



# RESPONSIBLE CARE<sup>®</sup> Verification Report

*Axiall Canada Inc.*

January 14 - 15, 2014



Chemistry Industry  
Association of Canada



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

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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 Axiall Canada Inc. The verification was undertaken on November 13, 2013 with the Operations & Planning meeting and included team visits to the Beauharnois, QC site. The verification team also conducted several interviews with other company personnel responsible for the conformance of several elements included in the Stewardship and Accountability codes. The Beauharnois Community Awareness panel (T.I.C.) activities were scrutinized.

This is the sixth Responsible Care verification completed for Axiall Canada (formally PPG Canada Inc.), Beauharnois site. The last verification was completed on February 2011. While considering all aspects of the Responsible Care Commitments during this verification the team placed an emphasis on conducting an in-depth examination of company aspects related to:

- The relationship between Axiall Chlor-Alkali Division management systems and the detailed expectations of Responsible Care in Canada and how these have been integrated and reconciled since the merger of PPG Chlor-Alkali into the new Axiall entity.
- Deliver of Responsible Care functions by corporate entities in key areas such as transportation, distribution, customer service, stewardship and social responsibilities.
- The RC codes cross reference elements to the company policies, procedures and practices to confirm the conformance to the RC 152 elements.
- Health, Safety, Security and Environment Protection activities on a daily and continuous basis.
- Its risks management approach including PSM, worst and alternate case scenarios and site vulnerability assessment (SVA) up dates.
- Progress in responding to new CIAC Responsible Care imperatives – including operational footprint reduction, business continuity planning, and corporate responsibility.
- Promotion of Responsible Care - internally and externally.

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 team believes that the company is capable of responding to the range of Work in progress and Improvement Opportunities during the verification-summarized below and discussed in detail in the report. The verification is complete and no further involvement is required by the verification team.

Signed: Marcel Émond

Date: April 3, 2014

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

### Finding Requiring Action

The verification team did not identify any Finding Requiring Action.

### Works in Progress

The team also noted a number of areas where Axiall had previously self-identified gaps in management practices and has initiated corrective actions and / or measures for continual improvement. The company is expected to complete the activities underway in an expeditious manner.

- Where management practices are delivered by the corporate entity, there is a need for Axiall Canada to inform those responsible about expectations in Canada and discuss opportunities to adjust those management systems so that the Canadian expectations are satisfied. This is especially the case in areas related to review and contracting of road and rail carriers of Axiall shipments.
- With Axiall joining the American Chemistry Council, it is expected that work will be taken to better promote the commitment to Responsible Care – In the United States and Canada on the Axiall public Web site.
- Axiall Canada should continue its work in support of the Beauharnois CMMI process and:
  - a. Revising its worst and alternate case scenarios to incorporate the last generation of simulation software and guidelines (AEGL);
  - b. Integrating its emergency plan/risks avoidance and communications with its adjacent industrial neighbors; and
  - c. Implement its risk communication plan with the City of Beauharnois and community, which is scheduled for completion in early 2015.

### Improvement Opportunities

The verification team identified a number of areas where, though Axiall is meeting Responsible Care expectations, it believes further improvements are possible. Axiall Canada is expected to give formal consideration to these opportunities and take appropriate action where it agrees beneficial outcomes are possible.

- Consider re-instituting a 3 year cycle for external auditing of environment, health and safety procedures, as was the previous practice at the site.
- Complete a formal review and update of the site vulnerability assessment, last completed in 2008.
- Review key logistics practices as executed by Axiall corporate and ensure these are equally relevant and appropriate to the Canadian context, for instance:
  - a. Address identified weaknesses highlighted with the Carrier411 software reporting (CSA), especially regarding the HAZMAT carriers;
  - b. Include data from Canadian provinces, as a supplement to the Carrier411 data, during the evaluation and selection of road carriers for Canada.
  - c. Institute a management practice to regularly assess road performance from customer carriers that pick up Axiall HAZMAT products in Canada;
  - d. Incorporate expectations of the Canadian Rail Carrier Evaluation (A joint CIAC and railway Association of Canada initiative) into the company's transportation management system , ensuring short line railways are properly evaluated and have the capacity and ability to safely transport Axiall HAZMAT Products.
- It is suggested that a management practice be implemented to be able to verify if the signatories of the Axiall HSE distributor and customers agreement adheres to the RC Product Stewardship Guideline other than relying only on the document acknowledgment signature.
- The Responsible Care promotion at the site could be improved so that it focuses on ensuring each employee can relate their EH&S daily tasks and responsibilities to support Responsible Care and

