# **RESPONSIBLE CARE®** Verification Report

PeroxyChem Canada Limited

September 27 - 28, 2017



Chemistry Industry Association of Canada



Responsible Care<sup>®</sup> Our commitment to sustainability.

#### Disclaimer

This report has been produced by a team, convened by the Chemistry Industry Association of Canada (CIAC), to provide advice to the member-company and assist it in meeting its Responsible Care<sup>®</sup> commitments. The material in this report reflects the team's best judgment in light of the information available to it at the time of preparation. It is the responsibility of the CIAC member-company that is the subject of this report to interpret and act on the report's findings and recommendations as it sees fit. Any use which a third party makes of this document, or any reliance on the document or decisions made based upon it, are the responsibility of such third parties. Although CIAC members are expected to share the results of this guidance document with interested parties, the Association, its member-companies, their employees, consultants and other participants involved in preparing the document accept no responsibility whatsoever for damages, if any, suffered by a third party as a result of decisions made or actions based on this report.

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### **EXECUTIVE SUMMARY**

This report documents the observations and conclusions of the independent verification team tasked with conducting a Responsible Care Verification of PeroxyChem Canada Limited. Following an initial planning meeting on August 30, 2017 at the company's Prince George, British Columbia facility, the verification was undertaken on September 27 & 28, 2017 at the same location. This was the second Responsible Care verification completed for PeroxyChem Canada Limited. The last verification was completed in December 2014. Four previous verifications have been carried out at this facility under the previous owner FMC of Canada Ltd.

While considering all aspects of the Responsible Care Commitments during this verification, at the request of the company, the team placed some focus on the potential for external impacts on the site.

As a result of the examination conducted, the verification team is of the opinion that the Responsible Care Ethic and Principles for Sustainability are guiding company decisions and actions, and that a self-healing management system is in place to drive continual improvement. The verification is complete, and no further involvement is required by the verification team.

Signed: Dave Mack Verification Team Leader

Date: November 24, 2017

For more information on this or a previous Responsible Care Verification Report, please contact your local company site representative: Chris Wong, Tel: 250-561-4235 CHRISTOPHER.WONG@PEROXYCHEM.COM

#### SUMMARY OF VERIFICATION TEAM OBSERVATIONS

#### **Findings Requiring Action**

The following relate to instances where the current status is at variance with the requirements of CIAC Responsible Care Commitments.

- i. Review and update the basis for the manufacturing site worst imaginable/most credible case incident scenarios. Redefine and document the scenarios as appropriate and communicate any changes to potentially impacted stakeholders and other interested parties. [OP 28 & 29, AC 129]
- ii. Establish and document a process to select and monitor the performance of contract laboratories with respect to how they operate in accordance with Responsible Care related expectations. [ST 117 & 118].
- iii. Establish and document an overall management system based on the plan-do-check-act continual performance improvement cycle for the operating site community and other applicable stakeholder awareness, dialogue, and social responsibility (i.e., the entire Accountability Code) [AC125 152].

#### Works in Progress

The following relate to self-initiated actions in support of continual performance improvement.

- i. Assessing the possibilities of installing global positioning system (GPS) locators on road transport trucks.
- ii. Developing a shelter-in-place plan for the manufacturing site to address response to related incidents at adjacent industrial operations which could have an impact.
- iii. Reviewing contingency planning for non-operational initiated emergencies.
- iv. Planning to establish future quantifiable targets for resource consumption once sufficient actual data collected.
- v. Working with product transloading terminals to address their community awareness and emergency response programs.
- vi. Establishing an appropriate process for tracking and closure of action items from Responsible Care verifications

#### **Improvement Opportunities**

The following relate to suggested actions that would enhance the effectiveness of current programs.

