When reviewing the Emergency Response documentation at the depot 911 was not listed at a ER number. All ER plans should be updated to include 911 as the primary number to use across the province.
- When requested by CSO to provide a copy of the ER plan, it was noted that she did not have a copy. Was told that they go over ER in all orientations and that all contractors have ER numbers.

#### Avalon:

- These emergency response plans are not typically tested / trialed for effectiveness. It is suggested to complete a table top exercise / communication drills on the emergency response plan.
- During a discussion on emergency response drills the SO pointed out that he has not completed a fire drill in the white hills building since he arrived in the role.

• Foreman did not have emergency response plan on site and auditors were never completely sure on what the process was outside of the foreman being the responsible person.

- Consider conducting ER drills to practice the roles and communication lines and protocols. 2way radio utilized for immediate call to depot and the deport will call ER services. Phone reception is poor and cannot be relied on. Practice of communications protocols will provide confidence in the event of an emergency.
- MEPS and personnel on the worksite were not familiar with the ER roles identified on the ERP. Training required to explain RR of the ERP positions.
- Discussion on ER roles and workers felt more training is required and are not sure what the role / responsibility of the positions identified in the ERP.
- ERP on site but it has not been tested consider testing the ERP / completing an exercise to ensure the communication / radio / SAT phone comms work if required.
- Survey crew completes a TBT and HA every morning and have an ERP plan with additional numbers to local ER services for the various towns.

# DOCUMENTATION / CONTROL

### Central:

- Hazard assessment form in orientation binder was different than the forms utilized on site and the copy included in the OHS program.
- All forms and documentation is stored on M drive locally, and any updates are received via email. We were advised that T&C manual, OHS program and SWP's are available on intranet website.
- The majority of the depots have printed off copies of the safe working practices (SWP) kept in binders at each location. A printed copy is an uncontrolled copy which can cause issues with revision control and making sure all information is up-to-date.
- The SWPs for the depot were kept in a binder which the MEPS had available to all employees, however the MEPS was unaware of where the master copies were stored online. Additionally, most of the SWPs reviewed were last updated in 2009. The general SWPs are typically only reviewed in the pre-summer meeting with specific SWPs reviewed if a unique / different scope of work.

### Eastern:

- Currently, there is no central location for new traffic control layouts. It is suggested to have a centralized location and responsible person to coordinate.
- The only copy of the SWPs were kept in two separate locations at depot. MEP could not access SWPs because not on T and W server/intranet. He would request SWPs from Clarenville. The MEP also noted that he did not have electronic copies of the SWPs.

### Headquarters:

• The OHS Program for T&W provides a health and safety policy for all employees in T&W. However, the OHS Manager believes each department should not have a separate policy but one policy statement under the Human Resources Secretariat. It was noted during the audit that this has been communicated to department management but not officially rolled out.

#### Labrador:

• JSA not available on site for the current activities on the road – in the process of being developed i.e. guard Rail installation and Pipe installation work.

# TOOLS AND EQUIPMENT / RESOURCES

### Central:

• Maintenance division has all the in-reach devices, but not all the engineering division does.

### Eastern:

- Generally, H&S communications are completed though OHS committee, communication from the DM, safety moments, etc. In the past, the OHS consultant H&S issues/lessons but this has not been occurring regularly. It was noted that the number of OHS consultants have been reduced in the past couple years. It is also suggested to have quarterly meetings between provincial management specifically to focus on H&S incidents, incidents, alerts, etc. Was noted that the DM has recently had phone meeting with workers across the province on important of incident reporting.
- Superintendent of Operations is acting Regional Director since the previous employee left the role
- Regional director is acting Superintendent of Operations. Wasn't clear at the time of the audit when the role of SO would be filled.
- It was noted that the Regional Director has not met the local OHS consultant for the region.
- The region does not have a region-specific H&S resource. There is a lot of expectation w.r.t safety and documentation which accompany the processes. Manage Safety program, provide direction and consistency across region. It was noted that contractors are required to have a specific CSO on larger projects but the local OHS consultant is shared across multiple regions and a large area.
- There should be a central resource which can provide clarifications / answer questions based on the Traffic Control Manual and / or layouts contained within. Also, it would be a central area for new approved layouts. This would allow consistency across the province.
- The Regional Engineer has lobbied for a region-specific H&S resource. Support could include: reviewing safety plans, visiting worksites, confirming contractor safety programs, helping with Safe Work Practices, and providing general safety support to the Engineering team.
- There is little to no presence of the OHS consultants within the region. Was noted that the OHS resources for the province have recently been reduced with the remaining 2 covering a larger area. Roles and responsibilities of OHS consultants need to be clarified. Was also noted that the Eastern OHS Consultant has not been seen much in the region.
- There was no computer access for workers in the depot but plans put in place to supply them.
- MEP noted that he has not met region OHS consultant. Was pointed out that consultant is available for help but would not typically be around depots/sites.

