# **RESPONSIBLE CARE®** Verification Report

PeroxyChem Canada Limited December 8 - 9, 2014



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 October 27, 2014 at the company's Prince George, British Columbia facility, the verification was undertaken on December 08 & 09, 2014 at the same location. This was the first 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 November 2011.

While considering all aspects of the Responsible Care Commitments during this verification the team placed particular attention to the continuance of the Ethic and Principles of Sustainability under the new ownership.

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.

Date: January 20, 2015

Signed: Dave Mack Verification Team Leader

For more information on this or a previous Responsible Care Verification Report, please contact your local company site or the company's overall Responsible Care coordinator:

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## SUMMARY OF VERIFICATION TEAM OBSERVATIONS

#### Works in Progress

The following relate to self-initiated actions to address identified gaps.

- i. In reviewing the company's product transportation operations the following were noted:
  - In process of moving to electronic log books for road transportation trucking.
  - Assessing the possibilities of installing global positioning system (GPS) locators on road transport trucks.
- ii. In reviewing the company's emergency preparedness and response plans the following were noted:
  - 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.
  - Preparing for a manufacturing site emergency simulation exercise with the municipal fire department using the department's new hazardous materials response equipment.
  - Planning a transportation emergency simulation for the spring of 2015.
- iii. In reviewing the company's incident reporting and investigation program the following were noted:
  - Moving to add to the current number of people in the company who are trained in incident root cause analysis
  - Looking into a new improved methodology for incident investigation.
- iv. Planning to establish future quantifiable targets for resource consumption once sufficient actual data collected.
- v. Consideration being given to setting up a site orientation visit for high school students which would include awareness of Responsible Care.
- vi. Working with product transloading terminals at Fort McMurray, Saskatoon and Hébertville to address their community awareness and emergency response programs.
- vii. On-going review of the Community Advisory Panel membership to confirm that the perspectives of local non-government organizations and special interest groups are being considered.
- viii. Various activities underway to transition from FMC programs to PeroxyChem corporate programs (e.g., information technology infrastructure, process safety risk profiling, corporate sustainability reporting, and consolidated audits).

#### **Improvement Opportunities**

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

- i. Include spirometry testing as part the health surveillance process for employees who are required to wear respirators as part of their on the job personal protective equipment.
- ii. Document an overview of the facility's process safety program, using the Canadian Society of Chemical Engineers Process Safety Guide as a template.
- iii. In reviewing the company's emergency preparedness and response plans the following were noted:
  - As an aid to emergency response planning, develop a site-wide emergency and spill response drawing that would be complementary to the company's site emergency response plan (SERP) documentation.
  - Add a description of the incident debrief process in the manufacturing facility and transportation emergency response plans, that addresses the identification of any learnings and related updates to the plans.
- iv. In reviewing the company's environmental programs the following were noted:
  - Consider replacing the elevated gravity feed gasoline storage tank with a system similar to the adjacent diesel fuel dispensing unit that is currently in use.
  - Examine the possibility of re-routing storm water management drains and sewers to the effluent holding ponds, as a preventive measure against any potential surface water contamination from storm water run-off.

- v. Make reference to and explain Responsible Care by name in the company's contractor and visitor orientation videos.
- vi. Build on the company's existing second party relationship standard by formally documenting all supporting processes and procedures (e.g., Responsible Care related selection and on-going performance monitoring)
- vii. In reviewing the company's community outreach programs the following were noted:
  - Re-communicate the manufacturing facility worst case incident scenario to the Community Advisory Panel members, to inform new members and as a refresher to others.
  - Communicate the results of this and future verifications to as broad an external audience as practical.
  - Consider use of social media for outreach communications.
  - Share the company's documented community dialogue process with the Community Advisory Panel.
- viii. Expand on the use of Responsible Care related quantifiable targets and establish a consolidated site wide process (e.g., scoreboard) to communicate actuals versus targets.
- ix. Document an overview of the facility's Responsible Care management system and its components, using the CIAC Management System Guide as a template.

#### **Successful Practices**

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

- i. The behavior based safety observation program that includes a component referred to as PATHS (peer approach to health & safety) that sets monthly targets for Responsible Care related performance improvement.
- ii. In reviewing the company's environmental programs the following were noted:
  - The installation and on-going operations of a new hydrogen reformer that optimizes energy efficiency and reduces emissions to air.
  - The installation and on-going operation of a new recycle compressor that reduces atmospheric venting of process gas.
- iii. The joint Community Advisory Panel with adjacent operations of Chemtrade Logistics Inc. has been a successful approach to public dialogue in the industrial area and a forum to address common issues.
- iv. The Responsible Care code expectations cross reference document on relevant facility processes and procedures that includes information on implementation and review steps for each element.
- v. Efforts of the management team and employees to maintain smooth operating conditions during the transition in ownership from FMC to PeroxyChem.