- i. Review long term health effects information for all potential workplace exposures and enhance the industrial hygiene program as appropriate, including attention to newer considerations, such as reproductive and other endocrine system effects.
- ii. Utilize the CIAC *Business Continuity/Critical Infrastructure Implementation Aid* as a reference in contingency planning for non-operational initiated emergencies.
- iii. Document formalized processes for on-going Responsible Care related performance monitoring of hazardous waste contractors and chemical suppliers.
- iv. Provide additional site signage and flag bearing the Responsible Care name and logo at the entrance to the site. Also post a management signed copy of the Responsible Care Ethic & Principles for Sustainability and verification certificate so that they are clearly visible in the office building reception area.
- v. Consult the Community Advisory Panel and CIAC peers in defining community outreach processes and, social responsibility, and how to measure their impact.
- vi. Consult the Community Advisory Panel on its operations for continual improvements.
- vii. In the cross reference document (aka gap analysis) identify how each listed company standard, process, procedure etc. is monitored for its effective implementation through audits, reviews, observations, or other relevant management processes, and provide an assessment of the degree to which each code requirement is met, i.e. the level of gap.
- viii. Consider the use of SIMS for tracking and closure on the full range of follow-up action items. In cases where SIMS is not considered appropriate, BIN lists can be used.

#### **Successful Practices**

The following relate to actions that strongly support sustained excellence in performance.

- i. The HS&E Network, a cross functional committee of operational task team members and management personnel, assigned to oversee Responsible Care related management systems implementation.
- ii. The integrated online documentation and record system applied to all Responsible Care related activities.

#### **1. INTRODUCTION**

#### 1.1 About Responsible Care Verification

As a member of the Chemistry Industry Association of Canada (CIAC), the most senior executive responsible for PeroxyChem Canada Limited operations in Canada attests annually to CIAC and its peers that the company's operations conform to the expectations contained in the Responsible Care Commitments and are guided by *Responsible Care Ethic and Principles for Sustainability*.

#### The Responsible Care<sup>®</sup> Ethic and Principles for Sustainability We are committed to do the right thing, and be seen to do the right thing. We dedicate ourselves, our technology and our business practices to sustainability - the betterment of society, the environment and the economy. The principles of Responsible Care<sup>®</sup> are key to our business success, and compel us to: work for the improvement of people's lives and the environment, while striving • to do no harm; be accountable and responsive to the public, especially our local communities, who • have the right to understand the risks and benefits of what we do; take preventative action to protect health and the environment; • • innovate for safer products and processes that conserve resources and provide enhanced value; engage with our business partners to ensure the stewardship and security of our • products, services and raw materials throughout their life-cycles; understand and meet expectations for social responsibility; • work with all stakeholders for public policy and standards that enhance • sustainability, act to advance legal requirements and meet or exceed their letter and spirit; promote awareness of Responsible Care, and inspire others to commit to these principles.

As an element of this commitment to Responsible Care, PeroxyChem Canada Limited must, every three years, participate in an external verification intended to:

- 1. Provide the Executive Contact with an external perspective when assessing if the company is indeed meeting the intent of the Responsible Care Commitments, along with advice on areas that may require attention;
- 2. Identify opportunities for assisting the company when benchmarking its own practices and performance against those of its peers, thus supporting continual improvement;
- 3. Contribute to the credibility of Responsible Care amongst company personnel and stakeholders, as well as the stakeholders of the broader industry;
- 4. Identify successful company practices that can be promoted to peers in the CIAC membership; and
- 5. Support the identification of areas of common weakness so that collective tools and guidance can be developed to improve performance in those areas across the CIAC membership.

Verification is conducted according to a common protocol, developed by the association's members and others, including several critics of the chemical industry. The verification is conducted by a team consisting of:

Knowledgeable industry experts with experience in Responsible Care;

- A representative of the public at large (usually with a public interest background and with experience in Responsible Care gained from serving on the CIAC's National Advisory Panel) and
- One or more representatives of the local communities where the company's facilities are located.

Once completed, the Verification Report is made publicly available through the CIAC website (<u>www.canadianchemistry.ca</u>). PeroxyChem Canada Limited is also expected to share the report with interested persons in its communities and other stakeholders as part of its ongoing dialogue processes.

Additional information on Responsible Care and / or the verification process can be found at the CIAC website <u>www.canadianchemistry.ca</u> or by CIAC at <u>glaurin@canadianchemistry.ca</u> or (613) 237-6215 extension 233.