### Avalon:

- Regional director does not have time to travel to different units and currently requirement journey authorization approval from headquarters. Management engagement at the work sites and depots will help further build a positive safety culture.
- There is no specific H&S resource within the region to support traffic control.
- There should be a central resource which can provide clarifications / answer questions based on the Traffic Control Manual and / or layouts contained within. This would allow consistency across the province. Previously Traffic Control Engineer was announced for this position but never filled.
- Noted that PPE is not provided in a timely manner i.e. Chain Saw Safety Gear.
- PPE not being maintained. i.e. Safety Harnesses for fall arrest not being regularly inspected / maintained.
- Not providing the basics in varying weather conditions i.e. water for hot humid days as required by the manual.
- When asked about prescription safety glasses it was noted that the funding has run out. These could not be provided.
- 4 OHS consultant to 2 clearly see why the consultants do not have time to do what is required. Only see or hear from them when something happens.
- Difficult getting lead hands / supervisors Personnel do not want the responsibility for the site / safety of the crew due to the hazardous nature of the work.
- There are not enough engineering resources on the Avalon region to properly manage all the contractor sites. The regional engineer was responsible for 2 sites himself.
- RE stated that there are no OHS consultants. He has not seen the OHS consultants on jobs and previous consultants in region did more of a policing role then coaching / teaching. RE believes that there should be a region-specific safety resource which would support all engineering operations within the region.

### **Headquarters:**

• Currently the organizational structure in government is undergoing changed. The OHS Manager (and consultants under the manager) will still be primarily reporting to the ADM of Corporate Services, however will also will be supporting traffic control for 2 separate departments.

- There are no hard roles and responsibilities for the OHS consultants to follow and typically there
  are given a lot of autonomy on day to day activities. The consultants need defined roles and
  responsibilities (e.g. site / depot visits, review site safety plans, Lead TBTs, conduct audits, etc)
  with specific targets they are expected to meet. This role should be based on coaching /
  teaching rather than policing.
- OHS consultants is taking a leave of absence which only leaves one consultant for the entire province.
- With previous OHS Management there was more of a policing policy which affected how the employees responded to the OHS consultants. With the new OHS manager there has been more focus on coaching and safety support this included:
  - Safety investigations
  - Site visits (support not policing)
  - Developing checklists for supervisors
  - Promote safety over schedule
  - Less site visits but more phone calls / support
  - o Heading up risk assessment teams
  - o Delivering training

- OHS consultants cut back to 2 from 4. Need to have the consultants available for guidance and direction. Consider having a OHS consultant per region.
- Personnel were not wearing the correct PPE on site 3 personnel did not have safety glasses.
- PPE personnel have to provide their own PPE with respect to the unique environment here in Labrador. Multiple people on the various crew had netting on and when asked they informed us that it was not supplied as a part of their PPE kit.
- There is little to no presence of the OHS consultants within the region. Was noted that the OHS resources for the province have recently been reduced with the remaining 2 covering a larger area. Roles and responsibilities of OHS consultants need to be clarified. Note that the contractors are required to have a CSO on site why would the government not require the same?
- The Regional Engineer believes the region requires a specific H&S resource. Believes OHS consultant is a good roll. Support could include: reviewing safety plans, visiting worksites, confirming contractor safety programs, helping with Safe Work Practices, and providing general safety support to the Engineering team. Remove some of the workload on the Eng personnel in the field. OHS consultant is a field resource for support and guidance.

- One of the survey crew did not have safety glasses on as required.
- The region does not have a region-specific H&S resource. There is a lot of expectation w.r.t safety and documentation which accompany the processes. Manage Safety program, provide direction and consistency across region. Often the OHS consultant are visiting to chck on OHS compliance and help with an incident not to work with the depot and project personnel to guide and train on the OHS program, or review proposed Traffic Control layouts, etc.

# AUDITING / INSPECTIONS / SITE VISITS

### Central:

- No audits completed locally other than site inspections, and no H&S audits completed by region or St. John's.
- Report and recommendations from the audit report should be shared with all regional heads and their teams.

### Eastern:

- The previous SO made regular site visits but the current RD / SO required ADM approval. Management commitment to safety is extremely important and site visits are an important tool to show the workers this. RD did communicate during the audit that he believed this was a very important process.
- It was noted that management are typically not seen at the depot or on site. A good safety culture will have good management involvement in all levels of the work. It is suggested to complete management visits, participate in toolbox talks, etc. which will further emphasize management's commitment to a positive safety culture.

### Avalon:

- SO does not have the time to complete site visits. He did note that this was a good practice which he completed in the past but unable to now due to other commitments.
- Beginning of worksite included a 3-sign set-up as indicated in 752-2 however after the flags person since there was approximately 1.5 km before we reached the work zone.
- Has not had a site visit from a safety consultant no checks / self-audits being done. To support / monitor safety program. Guidance and support would be greatly welcomed.