continual improvement. In particular, Axiall should consider utilizing the new CIAC Responsible Care online training program (available in English and French) as a key resource to support this objective.

### **Successful Practices**

The verification team also identified the following as successful practices. Axiall Canada is encouraged to share the details of these activities within the CIAC membership.

- The Joint Health & Safety committee members (JHS) regularly communicate with the other Axiall JHS committee in the sharing of best practices and events in the spirit of continual improvement and risk minimisation.
- The identification of critical equipment for preventive or predictive maintenance work is based on a rigorous evaluation consisting of HAZOP analysis, supplemented by LOPA and SIS quantified evaluations.

## 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 Axiall 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® 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, Axiall Canada Inc. 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 ([www.canadianchemistry.ca](http://www.canadianchemistry.ca)). Axiall Canada Inc. 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 [www.canadianchemistry.ca](http://www.canadianchemistry.ca), or by contacting the Responsible Care staff at CIAC at [glaurin@canadianchemistry.ca](mailto:glaurin@canadianchemistry.ca) or (613) 237-6215 extension 233.

### 1.2 About Axiall Canada Inc.

Axiall Canada Inc. is a wholly owned subsidiary of Axiall Chlor-Alkali division which is one division of Axiall Corporation (US). Axiall Corporation is the new entity formed in May 2013 by the merger of Georgia Gulf and the Chlor-Alkali division of PPG Industries (the former owner of the Beauharnois plant). Axiall Corporation is a leader in chlor-alkali products (third largest producers) and chlorovinyl materials (second largest). They have some 5200 employees. Axiall Corporation chlor-alkali division is a Responsible Care member of the American Chemical Council (ACC). Axiall Corporation also owns in Canada Royal Building Products (Toronto) which specializes in selling chlorovinyls materials. It was formally a Georgia Gulf business. Royal Building Products is not part of Responsible Care. Axiall Canada is only producing and selling chlor-alkali products. Axiall Canada has a sale office in Montreal and its only production plant is located in Beauharnois QC.

The Customer Sales, the Transportation and Distribution activities and raw material supplies are the responsibility of the Axiall Corporation Chlor-Alkali division (US). The Canadian related operation activities are managed from the Beauharnois site. In Canada, they have about 100 employees with the majority located in Beauharnois. The Axiall Corporation web site is [www.axiall.com](http://www.axiall.com).

### 1.3 About This Verification

The verification of Axiall Canada Inc. was conducted on November 13, 2013 and January 14, 15 2014 and included team visit to the Beauharnois Qc, plant. The verification team also conducted interviews with several corporate company personnel that are responsible for the compliance to the RC codes of practice elements that are not under the direct jurisdiction and responsibilities of the Beauharnois plant personnel. During the course of the verification, the team had the opportunity to interact with a wide range of plant personnel and has scrutinized the T.I.C. membership activities. Attachment 2 contains a list of those individuals interviewed and their affiliations.

This was the first verification for Axiall Canada Inc., but the sixth of the Beauharnois Quebec plant, which completed five verifications as the PPG chlor-alkali division. The last verification was completed on February 2011.

The verification team was comprised of the following individuals.