## 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® 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.canadianchemsitry.ca</u>). PeroxyChem Canada Limited is also is 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

During the first quarter of 2014, One Equity Partners acquired ownership of the Peroxygens division of FMC Corporation the former owner of the Prince George facility.

The company now known as 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 Hydrogen Peroxide plant, located in Prince George, British Columbia. Associated with PeroxyChem's operations are three privately owned and operated terminal facilities located in Fort McMurray, AB; Saskatoon, SK and Hébertville, PQ.

## 1.3 About This Verification

Following an initial planning meeting on October 27, 2014 at the company's Prince George, British Columbia facility, the verification of PeroxyChem Canada Limited was undertaken on December 08 & 09, 2014 at the same location. During the course of 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 first 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 November 2011.

Name	Affiliation	Representing	
Dave Mack	CIAC	Team Leader	
Ron Ormson	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 the team placed particular attention to the continuance of the Ethic and Principles of Sustainability under the new ownership.

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 comprehensively documented Project Safety Review Guideline in place which addresses safety in design through to commissioning of new facilities and equipment. This includes a detailed management of change process to ensure that new unacceptable risks are not introduced into the operation. This process applies to projects of all sizes, and was used successfully in a recent major project to install a new hydrogen reformer unit.

#### 2.1.2 **Operations Activities**

Annual reviews are carried out to assess on-going hazards and ensure that these are being adequately addressed in processes and procedures. There are manufacturing facility documented standard operating and maintenance procedures in place. In the laboratory area the company's international organization for standardization (ISO 9000) quality program is used to ensure the quality of results. Laboratory procedures are documented. Product transportation is by rail and road (approximately 65% 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 company owned and operated. Approximately 80% of 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 annual visual inspections and internal inspections every five years. Railcars are maintained and inspected every ten years by specialized industry service providers. Occasionally one specifically selected contractor is used to supplement the company's road tractor unit fleet. All drivers (company & contract) are trained on product handling and driving safety procedures. This is repeated every three years. There is a formalized route risk assessment process in place. Route risk assessments are reviewed annually. For manufacturing facilities there is a documented equipment integrity and reliability program in place as well as preventive maintenance and repair procedures. This also applies to a short pipeline bringing hydrogen from an adjacent supplier.

#### Works in Progress

- i. In process of moving to electronic log books for road transportation trucking.
- ii. 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. 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. A documented contractor safety program is in place. Standard operating and maintenance procedures have health and safety aspects defined therein. Non-routine work has a hazard analysis done prior to 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 the manufacturing facility, there is a process hazard analysis carried out every five years. A process referred to as Process Safety Risk Profile is also used to address aspects of process safety. The facility's worst case incident scenario has been defined as a process fire, and established that this would have no off-site impact. A range of procedures relating to process safety are in place. 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. There is a transportation emergency response vehicle maintained 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. With respect to critical infrastructure and business continuity, there is a business recovery plan in place. Incident reporting and investigation is addressed through a documented process.

#### 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. Preparing for a manufacturing site emergency simulation exercise with the municipal fire department using the department's new hazardous materials response equipment.

- iii. Planning a transportation emergency simulation for the spring of 2015.
- iv. Moving to add to the current number of people in the company who are trained in incident root cause analysis
- v. Looking into a new improved methodology for incident investigation.

#### Successful Practices

i. The behavior based safety observation program that includes a component referred to as PATHS (peer approach to health & safety) that sets monthly targets for Responsible Care related performance improvement.

#### Improvement opportunities

- i. Include spirometry testing as part the health surveillance process for employees who are required to wear respirators as part of their on the job personal protective equipment.
- ii. Document an overview of the facility's process safety program, using the Canadian Society of Chemical Engineers Process Safety Guide as a template.
- iii. As an aid to emergency response planning, develop a site-wide emergency and spill response drawing that would be complementary to the company's site emergency response plan (SERP) documentation.
- iv. Add a description of the incident debrief process in the manufacturing facility and transportation emergency response plans, that addresses the identification of any learnings and related updates to the plans.