### Headquarters:

• OHS consultants do not typically complete audits and many of the auditing is done via WorkplaceNL. T&W also does not have personnel trained in auditing.

- Not involved in the selection process other than preparing the tender and updating Secs to ensure the safety items are covered such as requirement for full time CSO.
- Discussions with the RE revealed that they were not given a Project Site Orientation by the contractor suggest that whether required or not that the RE request an orientation when visiting a site to ensure the process is correct and show the important of the process and overall commitment to safety.

 RE does not visit sites regularly due to the vast area to monitor – try to visit once a month and will offer suggestions on set up / safety issues as required. Suggest getting to a site or two and being present for the TBT and engage with the process to show leadership and commitment to how important this process is.

# GENERAL OPERATIONS

### Central:

- There is no longer Road Shows held within the department. This was seen as a good opportunity to communicate issues, safety concerns, lessons learned etc.
- Depots complete TBT every morning in addition to complete a hazard assessment. According to the T&W OHS Program they are only required to complete a TBT once a week.
- The SO has completed a simple daily activities checklist which includes Tool Box Meeting, Hazard Assessment, Emergency Response, Training Certs, Traffic Control Layout, Permits and information on the work scope. This must be provided to the superintendent of operations every morning and is a good reminder tool to put the responsibility on the MEPS to ensure all the appropriate processes are followed.
- When used properly, and as per instructions, the use of a crash continuous trailer (Crash Attenuators) can provide an additional level of safety to the workers and the public. The intent of the trailer is to fold up on impact and act as an energy absorber.
- Arrow boards, message boards, control vehicles with flashing arrows, etc are great tools to highlight traffic control operations and notify the public of ongoing work.
- Was noted by the MEPS that there is no flexibility for supervisor to modify the sign layouts (e.g. add signage, adjust spacing, etc.) based on the site and field risk assessment.
- Control vehicles with flashing arrows and letters boards are great tools to provide additional level of safety to the workers.
- It was noted by the workers that there is a greater risk of setting up a number of signs compared to the actual required work of pothole patchwork. Suggest development of a more simplified layout.

### Eastern:

- Leaving signs up while no work is taking place sends the wrong message to the public.
- TBT / safety meetings are not completed every day, specifically if completing the same topic in back to back day. It is always good practice to complete a TBT / safety meeting every morning prior to the start of the shift. To avoid monotonous TBTs suggest discussing different safety topics each day and /or looking for suggestions from the labourer's
- Flashing arrow boards/pickup trucks with flashing arrows are some of the best tools for traffic control and for overall public awareness.

- Was told by technician on site that they weren't following the layouts included in the manual but if OHS came on site, if they explained they were adding additional levels of safety, then this would be sufficient for OHS
- When reviewing contractor's documentation, it was noted that the TBTs are completed weekly. It is always good practice to complete TBTs/safety meetings prior to the start of every shift.
- Supervisor and the workers complete a TBT every day. This includes discussing the job, reviewing the hazard assessment, and reviewing the traffic control layout. While the T&W requirement is only once a week it is good practice to complete a TBT daily prior to work
- Arrow boards and radar sings work extremely well to slow down traffic.
- MEP pointed out that sometimes for traffic control setup they are limited as they do not have many vehicles (trucks) available. Was noted by MEP that current truck he is using has 410,000kms.
- When reviewing TC layout workers pointed out that they would use 3 flaggers in direct communication with each other through radios for work site. This was due to the nature of the winding roads.
- Pylons and flags are good tools to notified the public, but flashing lights are the best way to catch attention.

### Avalon:

- The layout required for the Kilbride set-up was not a typical layout from the manual. It was developed using lessons learned from the set-up last year in similar areas, using discussions in the pre-construction meeting and setting up traffic control and observing the traffic prior to proceeding with the work.
- One instance a vehicle stopped and pulled between traffic delineator posts. When the vehicle realized, they were in the worksite (i.e. man lifts in front of vehicle and barricades behind and on side) the passenger exited the vehicle and moved a delineator post so the vehicle could back up and leave the worksite.
- Multiple vehicles going down one lane and then backing up to go into the other lane.
- When arriving on-site there were 3 contractors standing close to an edge of the worksite. Questioned foreman on requirements afterwards and was told 4 to 5 ft, which was not being following initially.