#### 1.2 About PeroxyChem Canada Limited

PeroxyChem Canada Limited is a subsidiary of PeroxyChem, a chemical manufacturer and distributor based in Philadelphia. With manufacturing sites worldwide, PeroxyChem serves a wide variety of industry types. PeroxyChem Canada Limited manufactures Hydrogen Peroxide (H2O2). It is PeroxyChem's only Canadian facility and is located in Prince George, British Columbia. Associated with PeroxyChem's Canadian operations are three privately owned and operated transloading terminal facilities located in Edmonton, Alberta, Fort McMurray, AB, and Hébertville, QC.

#### **1.3** About This Verification

Following an initial planning meeting on August 30, 2017 at the company's Prince George, British Columbia facility, the verification of PeroxyChem Canada Limited was undertaken on September 27 & 28, 2017 at the same location. During the verification, the team had the opportunity to interact with a wide range of company personnel, as well as stakeholders external to the company. Attachment 2 contains a list of those individuals interviewed and their affiliations.

This was the second Responsible Care verification completed for PeroxyChem Canada Limited. Four previous verifications have been carried out at this facility under the previous owner FMC of Canada Ltd. The last verification was completed in December 2014.

vermeation team was comprised of the following individuals.						
	Name	Affiliation	Representing			
	Dave Mack	CIAC	Team Leader			
	Phil Byer	CIAC	Public-At-Large Verifier			
	Ron Williams	Local Resident	Community Representative			

The verification team was comprised of the following individuals.

## **2. TEAM OBSERVATIONS CONCERNING THE RESPONSIBLE CARE COMMITMENTS (CODES AND BENCHMARK AND COLLECTIVE EXPECTATIONS)**

During the verification of PeroxyChem Canada Limited, the verification team looked for evidence that the company was addressing the expectations documented in the Responsible Care Commitments (152 code elements plus 28 benchmark and collective expectations). While considering all aspects of the Responsible Care Commitments during this verification, at the request of the company, the team placed some focus on the potential for external impacts on the site.

In communicating its observations, the verification team will make repeated reference to the following categories of observations:

- 1. **Findings Requiring Action;** document instances where the verification team observes specific company actions (or the absence of company actions) which are inconsistent with the detailed codes and benchmark and collective expectations contained in the Responsible Care Commitments. Where possible, the team will communicate, based on their experience and judgment, why it is inconsistent and how the observation relates back to a possible gap in the expected management system and / or the ethic and principles underpinning company actions. The team may also provide advice on how the situation might be responded to.
- 2. Works in Progress; document instances where the team has observed the company self-initiating actions in response to identified gaps and deficiency arising from other internal or external audit and review activities, or where the company has self-initiated important improvement opportunities.
- 3. **Successful Practices;** document instances where the team believes the company has taken actions that strongly support sustained excellence in performance, and which should be communicated throughout the CIAC membership.
- 4. **Improvement Opportunities;** identify instances where the team has observed company actions and decision making as being largely consistent with the expectations detailed in the Responsible Care Commitments, but for which the team is of the opinion that the company could support further improvement by considering alternate or additional benchmarks when undertaking its planning and decision making.

The verification team's observations of how the company has addressed the Responsible Care Commitments are as follows:

#### 2.1 Team Observations Concerning Operations Code

The Operations Code defines environment, health and safety expectations regarding all company operational aspects including product manufacturing, transportation and distribution.

#### 2.1.1 Design and Construction of Facilities and Equipment

There is a detailed management of change process in place to ensure that new unacceptable risks are not introduced into the operation as a result of modification or additions to the plant. This process applies to projects of all sizes, and includes a comprehensive process hazard assessment.