<b>Name</b>	<b>Affiliation</b>	<b>Representing</b>
Marcel Émond	GMEÉ	<i>Team Leader</i>
Patrick Asch	Consultant	<i>Public-At-Large Verifier</i>
Denis Gervais	Groupe Écologique Crivert et membre T.I.C.	<i>Community Representative</i>

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

During the verification of Axiall Canada Inc., 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 the verification, the team placed an emphasis on conducting a more in-depth examination of certain company aspects identified by the company or the team. These were related to:

### **Beauharnois plant**

- Critical equipment selection and preventive maintenance; OP-17 to 21
- Health and Safety activities & PSM; OP-22 to 27
- Risk evaluation & communications; AC-125 & 129
- Emergency plan; OP-31 to 40
- Energy conservation; OP-76 & 77
- Environmental protection; OP-58 to 75

### **Beauharnois plant & Corporate (US)**

- RC Ethic & Principles for Sustainability (section B & E - Corporate only)
- Business continuity & critical infrastructure; OP-49 to 55
- Safety & Security in Transportation/Distribution; OP-4, OP-41 to 45, OP-12 to 16, ST-103 to 119
- Product Stewardship; ST-87,92, 94, 98 to 119
- Promotion of Responsible Care by name; ST-100 to 102 & AC-136 to 152
- Social Responsibility & Sustainable Development; Appendix A.

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

1. **Findings Requiring Action (FRA)** 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 verification 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 verification 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 verification 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

### 2.1.1 Design and Construction of Facilities and Equipment

Axiall has a corporate & local engineering work force with its own standards supported by the Chlorine Institute technical data. The management of change procedure (MOC) is driving the design, construction and startup of any project including the risk management and PSM activities. All Contractors working on site are prequalified before approval. Depending on project work complexity the work is done by the local engineering work force or jointly with the corporate specialists including third party specialized firms.

### 2.1.2 Operations Activities

The Beauharnois plant has operation procedures for all its process and production units from pre start up inspections to unit shutdowns. These procedures are revised as required and are based on compliance to corporate standards. The corporate department performs every 3 yrs a PSM audit and the next one is scheduled for mid February 2014. The corporate performs also a finance procedures and practices audit every 2 yrs.

The Beauharnois plant has a comprehensive training program for all employee tasks supplemented by some refresher courses as required on all key topics areas including RC activities.

The Beauharnois site has a business continuity plan that was developed for a potential epidemic (e.i.; SRAS) and that plan can be adapted to other large scale emergencies. Axial Corporation has several production plants that can support each other in the event of a large scale emergency.

The verification team has scrutinized the local and the US corporate management policies, procedures and practices for the transportation and distribution activities by road and rails to ensure the compliance with the requirements of the related elements of the Operation/Stewardship codes of practice.

Scrutiny of local procedures and practices confirmed that they are in compliance with the code elements and even are proactive as good corporate citizen (RC principles for sustainability). As an example they ban tractor idling by carriers on company property and they ask them to use the safest route (major Hwy) locally even at extra cost in order to minimize any undue transportation risks and nuisance by using the local congested arteries. The company worked with the City of Beauharnois to relocate the plant main entrance route to avoid the carriers coming in and out of the plant to cross a local major highway (132) and thus eliminating potential accident risks.

Scrutiny of corporate procedures and practices has highlighted that the company has some basic procedures for the selection, approval of road carriers and does some scrutiny of their road performance by using a third party software (Carrier411) to assure compliance with the US DOT regulations. However, the process lacks clear management criteria beyond DOT compliance. This process does not scrutinize the Carriers Canadian Provincial road performance data along with the Carrier 411 data for the selection of a Canadian base carrier and there could be potential gaps for the carriers servicing the Beauharnois plant. They do perform a Carrier 411 data base check on a carrier responsible for a customer product pick up but they scrutinize only initially for compliance with the legal DOT requirement and have no management system or practice to periodically assess the carrier ongoing road safety performance and behavior. As well, the corporate procedures and practices do not adequately support the Responsible Care Ethic of driving continual improvement (beyond regulation) in transportation safety and security.

Similarly, there are gaps in the company's management of rail carriers. Given several recent incidents in the Province of Quebec and elsewhere, there is an opportunity to ensure that management practices include a formal evaluation and screening of short line railways proposed to carry company product.