- It was noted that management are typically not seen at the depot or on site. A good safety culture will have good management involvement in all levels of the work. It is suggested to complete management visits, participate in toolbox talks, etc. which will further emphasize management's commitment to a positive safety culture.
- Flashing arrow boards/pickup trucks with flashing arrows are some of the best tools for traffic control and for overall public awareness. Would be an added benefit especially when doing Pothole patching.
- MEPS noted that the setting up of signs is the riskiest part of the job but there is a high percentage of the public do not respect / adhere to the signage. – Message boards may help alert and attack the public's attention to the work ahead.
- MEPS noted that they have all two-way traffic and only a couple of speed zones most likely need only a few layouts for the region for maintenance.
- SE suggested that we could have legislation concerning the speeding thru construction zones. This would reduce the number of signs – i.e. removing the fines double signs in the layout. Fewer signs being deployed means lower overall probability of an incident with this activity.
- Utilization of a stick to pass Tickets from checker to trucker. This eliminates the checker from having to exit the truck and be on the road in harm's way. Checker is able to stay in the truck which adds protection in the event of an incident.
- Slow sign nomenclature not as per the TCM manual. Does not appear to be in accordance with sign TC-165. (Actual sign was orange on a black backdrop.
- Flag personnel on site were not in the correct location. i.e. both were standing on the same side of the road. SE notified the Flags person and the person corrected position.
- Flags person sitting on the opposite side of the road on a bucket. Moved to the right side of the road when traffic approaching.

## APPENDIX E RECOMMENDATION WORKSHEET

(7 pages including this page)

### East Coast Corrosion Ltd.

### OHS Audit of T&W Traffic Control Program RECOMMENDATIONS

Recom No.	Section	Scope	Recommendation	ACTION(S) taken for closure	Deadline	By Whom	T&W Approved by	T&W Closed Date
1	9.1.5	General Training Recommendations	Management and Supervisory personnel are not familiar with the on-boarding processes that exists for hiring / transferring / orientating employees into a job position. They are using either informal processes and / or information that they searched on the Government website. It is recommended to remove the process from the OHS manual and make one standard on-boarding process for the Government. Where necessary, on-boarding can be tailored to the particular department to ensure that all OHS aspects and training requirements particular to a department are reviewed and addressed. This should provide the consistency of process and record keeping across the Governmental organization.					
2	9.1.5	General Training Recommendations	It was identified during the audit that there is a gap in the knowledge and understanding of the standard and required training for Traffic Control Personnel, maintenance crew, engineering personnel, etc. It is recommended that the job descriptions and roles and responsibilities for each position be updated to include the mandatory training. This could be potentially linked to a position in PS Access for ease of training identification and monitoring.					
3	9.1.5	General Training Recommendations	There is a gap in the communication and understanding of training certificate management within the department, especially concerning the responsibility of the worker and accountability of the supervisors and managers of the regions. There is a perception that the training records are now in PS Access or on line at Workplace NL and personnel cannot access them. Recommend a communication campaign on training access, availability, roles and responsibilities of the workers, supervisors and managers within. Employees need to understand how, but more importantly why, these protocols are in place. These campaigns can be followed up and monitored by the OHS consultant through guidance and coaching of personnel on the ground.					
4	9.1.5	General Training Recommendations	Further to the previous bullet point, a simple Leaning and Development process or Training Completion process flowchart should be established and published on the intranet for ease of reference, which management and supervisors can refer to for guidance on training completion. This process would reflect the use of PS Access and eliminate the need for Training Matrices and the general feeling that training needs to be tracked at the regional and depot level.					
5	9.1.5	General Training Recommendations	Even though night time work was a pilot project and not a focus of the audit it is evident that there would be some additional training requirements that would accompany this work. CLD indicated that they have reached out but have no responses regarding this matter.					
6	9.1.5	General Training Recommendations	It was noted by the CLD that PS Access was rolled out and that various computer training skills were offered to help individuals complete the computer training and other tasks required as a part of their job. CLD also noted that there are various government centres and sharing of computers at offices that can allow personnel to complete this work. Based on discussions with CLD and Region Management teams there is a difference in opinion in training accessibility and resources for such activity. Certain depots lacked the proper infrastructure (e.g. Computer availability, intranet access). Further, it is unreasonable to suggest that personnel travel to another office or utilize the open government building to complete leave request or online training (course dependant). As a result of multiple communications throughout the audit, it is noted that there is some misunderstanding or lack of acceptance and willingness for collaboration between the CLD and the regional management teams within the province. A suggested recommendation would be that if computer access is required for an employee's task, then it should be available within reason (minimum of one in each depot to be shared) so the employees can complete their task as a part of their daily work.					
7	9.2.3	TCP and TCPS Recommendations	It is recommended to review the content of the TCPS training course and utilize experienced personnel (in particular, those who have both worked in the field and were previously an internal training provider) to assist with enhancing the course content. Some items for consideration are; develop hands-on practical group exercises requiring TCM layout selection and set up, exercises on developing a Hazard Assessment, etc.					
8	9.2.3	TCP and TCPS Recommendations	Consider incorporating some Fatigue management information in the TCP course to make personnel aware of the hazard.					
9	9.2.3	TCP and TCPS Recommendations	Consider using experienced trainers who are familiar with the tasks such as experience in Traffic Control and the Traffic Control Manual, Hazard Risk Assessment and Emergency response. This experience will allow for queries and discussion which will provide confidence for the trainees.					