#### 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 permitted, and greenhouse gases are tracked and reported per British Columbia provincial regulations. It was noted that there has been a significant reduction in effluent pond outfall shutdowns as a result of the installation of an upgraded pH control system. There are recycling programs in place for plastics and paper as well as oil and battery recovery processes. Wastes are minimal and transportation and disposal is handled by a recognized service provider. Company representatives are aware of the location of final receiving sites used by the service provider and have assessed their general compliance status.

#### Successful Practices

- i. The installation and on-going operations of a new hydrogen reformer that optimizes energy efficiency and reduces emissions to air.
- ii. The installation and on-going operation of a new recycle compressor that reduces atmospheric venting of process gas.

#### Improvement opportunities

- i. Consider replacing the elevated gravity feed gasoline storage tank with a system similar to the adjacent diesel fuel dispensing unit currently in use.
- ii. Examine the possibility of re-routing storm water management drains and sewers to the effluent holding ponds, as a preventive measure against any potential surface water contamination from storm water run-off.

#### 2.1.5 Resource Conservation

Water use is tracked and reported through the CIAC National Emissions Reduction Master Plan (NERM) process, and raw materials, energy use, etc. is being tracked on an intensity basis. The company plans to continue to track water use in a manner that is consistent with the CIAC's Water Use Metric.

#### Works 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

Responsible Care nomenclature is evident throughout the facility in documentation etc., and can generally be articulated by employees with respect to their individual work activities. The company's Community Advisory Panel is also familiar with and kept aware of the initiative.

#### 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 or anticipated at the facility. Product risk characterization has been done previously and is current. Sales staff routinely promote Responsible Care in the market place and some dialogue occurs with suppliers. The sale of product is strictly controlled as hydrogen peroxide is known to be a precursor to explosive manufacture. In transit security is routinely reviewed and drivers are trained in highjack precaution procedures. Pin locks are used on road tank trailers when they are left unattended, and parking is in secure designated areas. The company is also aligned with the United States of America Customs Trade Partnership against Terrorism (C-TPAT), a joint government-business initiative with an objective to strengthen overall supply chain and border security. Product hazard information is made available to users through a link to the company's Material Safety Data Sheet (MSDS). With regard to historical waste practices, information is available on file as part of the regulated hazardous waste manifest process.

#### Works in Progress

i. Consideration being given to setting up a site orientation visit for high school students which would include awareness of Responsible Care.

#### Improvement opportunities

i. Make reference to and explain Responsible Care by name in the company's contractor and visitor orientation videos.

#### 2.2.2 Expectations with Respect to Other Parties

There is a second party relationship standard in place which addresses the acquisition of raw materials and extends through the manufacturing processes, sale, distribution, use and disposal of company products as appropriate. A number of processes are used to meet these expectations, including supplier, customer and transloading terminal selection and performance monitoring.

#### Works in Progress

i. Working with product transloading terminals at Fort McMurray, Saskatoon and Hébertville to address their community awareness and emergency response programs.

#### Improvement opportunities

i. Build on the company's existing second party relationship standard by formally documenting all supporting processes and procedures (e.g., Responsible Care related selection and on-going performance monitoring).

#### 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

There is a documented community dialogue process in place which defines the charter for the facility's Community Advisory Panel as well as other community interfaces. Through its involvement with the chamber of commerce the company sponsors a local business awards program. Financial support is provided to the University of Northern British Columbia the College of New Caledonia, as well as providing practical work experience to the college's power engineering students. The facility also has a charitable donations committee to review requests for related community support. There is a business conduct and ethics policy in place which must be signed off by all employees. The plant manager has exchanged correspondence with the Mayor of Prince George to inform the municipality about the company's efforts on Responsible Care.

#### Works in Progress

i. On-going review of the Community Advisory Panel membership to confirm that the perspectives of local non-government organizations and special interest groups are being considered.

#### **Successful Practices**

i. The joint Community Advisory Panel with adjacent operations of Chemtrade Logistics Inc. This has been a successful approach to public dialogue in the industrial area and a forum to address common issues.

#### Improvement opportunities

- i. Re-communicate the manufacturing facility worst case incident scenario to the Community Advisory Panel members, to inform new members and as a refresher to others.
- ii. Share the company's documented (August 2014) community dialogue process with the Community Advisory Panel.
- iii. Communicate the results of this and future verifications to as broad an external audience as practical.
- iv. Consider use of social media for outreach communications.

#### 2.3.2 Other Stakeholders

Facility management is familiar with local government officials, non-government organizations and businesses in the area, and interface occurs on an as needed basis. 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.