#### Improvement opportunities

- Axiall Canada should review key logistics practices as executed by Axiall corporate and ensure these are equally relevant and appropriate to the Canadian context, for instance:
  - Address identified weaknesses highlighted with the Carrier411 software reporting (CSA), especially regarding the HAZMAT carriers;
  - Include data from Canadian provinces, as a supplement to the Carrier411 data, during the evaluation and selection of road carriers for Canada;
  - Institute a management practice to regularly assess road performance from customer carriers that pick up Axiall HAZMAT products in Canada;
  - Incorporate expectations of the Canadian Rail Carrier Evaluation (A joint CIAC and railway Association of Canada initiative) into the company's transportation management system, ensuring short line railways are properly evaluated and have the capacity and ability to safely transport Axiall HAZMAT Products.

#### 2.1.3 Safety and Security

The Beauharnois plant has comprehensive Health, Safety and Environmental procedures and rigorous practices to efficiently manage all its operations and related activities. Performance is tracked by using key indicators and by benchmarking the site against the best practices from other Axiall chlor-alkali plants.

The corporate department performs Environment, Health and Safety audits (EHS) every 3 yrs but the last one was done in 2010 and was postponed last yr due to the new company merger. It was mentioned that the audit team should do the audit in 2014. The last corporate vulnerability assessment (SVA) was performed in 2007 followed by a site/consultant initiated one in 2010. Presently there is no plan to update the 2007 findings/results. The plant has a 24/7 security guard and the plant periphery and strategic areas are covered by a camera system (full implementation by Spring 2014).

#### Improvement opportunities

- *Consider re-instituting a 3- year cycle for external auditing of environment, health and safety procedures, as was the previous practice at the site.*
- *Complete a formal review and update of the site vulnerability assessment, last completed in 2008.*

Axiall has a formal process and procedures to report investigate and establish root cause findings and corrective action plans all incidents, accidents and near misses. Action plans are followed up to completion. The verification team scrutinized a few reports and the investigation process to confirm the practices. The team met with the joint HS team members (6) to confirm the plant personnel approach the personal and operations safety. The members even mentioned that they take the opportunity to discuss safety issues with the other Axiall plant personnel to exchange on safety matters and continuous improvement.

They have a preventive maintenance program to assure the plant mechanical integrity and also a critical equipment identification process for predictive & preventive maintenance activities. They use the HAZOP process (qualitative) supported by a LOPA & SIS activities (quantitative) to accurately identified there critical equipment.

## Success Practices

- The Joint Health & Safety committee members (JHS) regularly communicate with the other Axiall JHS committee in the sharing of best practices and events in the spirit of continual improvement and risk minimisation.
- The identification of critical equipment for preventive or predictive maintenance work is based on a rigorous evaluation consisting of HAZOP analysis, supplemented by LOPA and SIS quantified evaluations.

The verification team also scrutinized the risk management process and procedures along with the simulation process of the worst case scenario and alternate scenarios. The plant emergency plan has been updated and a copy given to the first responders.

The team noticed that these scenarios were not updated yet using the latest simulation technology (AEGL) and the risk communications to the population is still pending. The company is not aware of the effect of an emergency situation of all their industrial neighbors and how to address such emergency situation if an event should occur. All the above mentioned activities are not completed because they are coordinating these activities within the local CMMI mandate and work. The risk scenarios simulation update should be completed before end of winter 2014 and the risk communication to the Beauharnois citizen is planned for sometime in late 2014/early 2015. These activities are part of RC codes of practice compliance.

The company has an Emergency team able to answer any types of emergencies involving its products including chlorine.

## Works in Progress

Axiall Canada should continue its work in support of the Beauharnois CMMI process and:

- Revising its worst and alternate case scenarios to incorporate the last generation of simulation software and guidelines (AEGL);
- Integrating its emergency plan/risks avoidance and communications with its adjacent industrial neighbors; and
- Implement its risk communication plan with the City of Beauharnois and community, which is scheduled for completion in early 2015.