### East Coast Corrosion Ltd.

### OHS Audit of T&W Traffic Control Program RECOMMENDATIONS

Recom No.	Section	Scope	Recommendation	ACTION(S) taken for closure	Deadline	By Whom	T&W Approved by	T&W Closed Date
10	9.2.3	TCP and TCPS Recommendations	It is the auditor's opinion, which was supported by the results of the audit process, that the TCPS training did not have the right focus nor delivery method which resulted in a course with minimal value to the trainees. Further to this, the auditors completed both the TCP and TCPS training within a week and it did not provide any level of confidence to utilize the TCM in the field. Recommend having the TCPS course focus on two or three key topics which are: TCM use, TBT in conjunction with Hazard Risk assessment and SWP's. It is suggested that this be completed over a 2-day time frame so that a deep dive can be completed on each of these topics to give the Supervisors and lead hands the knowledge and competency to lead their teams with confidence.					
11	9.2.3	TCP and TCPS Recommendations	During the audit, it was pointed out on multiple occasions that the in-house TCP training and the third-party TCP training is inconsistent. Thus, there are two different levels of training provided for in house personnel vs the contractors hired for construction projects. It is recommended that the training provided to contractors to be the same standard training developed and approved for use in T&W. This would benefit the flexibility of Government to use both in-house and external training providers for the TCP course.					
12	9.2.3	TCP and TCPS Recommendations	Recommend that CLD work with WorkplaceNL on course content and training criteria for trainers to ensure consistency between internal and external training.					
13	9.2.3	TCP and TCPS Recommendations	If the intent is to keep the TCPS training in the current format, then the following recommendations should be considered: - Update content on steps of incident response and info on the forms to be used, - Expand the content of Safe Working Practices, - Increase the time spent on TCM and include scenario exercise work, - Provide the reference material such as the TCM, sample SWP's and forms utilized in the processes discussed, - In addition, the course should be moved to a classroom based approach to allow interaction, queries and discussion which will enhance learning and understanding.					
14	9.3.3	OHS Communications Recommendations	Throughout the audit, it was identified that there are significant gaps in communication between all levels of the Transportation and Works Department. This includes sharing of OHS information as well as scheduled communications and meetings. It is suggested to develop a process specifically around OHS communications which will be rolled out to all senior management within the province. This process would also outline responsibilities surrounding OHS communications as there seemed to be confusion as who was responsible for OHS communications (e.g. hazard alerts, lessons learned, SWP's, etc.).					
15	9.3.3	OHS Communications Recommendations	The T&W Department cover a significant portion of Newfoundland and Labrador and because of that the importance of communication cannot be emphasized enough. Regular scheduled meetings between regional supervision can ensure OHS issues and lessons are being communicated to all levels of Traffic Control. This includes Regional Directors, Regional Engineers, Superintendents of Operations, OHS Consultants and Site supervision (MEPS / OPS). This can also help to ensure a consistent approach is provided across the province with respect to health and safety. It is not the intention of the auditors to recommend weekly meetings but to highlight the fact that meetings which were previously noted have been discontinued and / or seriously lacking. It was noted by numerous auditees that the "Road shows", which were completed in the past, provided a great opportunity for conversations and discussions province wide.					
16	9.3.3	OHS Communications Recommendations	The biggest risk to traffic control employees is the traffic from the general public so any methods which can increase awareness must be considered. Ad campaigns on traffic control, radio announcements, Traffic Control signage within NL driver's exam are suggested tools which can educate the public in their responsibility. This concern was highlighted specifically by the traffic control workers working on the roadways.					
17	9.3.3	OHS Communications Recommendations	There did not seem to be any evidence of a process to share information including accident / incident info or lessons learned. The T&W OHS Program Manual briefly mentioned hazard alerts however, there was no evidence during the audit of sharing of hazard alerts within the T&W department. Most management were not aware of the process. These are an extremely important communication tool which can provided an illustrated summary highlighting OHS related issues in an understandable and quick manner, with the objective to share lessons learned within the department.					
18	9.3.3	OHS Communications Recommendations	It is suggested for the OHS Manager to send out an email communication to all provincial site supervision advising them on the OHS Managers role and responsibilities surrounding safety in the workplace.					
19	9.4.2	Hazard Assessment Recommendations	The Hazard assessment process is the main tool used by the workers to discuss and communicate the hazards and control measures associated with their tasks. It would be a good practice to develop fundamental training and workshops around the hazard assessment process including the Field Level Risk Assessment and Toolbox talks.					