#### 2.1.2 Operations Activities

Reviews are carried out every 5 years to assess the site's hazard potential and ensure that these are being adequately addressed in processes and procedures. The reviews include previous process hazard assessments,

plant changes, incidents and near misses. There are manufacturing facility documented standard operating and maintenance procedures in place. These procedures also apply to the laboratory area. Product transportation is by rail and road (approximately 70% by rail and the remainder by road for local deliveries). Major railroad companies are contracted and there are no short line railways used to transport product. Road tankers are mostly company owned and operated, supplemented by a dedicated contract carrier as required. Most of the rail cars are owned with the remainder being leased. Recognized industry standards (Canadian Standards Association) are used for road tanker inspection and maintenance. This includes regular external tank inspections and every five years tanks are inspected internally. Railcars are maintained and inspected every ten years by specialized industry service providers. All truck drivers (company & contract) are trained on product handling and driving safety procedures. For manufacturing facilities there is a documented equipment integrity and reliability program in place as well as preventive maintenance and repair procedures.

#### Work in Progress

i. Assessing the possibilities of installing global positioning system (GPS) locators on road transport trucks.

#### 2.1.3 Safety and Security

There is a documented occupational health and safety program in place which includes general safety rules, personal protective equipment requirements and safe work procedures, including a section on contractor safety. Exposure hazard monitoring is done on a job by job risk basis using recognized industrial hygiene processes, and there is also an employee health surveillance program in place. Standard operating and maintenance procedures have health and safety aspects defined therein. Non-routine work has a hazard analysis done prior to the commencement of the work. Day to day health and safety monitoring is done through a defined behavior based safety observation program in which all employees are expected to participate. For manufacturing operations, process hazard potential is addressed through a five-year review of each process area. The facility's most credible worst-case incident scenario has been defined as a process fire, and established that this would have no off-site impact. The technical analysis for the worst-case scenarios was completed in 1995. It has not been reviewed or updated based on the current site situation and the latest scientific information, including acute exposure guidelines for toxic emissions from an incident. Manufacturing facility emergency preparedness and response is addressed through a document plan, and the site is aware of potential impacts from adjacent industry incidents. The local municipal fire department is the primary emergency responder to the site and department personnel have been given process orientation. The company is also a member of an organization referred to as the Prince George Industrial Municipal Aid Committee. Transportation emergency preparedness and response is also addressed through a documented plan. Transportation emergency response equipment is available on site for local road incidents, and the company has contracted with a recognized service provider for system wide response capability. Regular manufacturing site and transportation emergency drills are carried out. The company is aware of its security vulnerabilities and a documented security and loss prevention standard is in place. Consideration has been given to some aspects of critical infrastructure and business continuity that could be affected by external events such as fires. Incident reporting and investigation is addressed through a documented process referred to as High Rigour Investigation. Follow-up actions from incident investigations are assigned to individuals with target completion dates. A software system referred to as SIMS is used to track findings. Employee performance is addressed through a documented review process.

#### Finding Requiring Action

i. Review and update the basis for the manufacturing site worst imaginable/most credible case incident scenarios. Redefine and document the scenarios as appropriate. [OP 28 & 29]

#### Works in Progress

- i. Developing a shelter-in-place plan for the manufacturing site to address response to related incidents at adjacent industrial operations which could have an impact.
- ii. Reviewing contingency planning for non-operational initiated emergencies.

#### Improvement opportunities

- i. Review long term health effects information for all potential workplace exposures and enhance the industrial hygiene program as appropriate, including attention to newer considerations, such as reproductive and other endocrine system effects.
- ii. Utilize the CIAC *Business Continuity/Critical Infrastructure Implementation Aid* as a reference in contingency planning for non-operational initiated emergencies.

#### 2.1.4 Environmental Protection

Environmental protection procedures are documented, and the company is certified under the International Organization for Standardization Environmental Management Systems standard (ISO 14001). Emissions and discharges are monitored. These are approved by regulatory permit, and greenhouse gases are tracked and reported per British Columbia provincial regulations. Wastes are minimal, and transportation and disposal are handled by a recognized service provider. The company is aware of the location of final receiving sites used by the service provider and have assessed their general compliance status. Opportunities are sought to reduce emissions and wastes.

#### Improvement opportunity

i. Document formalized processes for on-going Responsible Care related performance monitoring of hazardous waste contractors.