### 2.1.4 Environmental Protection

The company operates well within the air & water emission limits imposed by the Quebec Minister of Environment Certificate of approval. They have Key Performance Indicators (KPI) to measure all their emissions and energy consumption. They had no environmental reporting event in 2013, though two did occur in 2012. They have a solid wastes collection and recycling program to minimize annual waste sent to external landfill. They measure their green gas emission and have reduced them by close to 45% since 2008, by reducing the need of energy to dry the products and by installing a new gas fired boiler. The site has an annual goal to reduce the total plant energy by 1% either by process efficiency improvement or new capital projects. The goal for 2014 is to submit 12 new projects. The solid wastes which are mainly coming from impurities contained in the salt used as raw materials for chlorine production are sent to the plant approved process landfill area on the property.

### 2.1.5 Resource Conservation

The company process for chlorine production is stoichiometric and one of the possible energy reduction opportunities is the product drying need. It is a corporate objective to identify energy reduction projects to reduce the global energy needs by 1%. The total plant energy was reduced in 2012 by 2.1% and 5.3% in 2013 with the start up of the new gas fired boiler. For each project or replacement of old equipment there is a formal energy consumption analysis and a goal to use the latest technology to maximize all the

energy saving opportunities. Recently, as example, they started using Del light bulb for high efficiency lighting and since 2011; they have a no idling policy for any truck coming into the plant.

#### 2.1.6 Promotion of Responsible Care by Name

Responsible Care name & content is included in the company management system documentation, internal activities and Stewardship activities (customer/distributor/suppliers). At the plant level, the Responsible Care is promoted as an example in the public domain by distributing information pamphlets, having seminars for primary school on chemical usage as well as many other activities.

Each employee has a training session on RC and its components. At the plant level, the majority of the employees understands the intent and expectations of the Responsible Care commitment and behaviors and can relate it to proper HSE practices. Few, however, are aware of the expectations beyond HSE and the link to their daily tasks or the implication of RC in the company activities.

Unfortunately, the Axiall Web site for general public access does not mention a word on Responsible Care and Axiall related activities.

#### Improvement Opportunity

- The Responsible Care promotion at the site could be improved so that it focuses on ensuring each employee can relate their EH&S daily tasks and responsibilities to support Responsible Care and continual improvement. In particular, Axiall should consider utilizing the new CIAC Responsible Care online training program (available in English and French) as a key resource to support this objective.

#### Work in Progress

- It is expected that the company's commitment to Responsible Care in Canada and the United States will be publicly communicated on the Axiall public Web site.

## 2.2 Team Observations Concerning Stewardship Code

### 2.2.1 Expectations of Companies

The Beauharnois plant does not perform R&D but has a quality control laboratory to verify that the products are manufactured to specifications. The company has operations procedures and management systems to assure that all employees working at the manufacturing of their products in all the departments have the tools and knowledge to work and handle safely the chemicals at the site.

At the local level, procedures are in place for their suppliers/contractors selection & approval and those contracted including the carriers must adhere to the same HSE requirements when working or being present on site. As part of their contractual agreement with Axiall, carriers must report any deficiencies including HSE matters encountered during the product delivery to the customer and a documented corrective action is initiated immediately. Provisions are in place to cease delivery, where necessary, until the deficiency is corrected.

An energy efficiency assessment is performed by the Engineering department on any new products to privilege the product with the lowest energy consumption. At the local level (Beaurharnois), they have frequent discussions with their suppliers and contractors about RC and their related activities.

### 2.2.2 Expectations with Respect to Other Parties

The company supplies all related HSE documents to those involved in the safe handling of its products and can give customized training to their customers and suppliers on an as needed basis. As a minimum, the company

supplies MSDS to people involved with their products. All new customers have to answer to a self assessment and as required a site visit linked to the product safety hazards is performed to assure that they are familiar with the product properties and safe handling criteria before the first shipment. A routine check is performed with each customer to avoid their products misuse and the must comply with Axiall security requirements.

The product contracts (US responsibility) do not mention Axiall's commitment to RC and the customer expectations towards the Responsible Care Ethic and Principles for Sustainability. On the other hand, all customers/distributors have to sign an Axiall RC HSE compliance agreement along with the product contract before the first delivery. Axiall has no formal management system or practices to verify from time to time if the customer is adhering or be in compliance with the signed HSE agreement.

