



RESPONSIBLE CARE[®] Verification Report

Evonik Canada Inc.

November 3, 4, 2015

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[®] 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.

Responsible Care[®] is a registered trademark of the Chemistry Industry Association of Canada.

EXECUTIVE SUMMARY

This report documents the observations and conclusions of the independent verification team tasked with conducting a Responsible Care Verification of Evonik Canada Inc. (EVONIK). The verification was carried out on November 3 and 4, 2015, at the Canadian manufacturing facility, located in Maitland, Ontario.

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 company's operations being a part of a larger global organization (Evonik Industries)
- The site being one of two (Gibbons, AB and Maitland, ON) in Canada
- Determining the impact (if any) of significant changes since the last verification
- Community outreach and communications
- Promotion of Responsible Care by name.

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 Findings Requiring Action identified 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: _____

Date: December 17, 2015

Gerry Moss
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:

Douglas Woods

Director of Regulatory Affairs & EHS
ESHQ Department
Cell Phone [416-455-4879](tel:416-455-4879)
doug.woods@evonik.com

Evonik Canada Inc.

<http://www.evonik.com/northamerica>

SUMMARY OF VERIFICATION TEAM OBSERVATIONS

Findings Requiring Action:

1. The company needs to have a process in which they identify and obtain updated information regarding local officials and the media in order to effectively liaise and communicate their Emergency Plan to the community. OP34
2. The company needs to develop a program to address acts of malicious intent by those outside or inside the company. Specifically, the program should include the following: site security (Maitland site management should have a good understanding of the security system in place from the chemical park service provider and close any gaps), and product storage. OP48
3. The company needs to develop a Business Continuity Plan and the team suggests using the CIAC Responsible Care Operations Code Business Continuity/Critical Infrastructure Implementation Aid. (OP49-55)
4. The team recommends a concerted effort to promote RC to all stakeholders as well as provide visibility in as many places as possible at both facilities. (OP81-84; ST 100-102; AC132, AC140, AC143, AC150)

Works in Progress:

1. The company should create standard criteria as an aid to route selection with their carriers and audit against these. OP14
2. The company needs to incorporate a dislocation policy into the Maitland Emergency Plan. (OP38, OP46)
3. Clarify the worst-case incident scenarios for both facilities, its off-site impact zone and communicate findings to the community. AC129
4. Include the on-site laboratory operations in the existing process hazard assessment that is done every 5 years on other areas of the facility. OP9
5. Inclusion of wording in all product and services contracts to identify expectations related to Responsible Care. (ST115-116)
6. The teams recommends that senior management at Maitland seek out, inform and engage with local, provincial and federal representatives to promote the company and Responsible Care. AC138

Improvement Opportunities

1. Share Emergency Management Plan in more depth with CAP, i.e. reference the Gibbons one-page scenario summaries. OP36
2. Add Ministry of the Environment and Climate Change (MOECC) as bullet in Carrier Selection and Approval Procedure S-PR-NA-002. (OP12-13)
3. Include Responsible Care dialogue as part of the Pre-Delivery Inspection process. (ST100-102)
4. The company should work in conjunction with the other company partners to increase and reinvigorate the community membership in the Maitland CAP, along with development of a Terms of Reference for both CAPs. Communication with CAP members on various aspects of the company's business and potential threats to the community, environment and emergency procedures is necessary. (AC129-130)

5. It is recommended that both Gibbons and Maitland site management, in conjunction with corporate communications, identify, seek out and communicate at planned intervals with relevant non-governmental organizations. (AC147-150)

Successful Practices:

1. Neutralizing agent packets for acids and bases – employees carry small supply with them in the field.
2. Out of Service equipment (ie Tankers and Rail Tanks) are locked out from being scanned for filling.
3. The company production is benchmarked against itself on an ongoing basis thus setting continuous improvement goals. Additionally, optimization of all resources is managed at the control room level. OP77
4. In maximizing waste reduction, the company has removed most of the alumina from its waste stream (ie. landfill) to recycling instead by sourcing a buyer. OP61
5. In conjunction with their water treatment supplier, the company has been successful in reducing steam by 20%+ and realized a significant reduction in water treatment chemicals. OP61
6. The company has developed a unique method of assessment of Responsible Distributors in requesting an affirmative statement regarding Responsible Care Commitments. The team recommends that the company include a request for communication of worst case scenarios as part of that statement. OP15
7. The company's use of seals in the lock out procedure to provide security to the external contractors. OP19

About Responsible Care Verification

As a member of the Chemistry Industry Association of Canada (CIAC), the most senior executive responsible for Evonik's 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, Evonik 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 CIAC website at www.canadianchemistry.ca. Evonik 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, or by contacting CIAC Responsible Care at glaurin@canadianchemistry.ca or (613) 237-6215 extension 233.

About Evonik

Evonik Canada Inc. has two manufacturing sites in Canada - the Gibbons facility, located in Sturgeon County, Alberta and the Maitland facility, located in Maitland Ontario. Both facilities manufacture hydrogen peroxide primarily for use in the pulp and paper industry. These sites are part of the Active Oxygens Business Line within the Resource Efficiency Segment of Evonik Industries, one of the world's leading specialty chemicals manufacturing companies, based in Germany. The Gibbons facility, started production in 1991 with its capacity being doubled in 1996. In 1998 the facility was purchased by Evonik, currently employing 38 full time multiskilled employees. The Maitland facility, started production in 1987 and was acquired by Evonik in 2011, currently employing 26 full time multiskilled employees.