#### 2.1.5 Resource Conservation

Water use is tracked and reported through the CIAC National Emissions Reduction Master Plan (NERM) process Raw materials and energy use is also being tracked.

#### Work in Progress

i. Planning to establish future quantifiable targets for resource consumption once sufficient actual data collected.

#### 2.1.6 Promotion of Responsible Care by Name

The Responsible Care logo is displayed on transportation trucks, stationary, business cards etc. An orientation to Responsible Care is provided to all new employees. Employees who were interviewed could generally articulate how Responsible Care applied to their individual work activities. The company's Community Advisory Panel is also familiar with and kept aware of the initiative, and Responsible Care is also promoted at regular community outreach activities.

#### Improvement opportunity

 Provide additional site signage and flag bearing the Responsible Care name and logo at the entrance to the site. Also post a management signed copy of the Responsible Care Ethic & Principles for Sustainability and verification certificate so that they are clearly visible in the office building reception area.

#### 2.2 Team Observations Concerning Stewardship Code

The Stewardship Code addresses all company raw materials, products and services and defines expectations for the care and control of same throughout their life cycle.

#### 2.2.1 Expectations of Companies

The company produces one commodity chemical, and at this time there is no new product piloting or introduction being done at the facility. Should this occur, however, a documented new product pre-launch process is applied. Product risk characterization has been done previously and is current. Product regulations and science information are routinely monitored for any changes to the risk profile. The sale of product is strictly controlled as hydrogen peroxide is known to be a precursor to explosive manufacture. Appropriate product security measures are in place throughout the life cycle. The Department of Homeland Security in the USA and Natural Resources Canada are involved in monitoring hydrogen peroxide use. Product hazard information is made available to users through the company's Safety Data Sheet. With regard to historical waste practices, information is available on file as part of the regulated hazardous waste manifesting system.

#### 2.2.2 Expectations with Respect to Other Parties

In this section, other parties related to company operations include product transloaders, chemical suppliers, contract laboratories, site contractors and customers. Contract carriers and hazardous waste contractors are addressed in the Operations Code. The company's Distribution Mandatory Safety Standards are applied in the selection of new transloaders and also used for annual performance monitoring. The purchasing of major process feed stock chemicals is handled at a corporate level, and are procured from off-shore sources likely with some challenges in ensuring their alignment with Responsible Care principles. A documented procedure is in place for purchases by the site. A Responsible Care related self-assessment process is applied in the selection of site managed chemical suppliers. It was noted that there is no formalized process in place to check on the Responsible Care related performance of contract laboratories. There is a process in place for site contractor selection and performance monitoring. An approval process is applied to new customers and routine follow-up visits occur to monitor Responsible Care related performance.

#### Finding Requiring Action

i. Establish and document a process to select and monitor the performance of contract laboratories with respect to how they operate in accordance with Responsible Care related expectations. [ST 117 & 118]

#### Work in Progress

i. Working with product transloading terminals to address their community awareness and emergency response programs.

#### Improvement opportunity

i. Document a formalized process for on-going Responsible Care related performance monitoring of chemical suppliers.

#### 2.3 Team Observations Concerning Accountability Code

The Accountability Code defines expectations for communication and dialogue with communities local to company manufacturing and distribution operations and transportation corridors, as well as other stakeholders with an interest in company activities.

#### 2.3.1 Operating Site Communities

Dialogue within the community occurs through a variety of avenues. A Community Advisory Panel is in place with a documented charter. Meetings of relatively short duration are held bi-annually. The company is also involved in the Prince George Industrial Mutual Aid Committee, a group that involves members from throughout the community addressing aspects of emergency response. It is also a member of the Prince George Chamber of Commerce. There is a charitable donations program in place which includes various scholarships and bursaries at the College of New Caledonia and The University of Northern British Columbia. Regular site tours are given, and the company supports local work experience programs such as trade apprenticeships, power engineering work practicums and co-op engineering programs. While recognizing these activities to be significant, there appears to be reluctance by the facility to have more proactive dialogue in certain regards due to restrictions by the corporate ownership entity in the U.S. In addition, there is no documented overall management system for facility community communication and dialogue to drive continual performance improvement. Making effective use of the Community Advisory Panel to provide advice on proactive community dialogue and social responsibility does not appear to be a priority. The same could apply to seeking similar advice from CIAC peer companies.