### OHS Audit of T&W Traffic Control Program RECOMMENDATIONS

### East Coast Corrosion Ltd.

Recom No.	Section	Scope	Recommendation	ACTION(S) taken for closure	Deadline	By Whom	T&W Approved by	T&W Closed Date
20	9.4.2	Hazard Assessment Recommendations	To ensure all employees and / or visitors attending contractor work sites are aware of the scope and associated hazards it is recommended to make it a best practise to review and sign onto the contractors TBT forms and / or hazard assessments. It is an OHS requirement to ensure that everyone is aware of the hazards of the site and actions to address these.					
21	9.4.2	Hazard Assessment Recommendations	While not required by the T&W OHS Program Manual, it is considered a good safety practice to complete a TBT every morning at the start of a shift. Auditors did note that the Hazard assessment were required to be reviewed every morning which essentially covers the hazards to be present that day. To avoid monotonous TBTs it is suggested to discuss different safety topics each day and / or looking for suggestions from the labourer's.					
22	9.4.2	Hazard Assessment Recommendations	It wasn't clear during the audit how the new risk assessment process mentioned above was being managed or tracked. Further information around this process should be communicated to all regions. This includes the objectives of the process (to develop new SWP's) and the current status. This is of increasing importance since one of the OHS Consultants has taken a year's leave.					
23	9.4.2	Hazard Assessment Recommendations	As per the conversation with the OHS Manager there is a new hazard and risk assessment process being developed using pre-filled hazard tables in combination with a field risk assessment piece. It is suggested to also review the current Tool Box talk form utilized within this process and update. It is suggested that for the Tool Box Talk form include, general info, work activity / task, hazard categories, biggest risk to people, stop the job triggers, who is doing what and work declaration.					
24	9.5.5	Traffic Control Manual Recommendations	It is evident that there is confusion regarding the ability to change and modify the Traffic Control layouts to suit a particular traffic control situation while keeping the employee's safety in mind. The TCM itself is unclear about the process to follow to assess and implement change. Recommend a Management of Change process be developed and implemented to allow the flexibility and efficiency in making low risk modifications and changes to an existing traffic control layout. This process would need to account for the identification, evaluation of safety and suitability along with approval requirements. This will allow the supervisors to make practical changes in the field and still maintain the safety of the personnel involved.					
25	9.5.5	Traffic Control Manual Recommendations	As result of the "opportunity for improvement" items identified above, it is suggested for someone to be assigned accountability for the Traffic Control Manual. It is recommended that a dedicated focal point for management of the Traffic Control Manual, Traffic Control queries and clarifications for consistency of process. This will enable monitoring of change requests and ensure that manual revisions / updates are done more efficiently.					
26	9.5.5	Traffic Control Manual Recommendations	It has been a common theme throughout the audit that there are key Traffic Control layouts missing from the manual i.e. Pot Hole Patching, working in intersections, etc. It is recommended that the Opportunities for improvement be implement as noted above. During the development of these layouts, it would be beneficial to utilize experienced field personnel to review and comment on layouts to ensure all key elements are considered before issuing for use.					
27	9.5.5	Traffic Control Manual Recommendations	Suggestion to review and revise the TCM to be user friendly as it is poorly organized making it difficult to navigate to find particular items such as the decision matrix.					
28	9.5.5	Traffic Control Manual Recommendations	Currently, there are TCM layout changes made at the request of an individual region and these changes are not being shared / communicated around the province. It is recommended that a process be adopted for development, issuance and storage of new TCM layouts for ease of accessibility and use in all regions until such time a manual update is completed.					
29	9.5.5	Traffic Control Manual Recommendations	There are many observations noted throughout the audit: - Deploying and retrieving signs is high risk during maintenance work especially for short term work / slow moving operations scenarios, - Too many signs used in some setup situations, - Conflicting information across regions, and work groups, - Use of control vehicles, electronic signage and crash attenuators would provide a higher level of safety versus deploying multiple signs. It is recommended that these observations noted above be reviewed and assessed as this is direct feedback					
			from personnel executing the work. Working with front line personnel to arrive at a final product will also have a higher probability of adherence because they were involved in the process.					
30	9.6.4	OHS Reporting Recommendations	It is suggested that each region be provided with a set of H&S objectives and targets which they are required to meet or exceed. This could include a target of a low incident rate, complete % training, 0 LTI, etc. Objectives / targets should be established early in the year and tracked throughout the year to ensure completion.					