### Improvement Opportunity

- It is suggested that a management practice be implemented to be able to verify if the signatories of the Axiall HSE distributor and customers agreement adheres to the RC Product Stewardship Guideline other than relying only on the document acknowledgment signature.

The distributors that are hired by Axiall to distribute their products have to follow the Axiall standards and guidelines. The distributors must make sure that its customers are capable of handling the Axiall products and have to report any issues/outcomes to Axiall for corrective actions/remedial. These activities are documented and were scrutinized by the verification team. The distributors signed the RC EHS agreement and have an ongoing business relation with Axiall. Majority of the Axiall Canadian contracted distributors are adhering to the RC guiding principles. In practice, the contracted distributors are an extension of the Axiall sales department.

## 2.3 Team Observations Concerning Accountability Code

### 2.3.1 Operating Site Communities

Axiall Beauharnois has a comprehensive Community Outreach process with a community awareness panel (T.I.C.) that meets 2 to 3 times/yr. for the last decade. Axiall is transparent with the T.I.C members, answers all their preoccupations and gives them all the information about their operations including any HSE issues or emissions. Minutes are published and distributed after each meeting. The T.I.C. has a web site that is available for information to the local community. That Web site is sponsored by Axiall and Canexus another CIAC local member company.

Locally, the plant has a procedure (GR001-02) to formalize the company decision-making process in prioritizing the social activities (understand stakeholders concerns & expectations).

Axiall also makes every year some presentations to primary school students on chemistry and the chemical industry's role in society. In collaboration with the City of Beauharnois, they distribute to the new residents some information about their operations as well as how to react in case of an emergency situation. For the last decade and in collaboration with the City administration, Axiall give public access to the "Bois Robert" as a recreation area and also make contributions to support the ongoing maintenance.

### 2.3.2 Other Stakeholders

Axiall Canada maintains effective, ongoing relationships with the city administrators and first responders on industrial issues and company operations. The actively participate in the CMMI process and play an important leadership role. The plant personnel also participate actively in the different CIAC committees including the Leadership Group and the Tanscaer committees. Plant personnel were publicly recognized for their contributions to CIAC and the chemical industry at large during the CIAC annual meeting in 2013.

They appears proactive in taking actions to assure that their product transportation be done in a Responsible approach, minimizing using the local routes to avoid public disturbances and asking their carriers to use the major highways in the plant vicinity even if they have to incur extra transportation costs. The site personnel promote RC with the local community representatives and local service providers.

### 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 Axiall management system(s) and compared and contrasted the attributes of that system(s) to those of a self-healing overall management system as discussed in the CIAC Management System Guide. The verification team's related observations to the company management system(s) 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 considering the PLAN Step of Axiall Canada management system, the verification team observed amongst other the following:

- They have an annual budgetary process that identifies all the HSE objectives and funds for their capital projects. It includes always activities for correcting deficiencies noted in the past year operations and applying the continuous improvement principles.
- Key performance indicators are in place to track all key aspects of their business and operations, including HSE activities and make sure to be on track with the annual budget and operations/HSE targets.
- A formal training program is in place for all their employees on technical and administrative issues to assure that they can perform their tasks and responsibilities in a safe manner.
- They have an annual employee job safety performance and related improvement plan.
- The employees have access to the company information including all HSE matters thru the internal web site.
- They have a legal department to support the business and operation activities and assure compliance with all Canadian and US laws.
- Products risks have been identified and relevant information is made available to all concerned parties, including the general public, through their web site.
- They have corporate and local procedures/practices to support their HSE practices in all aspects of the business.
- They have comprehensive procedures and rigorous practices to identify, report and investigate with root cause and corrective action plans any incidents, accidents and near-misses.

The plant management has produced a cross reference document to link the 152 elements of the codes of practice to the Axiall procedures/practices to assure the RC compliance. Some Improvement Opportunities are highlighted in the report to identify practices that can be improved to re-enforce the RC compliance to the codes of practice.

#### Work in Progress

- Where management practices are delivered by the corporate entity, there is a need for Axiall Canada to inform those responsible about expectations in Canada and discuss opportunities to adjust those management systems so that the Canadian expectations are satisfied. This is especially the case in areas related to review and contracting of road and rail carriers of Axiall shipments.