#### Findings Requiring Action

- i. Based upon the finding requiring action in section 2.1.3 of this report to review and update the basis for the manufacturing site worst imaginable/most credible case incident scenarios, communicate any changes to potentially impacted stakeholders and other interested parties. [AC 129]
- ii. Establish and document an overall management system based on the plan-do-check-act continual performance improvement cycle for operating site community awareness, dialogue, and social responsibility [AC125 136].

#### Improvement opportunities

- i. Consult the Community Advisory Panel and CIAC peers in defining community outreach processes and, social responsibility, and how to measure their impact.
- ii. Consult the Community Advisory Panel on its operations for continual improvements.

#### 2.3.2 Other Stakeholders

Site management is familiar with local government officials, non-government organizations and businesses in the area, and interface occurs on an as needed basis. As with Operating Site Communities above, there is no documented overall management system for communication and dialogue with these stakeholders. All product is supplied to other industrial users, and there is no direct line to the consumer market. The facility is represented on the CIAC regional transportation community awareness and emergency response committee (TransCAER) and participates in related community events.

#### Finding Requiring Action

 Establish and document an overall management system based on the plan-do-check-act continual performance improvement cycle for stakeholder (beyond operating site communities) awareness, dialogue and social responsibility, as applicable to the size, scope and risk profile of the company. [AC137 – 152].

#### **3. TEAM OBSERVATIONS ON THE COMPANY MANAGEMENT SYSTEM**

It is a requirement of Responsible Care that companies have a documented, self-healing management system or systems capable of identifying and responding to deficiencies and otherwise supporting continual improvement across all company business units, functions, and sites and as a framework for implementing the Responsible Care Commitments.

The verification team studied PeroxyChem Canada Limited management systems and compared and contrasted the attributes of those systems to that of a self-healing overall management system as discussed in the CIAC Management System Guide. The verification team's observations related to the company management systems are as follows:

#### 3.1 Observations on the PLAN Step

During the 'PLAN' Step of the management system, the company is required to decide what the goals of the company are and how they will be met. In determining those goals, it is expected the company will look inward, across its operations, but will also look outward, considering the expectations of: stakeholders; regulatory requirements; relevant CIAC Responsible Care Commitments and supporting tools; and other industry benchmarks.

In reviewing the 'PLAN' Step, the following was noted:

Policies are in place to address health & safety, environment and quality. The facility management group develops annual objectives. Inputs to objectives include audit results, process hazard analyses, incident reviews, feedback from employees, the Community Advisory Panel and other stakeholders as appropriate. All health, safety and environmental initiatives are coordinated through a cross functional committee referred to as the HS&E Network, which develops an annual plan. There is a declared target of zero for health, safety and environmental incidents. Employee competency needs have been defined.

#### 3.2 Observations on the DO Step

During the 'DO' Step in the management system, the company is required to convert the decisions of the 'PLAN' Step into action and ensure awareness and understanding by all involved. It is expected that the company will implement an organizational structure, assign responsibilities to appropriate personnel, supply sufficient training and resources to execute planned actions and develop and document standards, procedures and programs, as applicable.

#### In reviewing the 'DO' step, the following was noted:

The facility management group is clearly defined and is supported by a series of cross functional employee teams to address day to day operations, including Responsible Care related requirements. There are comprehensively documented standards, practices and procedures in place which address wide range Responsible Care related requirements. There is a new employee orientation process in place and an ongoing training matrix which defines related requirements for all positions. The management system and its components are documented, and Responsible Care code expectations are cross referenced and documented to relevant facility standards, processes and procedures.

#### Successful Practices

- i. The HS&E Network, a cross functional committee of operational task team members and management personnel, assigned to oversee Responsible Care related management systems implementation.
- ii. The integrated online documentation and record system applied to all Responsible Care related activities.