### OHS Audit of T&W Traffic Control Program RECOMMENDATIONS

### East Coast Corrosion Ltd.

Recom No.	Section	Scope	Recommendation	ACTION(S) taken for closure	Deadline	By Whom	T&W Approved by	T&W Closed Date
31	9.6.4	OHS Reporting Recommendations	Engineering contractors provides monthly reports to T&W including H&S statistic. This information is not being used by the department and should be captured as part of their reporting / KPIs and to complete trend analysis to highlight areas requiring focus and improvement.					
32	9.6.4	OHS Reporting Recommendations	H&S statistics and information is not shared throughout regions or from headquarters. It is suggested that when an accident / incident / near miss occurs, that information be sent out to all regions as a safety alert to prevent reoccurrence in another region. Additionally, it is recommended that there be an avenue for employees to discuss concerns and issues and lesson learned sharing with regards to health and safety (quarterly meetings, annual conference etc.).					
33	9.6.4	OHS Reporting Recommendations	T&W does not have a hazard observation / identification system which can be utilized on site, aside from the form used to document accidents or incidents There could also be an incentive program implemented to encourage participation if developing such a system is considered.					
34	9.7.2	Contractor Management Recommendations	It is recommended that the T&W spec book be revised to include eye protection as a mandatory PPE requirement. When completing road work, it seems evident that eye injuries are of high potential and probability, and eye protection would be the last line of defence in preventing an injury.					
35	9.7.2	Contractor Management Recommendations	It is recommended that the T & W Spec book be revised to capture all applicable codes and standards referenced or required and ensure that the latest revisions of the codes and standards are utilized. As example, the spec book references a 2012 CSA standard for P.P.E which was revised in 2015. A process shall exist to ensure new standards are utilized and implemented.					
36	9.7.2	Contractor Management Recommendations	It is recommended that Contractors be required to submit health and safety information along with a technical and commercial submission for bid packages. Health and safety should be a focus during the bid evaluation process. Additionally, the regional employees will be working with the contractors and should be involved in selection, specifically if there are any issues related to past experience. It is also suggested to update the contractor evaluation form to include a safety evaluation, and include this in the bid evaluation process. This contractor evaluation process should be rolled out and communicated to all personnel.					
37	9.7.2	Contractor Management Recommendations	There is no formal process for capturing and reporting hazards observed on site. It is suggested to have contractors implement / utilize a program such as an observation card program to formally document issues and measures taken to mitigate and close out.					
38	9.7.2	Contractor Management Recommendations	An observation during the audit highlighted that there is a lack of resources to be responsible for contractor management from a health and safety perspective. There is no dedicated resource to ensure that the Contractor Site Safety Plan is adequate for the operations, or to ensure that they are following the standards set out in the plan. This role could also be beneficial to communicate safety issues, monitor H&S on the site, and as an educational / continuous improvement perspective.					
39	9.8.2	Safe Work Practices (SWP's) Recommendations	The process for use of SWP's needs to be rolled out to all employees as it is not typically understood how and when they should be used instead of only being available in the system for reference when needed.					
40	9.8.2	Safe Work Practices (SWP's) Recommendations	All management should be consulted and updated on the SWP's update process and how this is to be communicated. Additionally, after an update has been made to SWP's, a notification should be sent to all site supervision. It is also suggested to review the more common SWP's in the pre-meetings each year with the maintenance workers and in the pre-construction meetings with the engineering team and contractors.					
41	9.9.2	Accident / Incident / Near Miss Investigation and Reporting Recommendations	The Current process in the T&W OHS Program Manual does not align with the new Accident / Incident / Near Miss Reporting process outlined during the audit. It is recommended for T&W to update the process within the OHS Program Manual. It is also suggested to review the process flow to ensure the correct personnel are involved at the right steps. Potentially, the local regional supervisor should be notified, then the OHS Manager or delegate should be the first person to action the report at headquarters with the Deputy Manager being notified accordingly.					
42	9.9.2	Accident / Incident / Near Miss Investigation and Reporting Recommendations	The process for investigations is not clearly understood and / or outlined within the T&W OHS Program Manual, Section 8.6. Some employees noted they have completed a one-day training course for conducting investigations, while other haves no training. It is suggested to develop a structured / formal process to ensure all OHS incidents occurring at T&W sites are classified, notified, investigated, analyzed and reported, to the same standard using consistent definitions and reporting format.					