### 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 considering the DO Step of Axiall Canada management system, the verification team observed amongst other the following:

- The Plant Manager directly report to the V.P. Manufacturing (US), located in Pittsburg PA.
- The Beauharnois plant management has to comply with the Axiall corporate Chlor- Alkali division policies and procedures.
- Plant personnel are responsible of all activities at/initiating from the site. Transportation, Distribution and Sales personnel have a matrix reporting structure and must comply with the corporate procedures and decisions.
- The RC coordinator is responsible along with the management team to assure the site RC compliances are addressed in site activities.
- The management team meets regularly (daily, weekly, monthly and quarterly) as required to assure that activities are performed to support the identified KPI's and annual objectives and to be in compliance with the corporate HSE requirements.
- All annual objectives are part of the annual budget framework and are tracked until completion.
- All site procedures including HSE are revised and updated as required in a 3-5 yr time frame.
- Process risks are identified with known methodology (HAZOP, What If, LOPA) and revised every 5 yrs.
- The site has a comprehensive Management of Change Process (MOC) that is enforced for any operation change.
- Internal emergency simulations are performed every year.
- HSE and Finance Corporate audits are performed on a 3-yr time frame at the site to assure plant compliance with related corporate policies and procedures. The audit findings are documented and have to be addressed.

### 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 considering the Check Step of Axiall Canada management system, the verification team observed amongst other the following:

- KPI's including HSSE activities are regularly tracked (daily, monthly and quarterly) and gaps are addressed and corrected.
- Each incident, accident, near miss is reported, investigated and the corrective measures, action plan are tracked to completion in the company software reporting system (SAP).
- Regular communications (telecom/reports) between the site personnel and as required with the US corporate individual responsible for an RC activity managed by the corporation.
- Internal and corporate external audits to assure compliance with the procedures and practices.
- All technical training activities are supported by a test to confirm the personal understanding.



- Employees have an annual job performance assessment.
- Ongoing follow up and reporting of plant emissions to air and water to confirm compliance with the plant Government Authorization Certificate (C.A.).
- The Joint Health & Safety Committee meets monthly to review plant incidents, accidents and any HSE activities/matters that need to be addressed. Highlights are documented.

### 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 and corrected, etc.

In considering the Act Step of Axiall Canada management system, the verification team observed amongst other the following:

- Root cause is identified for each incident, accident investigation and a corrective action plan is implemented and tracked to completion to correct the problem.
- A corrective action plan with a schedule is produced to correct any deficiency highlighted in an internal or corporate external audit.
- Annually, funds are dedicated to capital projects to improve operations performance, reduce energy consumptions, wastes reductions, etc.
- As mentioned in the check step, correcting measures are implemented to keep KPI's on target.
- Locally, the carriers "on the road performance" and customer services non conformance are rigorously tracked and corrective action plan implemented.
- A preventive and predictive maintenance program on plant equipment is performed and followed closely.

#### 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 Axiall Canada 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). Some of the verification team’s amongst other related observations on the company’s application of the *Responsible Care Ethic and Principles for Sustainability* are as follows:

- The plant management has multiple social activities for the wellness of the population. They donate funds to non-profit organizations, they make available the "Bois Robert" to the public for recreational activities and reserve funds for the site maintenance, they make presentation to primary school students to familiarize them with the safe use of chemicals, etc.
- Corporate and site energy efficiency goals are in place with an ongoing annual objective to reduce their total energy consumption by 1%.
- Several working practices were implemented to protect the environment such as the no idling policy for carriers coming on site, asking their carriers to use the available major highways to come in and go out of the plant instead of using the local streets in order to reduce the transportation risks and public disturbance.
- They evaluate all new equipment before their selection and approval in order to select the one with the lowest energy consumption.
- They play a leadership role in collaboration with the City First Responders on the CMMI work.
- A strong and sustained relationship exists with the community advisory panel (T.I.C.) and Axiall/Canexus sponsor the T.I.C. Web site.
- Axiall Corporation public web site clearly states the company commitments on Sustainability and Philanthropy practices.