## 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 decides 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. Annual objectives are developed by the facility management group. 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.

#### Improvement opportunities

i. Expand on the use of Responsible Care related quantifiable targets and establish a consolidated site wide process (e.g. scoreboard) to communicate actuals versus targets.

#### 3.2 Observations on the DO Step

During the 'DO' Step in the management system, the company converts the decisions of the 'PLAN' Step into action and ensures 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 a 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. Responsible Care code expectations are cross referenced and documented to relevant facility processes and procedures.

#### Works in Progress

i. Various activities underway to transition from FMC programs to PeroxyChem corporate programs (e.g., information technology infrastructure, process safety risk profiling, corporate sustainability reporting, and consolidated audits).

#### Successful Practices

- i. The Responsible Care code expectations cross reference to relevant facility processes and procedures document that includes information on implementation and review steps for each element.
- ii. Efforts of the management team and employees to maintain smooth operating conditions during the transition in ownership from FMC to PeroxyChem.

#### Improvement opportunities

i. Document an overview of the facility's Responsible Care management system and its components, using the CIAC Management System Guide as a template.

#### 3.3 Observations on the CHECK Step

During the 'CHECK' Step in the management system, actions carried out in the 'DO' Step are 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 will be reviewed along with employee competences for assigned responsibilities, internal and external audits will be undertaken, incidents will be assessed to identify root causes, and performance measurement will 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, safety standards and corporate environment, health and safety consolidated audits are also in place to verify conformance with related requirements. Follow-up actions from audits are assigned to individuals with target completion dates. Software systems known as "SIMS" and "GUARDIAN" are used to track findings. These tracking systems are also used for incident investigation and other follow-up actions. Employee performance is addressed through a documented review process and a review process is also in place for contractors.

#### 3.4 Observations on the ACT Step

During the 'ACT' Step in the management system, the company translates 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 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:

From the results of performance assessments, changes are made into corrective actions for continual improvement. This includes ensuring that the learnings from incident investigations are effectively implemented. Employees receive a performance sharing award each quarter if safety, health and environmental standards are met. These standards include no serious incidents; follow up on incident reports, completion of behaviour based safety observations and energy conservation.

## 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 manner in which 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, the company was seen to be appropriately aligned with following elements of the Responsible *Care Ethic and Principles for Sustainability*:

- 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 the local communities, who have the right to know the risks and benefits of what they do;
- Take preventive action to protect health and the environment;
- Innovate for safer products and processes that conserve resources and provide enhanced value;
- Engage with their business partners to ensure the stewardship and security of company 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 requirement and meet or exceed their letter and spirit; and
- Promote awareness of Responsible Care, and inspire others to commit to the principles.

## 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.

## ATTACHMENT 1

## **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.

On behalf of PeroxyChem Canada Limited I would like to thank the verification team for their thorough review of our management systems and insightful comments and recommendations. The feedback received was supportive as we make our transition from FMC to PeroxyChem. PeroxyChem will assign resources to continue working on the identified Works in Progress and Improvement Opportunities which support our key company values of safety and continuous improvement. The Responsible Care ethic will continue to be a key component of our site culture at PeroxyChem Canada Limited.

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 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.

Glenn Gourley Plant Manager PeroxyChem Canada Limited January 19/2015



## **INTERVIEW LISTS**

## A: Company Personnel

Name	Position	Location	
Al Hendricks	Production Co-ordinator Prince George, British Colum		
Ben Crooks	Reliability Manager	Prince George, British Columbia	
Cori Laurin	Controller	Prince George, British Columbia	
Doris Meredith	Laboratory Co-ordinator	Prince George, British Columbia	
Glenn Gourley	Plant Manager	Prince George British Columbia	
Janice Hendrickson	Technical Manager	Prince George, British Columbia	
Ken Ryan	Distribution Co-ordinator	Prince George, British Columbia	
Liliana Parra	EH&S Specialist	Prince George, British Columbia	
Taryn Stokes	Production Manager	Prince George, British Columbia	
HS&E/PATHS Networks	Members Prince George, British Columbia		

## B: External Stakeholders

Name	<b>Company / Organization</b>	Position	Location
Bill Stewart	Community Advisory	Member	Prince George, British
	Panel		Columbia
Cathy McKay	Community Advisory	Member	Prince George, British
	Panel		Columbia
Dorothy Friesen	Community Advisory	Member	Prince George British
	Panel		Columbia
Ron Williams	Community Advisory	Member	Prince George, British
	Panel		Columbia

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