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43	9.9.2	Accident / Incident / Near Miss Investigation and Reporting Recommendations	It is suggested to develop a HSE communication matrix for accident / incident / near misses which will determine the type of response / communication as well as the reporting lines (e.g. Regional Management, Site Management, etc). The results of investigations, specifically the lessons learned, should also be shared, as appropriate, to each region. As noted in OHS Communication findings, there is no evidence of a process to share information including accident / incident info and lessons learned. See recommendations above on the sharing of accident / incident info and lessons learned (e.g. Hazard alerts).					
44	9.9.2	Accident / Incident / Near Miss Investigation and Reporting Recommendations	It was noted during the audit that T&W management have recently communicated the importance of accident / incident / near miss reporting to all employees however improvements are still required. Workers need to be educated on the importance of reporting and why they need to report all near misses and incidents. Also, a disciplinary culture around investigation findings will only lead to less information being reported.					
45	9.9.2	Accident / Incident / Near Miss Investigation and Reporting Recommendations	It is recommended for all employees who are responsible to conduct an investigation into an accident / incident / near miss are to be trained appropriately. This training should have an emphasis on how to find the root cause, conduct an investigation and make effective recommendations to prevent similar occurrences from happening again.					
46	9.10.2	Emergency Response Recommendations	It is recommended to develop an ER process which governs site response and corporate notification protocols for guidance and support. This process should also provide guidance on roles and responsibilities so that personnel can be trained on these roles for confidence of execution in the event of a real emergency. This process should also define ER training and exercise protocols to ensure compliance and competency in the event of a real emergency.					
47	9.10.2	Emergency Response Recommendations	Complete an emergency response /fire drill at all locations, as required by legislation.					
48	9.10.2	Emergency Response Recommendations	Update emergency contact information contained within the emergency response plan to reflect current contact personnel and emergency numbers.					
49	9.10.2	Emergency Response Recommendations	Recommend conducting ER table top exercises specially to test all communications to emergency services. This is particularly important in more remote areas where we are relying on Sat phones, in-reach or 2-way radio to contact the main depot or regional office to relay the need for ER services.					
50	9.10.2	Emergency Response Recommendations	Typically, a supervisor will appoint personnel to the roles on the ER form but noted during the audit that most employees are not sure what the role is responsible for. ER training is required with supervisors and front line personnel to ensure that they understand the roles defined on the emergency response plans utilized in the field.					
51	9.11.2	Document Control Recommendations	Revision control was an issue noted throughout the audit. It is recommended to remind all employees on the important of using the proper information. It is also suggested to review the Documentation and Records Review Section 4.5 in the T&W OHS Program Manual and update as per current processes.					
52	9.11.2	Document Control Recommendations	As stated in the OHS Records findings, the T&W OHS Program Manual has not been updated since 2014. In addition, it has been communicated by the OHS Manager that the Government is looking at creating a standard OHS Policy which will apply to all departments. As the OHS Program needs to be revised it is strongly suggested to progress this update by the end of the year.					
53	9.11.2	Document Control Recommendations	There were issues noted when accessing the SWP's online as some were not available and many of the SWP's reviewed during the audit were last updated in 2009. As mentioned within the SWP's section, the current review process needs to be communicated to employees and the proper resources need to be allocated to ensure completion.					
54	9.11.2	Document Control Recommendations	It wasn't clear during the audit if a new / revised layout required an engineering stamp approval or just a signature and date. It is suggested to update the TCM if this is considered a requirement.					
55	9.12.3	Resources / Tools and Equipment Recommendations	It was evident that there were some gaps in the supply and maintenance of PPE. It is recommended that a PPE program be put in place to ensure the supply and more importantly the correct maintenance of PPE.					
56	9.12.3	Resources / Tools and Equipment Recommendations	It should be noted that in a number of incidents where PPE was not being worn as it should be (i.e. hard hats being worn backwards or on top of ball caps, no glasses). Education in the correct use and care of PPE is important to ensure that the particular piece of equipment will perform and protect the worker as designed.					
57	9.12.3	Resources / Tools and Equipment Recommendations	Health & Safety support and guidance has been a major item of discussion throughout the audit. It is evident that the support resources have diminished which makes it extremely difficult for the existing resources to complete their tasks and offer any type of guidance and support to field operations. Recommend that the H&S resources be reviewed and consider providing enough positions to adequately support T&W activities. It is the opinion of the auditors that there is a need for at least one resource per region.					

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58	9.12.3	Resources / Tools and Equipment Recommendations	It has been noted that the role of the consultant has changed over the recent past due to new OHS management and that it is not always clear to the consultants or the management team what the role and responsibilities of the OHS consultant is within T&W. Recommend OHS consultants roles and responsibilities be defined and communicated. A set of goals or targets to support the Health and Safety strategic direction or the focused areas identified for improvement based on past Health and Safety performance. This will enable the OHS consultants to support guidance of engineering and maintenance with a positive and focused approach.					
59	9.13.4	Auditing / Site Inspections / Visits Recommendations	The T&W OHS Program Manual states that auditing of the Occupational Health and Safety Program will be the responsibility of the Human Resources division in conjunction with the T&W Department and that each location will be required to perform a self-audit. There was no evidence of this being completed throughout the audit. It is recommended to develop an auditing program for each region. The purpose of the program is to verify that the organization is conforming to the T&W OHS Programs and Processes. Additionally, it is suggested for T&W to have employees trained in an auditing process. The reliability and applicability of audit findings is directly related to the competence of the person(s) completing the audit.					
60	9.13.4	Auditing / Site Inspections / Visits Recommendations	, Similar to the recommendation above in the Hazard Assessment section, it is recommended as best practise to review and sign onto contractor TBT forms and / or hazard assessments prior to entering the site. All employees and visitors are to be aware of the hazards of the site and actions taken to address these.					
61	9.13.4	Auditing / Site Inspections / Visits Recommendations	There is little to no management presence noted during the audit on T&W worksites. Most Management / Supervision interviewed did agree with the benefits of management engagement on site and that it is hard to champion safety without visiting the employees in the field, but noted that their current work requirements did not allow for many site visits. It is suggested to conduct management visits, participate in toolbox talks, etc. which will further emphasize management's commitment to a positive safety culture. Suggestions also include developing a management schedule either provincially or regionally and development of a management / supervisor site visit form. This would also be a good opportunity to provide positive feedback to workers as well.					

- Total Action non-blank: 0 Total Action items Open: 61
  - Nul items: 0
- Total Action items Closed: 0
  - Total Action Items: 61

# Percent Closed: 0%