#### Improvement opportunity

i. In the cross-reference document (aka gap analysis) identify how each listed company standard, process, procedure etc. is monitored for its effective implementation through audits, reviews, observations, or other relevant management processes, and provide an assessment of the degree to which each code requirement is met, i.e. the level of gap.

#### 3.3 Observations on the CHECK Step

During the 'CHECK' Step in the management system, actions carried out in the 'DO' Step are required to be assessed to determine if they are actually being carried out according to plan, and whether they are achieving the desired outcomes and delivering continual improvement. Here, the overall management system and components should be reviewed along with employee competences for assigned responsibilities, internal and external audits should be undertaken, incidents should be assessed to identify root causes, and performance measurement should be conducted and reviewed.

#### In reviewing the 'CHECK' Step, the following was noted:

Responsible Care related performance monitoring includes daily reviews of all parameters at a routine meeting involving production, maintenance and technical personnel. The HS&E Network also tracks progress with a subcommittee referred to as Who's Watching the Plan. Comprehensive environmental management system and corporate safety standards audits are also in place to verify conformance with related requirements. Follow-up actions from audits are assigned to individuals with target completion dates. The software system referred to as SIMS is used to track findings. This system, however, was not used to track findings from the previous Responsible Care verification. There were action items in the minutes of some meetings or reviews where a better system than that being used for these would facilitate tracking. Incident investigation is addressed in the Operation Code. Employee performance is addressed through a documented review process.

#### Work in Progress

i. Establishing an appropriate process for tracking and closure of action items from Responsible Care verifications

#### Improvement opportunity

i. Consider the use of SIMS for tracking and closure on the full range of follow-up action items. In cases where SIMS is not considered appropriate, BIN lists can be used.

#### 3.4 Observations on the ACT Step

During the 'ACT' Step in the management system, the company is required to translate the results of the 'CHECK' Step into corrective actions for improvement. This includes revisiting the 'PLAN' Step to decide whether changes are need to the company's stated goals or action plans, policies and procedures for achieving those goals. Considerations when examining the 'ACT' Step should include whether and how: audit and review findings are responded to; performance is communicated internally and externally; employee and contractor performance is rewarded or corrected, etc.

#### In reviewing the 'ACT' Step, the following was noted:

The results of performance assessments are reviewed, and changes are made to the management system for continual improvement where necessary. This includes ensuring that the learnings from incident investigations, audits, etc. are effectively implemented. Employees receive a performance sharing award each quarter if safety, health and environmental performance metrics are met. Results of the review are communicated to the Community Advisory Panel and other stakeholders as appropriate.

#### 4. TEAM OBSERVATIONS ON THE RESPONSIBLE CARE ETHIC AND PRINCIPLES FOR SUSTAINABILITY

Each CIAC member company is formally committed to the ethic of "*Doing the right thing, and being seen to do the right thing.*" This ethic, along with the principles for sustainability is expected to guide the company's decision making and practices. In conducting the verification, the team is looking to understand how well the ethic is understood and adopted within the company, and the degree to which the principles inform the way the company does its business.

The verification team carefully observed PeroxyChem Canada Limited decision-making processes and actions and compared and contrasted the attributes of those with the attributes of a company guided by the Responsible Care Ethic and Principles for Sustainability as discussed in the Responsible Care Commitments (Appendix E). The verification team's related observations on the company's application of the *Responsible Care Ethic and Principles for Sustainability* are as follows:

Through observation and analysis, and subject to effectively dealing with the 'findings requiring action' and completion of the 'works in progress' as identified in this report, the company was seen to be appropriately aligned with the following elements of the *Responsible Care Ethic and Principles for Sustainability*. Refer to the explanatory notes following each element:

- Work for the improvement of people's lives and the environment, while striving to do no harm; [Supported by a clear commitment to Responsible Care.]
- Be accountable and responsive to the public especially the local communities, who have the right to know the risks and benefits of what they do;
   [Supported by commendable community outreach efforts, however, effectiveness could be enhanced by having a defined management system for community awareness and dialogue.]
- Take preventive action to protect health and the environment; [Supported by a slate of environment, health and safety processes and procedures.]
- Innovate for safer products and processes that conserve resources and provide enhanced value; [The facility manufactures a single commodity product using a proven process. Research and development is managed by the company's corporate ownership entity, however, there appears to be limited opportunities in this aspect.]
- Engage with their business partners to ensure the stewardship and security of company products, services and raw materials throughout their life cycles;
   [Supported by processes to select and monitor the Responsible Care related performance of customers, product transloaders, and chemical suppliers, however, likely that there are challenges in this area with off shore chemical purchases.]
- Understand and meet expectations for social responsibility;
  [Supported by commendable efforts in this area, however, effectiveness could be enhanced by having a defined management system with reference to Appendix A to the Responsible Care Codes of Practice]
- Work with all stakeholders for public policy and standards that enhance sustainability, act to advance legal requirement and meet or exceed their letter and spirit;
  [Some interface with stakeholders other than the operating site community. Effectiveness could be enhanced by having a defined management system for this aspect.]
- Promote awareness of Responsible Care, and inspire others to commit to the principles. [Some efforts in this area with local organizations and business partners. Continue to capitalize on opportunities presented.]

#### 5. VERIFICATION TEAM CONCLUSION

As a result of the examination conducted, and in consideration of the observations communicated within this report, the verification team is of the opinion that the Responsible Care Ethic and Principles for Sustainability are guiding company decisions and actions, and that a self-healing management system is in place to drive continual improvement. The verification is complete, and no further involvement is required by the verification team.

#### **COMPANY RESPONSE TO VERIFICATION TEAM REPORT**

On behalf of PeroxyChem Canada Limited I have reviewed this verification report. The observations and conclusions contained in the report have been discussed with the verification team.

PeroxyChem Canada Limited will communicate the results of the verification exercise with its CIAC peers at their next meeting, and will discuss the verification results with our stakeholders, including those representing communities near our operating sites.

We will give consideration to the Improvement Opportunities identified by the verification team and will assist the CIAC in communicating and sharing the identified Successful Practices to other CIAC members. Plans will be developed and implemented to respond to those Findings Requiring Action and Works in Progress where completion of such is action required to close gaps with respect to requirements, as identified by the verification team. Our progress in implementing those plans will be discussed when preparing our Annual Statement of Re-Commitment to Responsible Care, and communicated to the verification team at the time of our next verification.

Name: Glenn Gourley Position: Plant Manager PeroxyChem Canada Limited Date: November 22, 2017



#### **INTERVIEW LISTS**

#### A: Company Personnel

Name	Position	Location
Ben Crooks	Maintenance Manager	Prince George, British Columbia
Cori Laurin	Controller	Prince George, British Columbia
Dave Willis	Technical Account Manager	Vancouver, British Columbia
Doris Meredith	Laboratory Co-ordinator	Prince George, British Columbia
Glenn Gourley	Plant Manager	Prince George British Columbia
HS&E/PATHS Networks	Representatives	Prince George, British Columbia
Jaspreet Chahal	Responsible Care Support	Prince George, British Columbia
John Rovison	Vice President R & D	Tonawanda, New York
Ken Ryan	Distribution Co-ordinator	Prince George, British Columbia
Leland Millar	PI Network Representative	Prince George, British Columbia
Liliana Link	Responsible Care Co-ordinator	Prince George, British Columbia
Michelle De Vere	Technical Manager	Prince George, British Columbia
Shane HIbberd	HS&E Network Representative	Prince George, British Columbia
Taryn Stokes	Production Manager	Prince George, British Columbia
Tim Ward	EHS Director	Philadelphia, Pennsylvania

#### B: External Stakeholders

Name	Company / Organization	Position	Location
Brent Morgan	Community Advisory Panel	Member	Prince George, British Columbia
Cathy McKay	Community Advisory Panel	Member	Prince George, British Columbia
Dorothy Friesen	Community Advisory Panel	Member	Prince George British Columbia
Ron Williams	Community Advisory Panel	Member	Prince George, British Columbia

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