The verification team members during the verification process has met and discuss with several employees in different departments the RC codes of practice and how it relates to their current tasks and responsibilities. Globally all are aware that they must behave and work with the highest HSSE standards in their daily activities and take preventive actions to protect health and environment and not to affect the public at large but not all the employees met could relate their daily work activities with the compliance of the RC guidelines and related codes of practice. Such reference was also made in section 2.1.6.

## 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 team believes that the company is capable of responding to the range of Work in Progress identified during the verification as summarized in the Executive Summary and discussed in detail in the report and is expected to give formal consideration to these improvement opportunities and take appropriate action where it agrees beneficial outcomes are possible. The verification is complete and no further involvement is required by the verification team.

*Marcel Émond*  
CIAC Team  
Head Verifier

2014-04-03

## ATTACHMENT 1: COMPANY RESPONSE TO VERIFICATION TEAM REPORT

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

Axiall Canada Inc. 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 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 the Findings Requiring Action 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.

Suite à la réception de la copie du rapport préliminaire, des discussions avec le chef auditeur de la GR M. M. Emond ont eu lieu et des modifications ont été apportées. Par conséquent, Axiall Canada Beauharnois, Québec est en d'accord avec la version finale du rapport.

Les points mentionnés en section "Travaux en progrès" et "Opportunités d'amélioration" qui sont principalement reliés à une amélioration ou harmonisation des codes et principes de la GR du Canada (ACIC) avec celle des États-Unis (ACC) seront adressés et discutés avec les responsables de notre bureau chef. Déjà en date du 7 mars 2014, il y a des échanges en ce sens avec le directeur EHS&S service pour qu'il prenne connaissance avec son groupe de travail des différences entre l'ACC et l'ACIC. Comme notre siège social est situé aux États-Unis nous ne pouvons promettre que le tout sera corrigé mais nous ferons tout en notre pouvoir d'améliorer ces points d'ici la prochaine vérification.

Comme par le passé, lors de la réunion de la TIC (Tribune d'information communautaire) du 15 octobre 2014 nous présenterons ce rapport final aux représentants de la communauté.

Je tiens à remercier Marcel Emond, Patrick Ash et Denis Gervais vérificateurs qui ont fait un excellent travail en tout respect de notre culture et philosophie de notre entreprise.

George Banoub  
Directeur de l'usine  
Daniel Léger,  
Directeur service à la clientèle/ Logistique  
21 mars 2014

## ATTACHMENT 2: INTERVIEW LISTS

### A: Company Personnel Contacted During Verification Process

Name	Position	Location
Georges Banoub	Directeur usine	Beauharnois, Qc
André Jetté	Directeur production et entretien	Beauharnois
Michael Hall *	Directeur environnement, santé, sécurité et qualité	Beauharnois
Louise Guay	Directrice de finances	Beauharnois
Martin Roy	Directeur ingénierie	Beauharnois
Nicole Gagnon	Directrice humaines	Beauharnois
Daniel Léger	Directeur Service à la clientèle /logistique et coordinateur GR	Beauharnois
Stéphane Girard	Ingénieur usine chlore et PSM	Beauharnois
Nicolas Gauthier *	Coordinateur SSE	Beauharnois
Membre comité conjoint santé et sécurité (7)*	Usine de Beauharnois	Représentants de la direction et des employés

### B: External Stakeholders Contacted During Verification Process

Name	Company / Organization	Position	Location
Bruce Sullivan	Axiall Corporation	Manager Transportation/Logistic	Pittsburg, PA
Allan Chapple	Axiall Corporation	Director Corporate Communications & Public Relation	Pittsburg, PA
Laura Kayhart	Axiall Corporation	Product Stewardship Specialist Manager	Pittsburg, PA
Denise Obrian	Axiall Corporation	Distribution Manager	Pasadena, tx
Jim Quinn	Axiall Canada	Senior Account Sales Manager	Montreal, Qc
Caroll Wolkof	Axiall Corporation	Customs Shipping Compliance Analyst	Pittsburg, PA



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