About This Verification

The verification of Evonik Canada Inc. (EVONIK) was conducted on November 3 & 4, 2015 and included the team visit to Maitland, Ontario site. The verification team also conducted interviews with other company personnel and external stakeholders at locations the team was unable to visit. During the course of the verification, the team had the opportunity to interact with a wide range of company personnel, including representatives from the Gibbons, AB site, as well as stakeholders external to the company. Attachment 2 contains a list of those individuals interviewed and their affiliations. This is the fourth verification exercise completed for EVONIK. The last verification for Gibbons, AB was completed on January 2012 and this was the first verification for the Maitland site.

Team observations concerning the Responsible Care commitments (codes and benchmark and collective expectations)

During the verification of EVONIK, the verification team looked for evidence that the company was addressing the expectations documented in the Responsible Care Commitments. A sampling of the 152 code elements, a review of the 28 benchmark and collective expectations and the company response to the Ethic and Principles for Sustainability was undertaken. 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 specific aspects of the company's community initiatives and Responsible Care branding.

Overall, the team was impressed by the dedication and commitment of the site senior management, as well as the corporate support management to the ethic and principles of Responsible Care and their application to all aspects of the Canadian company operations.

TEAM OBSERVATIONS CONCERNING OPERATIONS CODE

The team is of the opinion that the company meets Responsible Care expectations for all reviewed Operations Code elements. There were no Findings Requiring Action in this section and the listed below Opportunities for Improvement are presented for the company's consideration. Design and Construction of Facilities and Equipment (OP1-6)

The company has documented standards and procedures to guide them in the design and construction of new facilities. Large projects have corporate involvement and oversight while smaller projects can be handled locally

utilizing their excellent Management of Change process. For the codes that were reviewed all expectations for Responsible Care implementation have been met.

Findings Requiring Action:

None.

Works in Progress:

None.

Improvement Opportunities:

None.

Successful Practices:

None.

Operations Activities (OP7-21)

In considering the four subsections of the Operations Activities area the team agrees that the company sufficiently meets Responsible Care code implementation expectations. All operations activities including operating procedures, laboratory practices, transportation activities and plant maintenance are well documented and implemented.

i. General Considerations (OP7)

Computerized control systems are key to the successful operation of the Evonik plants. Of note was the ability to retrieve detailed descriptions of every single control loop, tag, or instrument number. Attention to detail was shown in all areas, such as process interlocks, safe operating ranges, and chemical process operator training.

ii. Laboratory Practice (OP8-11)

Evonik ensures proper training of controllers that come into the lab, including any procedures required to perform work. However, the company should include the on-site laboratory operations in the existing process hazard assessment that is done every 5 years on other areas of the facility.

iii. Transportation and Physical Distribution (OP12-16)

To assist the company and the carrier, standard criteria as an aid to route selection should be created and the carriers audited against these. Terminals and distribution warehouses are treated alike, and have to meet the same safety, security, etc. criteria. Out of Service equipment (ie Tankers and Rail Tanks) are locked out from being scanned for filling; this is a successful practice. The company has developed a unique method of assessment of Responsible Distributors in requesting an affirmative statement regarding Responsible Care Commitments. This is considered a successful practice. The team recommends that the company include a request for communication of worst case scenarios as part of that statement.

iv. Maintenance (OP17-21)

Maintenance procedures are well integrated with the Management of Change and variance reporting processes and preventive maintenance is routine. The company's use of seals in the lock out procedure to provide security to the external contractors is a successful practice.

Findings Requiring Action:

None.

Works in Progress:

Include the on-site laboratory operations in the existing process hazard assessment that is done every 5 years on other areas of the facility. (OP9)

The company should create standard criteria as an aid to route selection with their carriers and audit against these. OP14

Improvement Opportunities:

Add Ministry of the Environment and Climate Change (MOECC) as bullet in Carrier Selection and Approval Procedure S-PR-NA-002. (OP12-13)

Successful Practices:

Out of Service equipment (ie Tankers and Rail Tanks) are locked out from being scanned for filling. The company's use of seals in the lock out procedure to provide security to the external contractors. OP19

The company has developed a unique method of assessment of Responsible Distributors in requesting an affirmative statement regarding Responsible Care Commitments. The team recommends that the company include a request for communication of worst case scenarios as part of that statement. OP15

Safety and Security (OP22-57)

The company has Health and Safety Standards in place to provide employees and all other involved personnel with the necessary knowledge and tools to recognize potential safety, health and environmental hazards. Their goal is zero incidents (their current rate results are excellent for both sites). The company has a thorough process safety management program fully capable of dealing with the hazardous materials used. The team reviewed all six subsections in this area and concluded that Responsible Care code implementation expectations are being met.

i. Occupational Health and Safety (OP22-27)

Aspects of Evonik's occupational health and safety programs include a hazard elimination and control process for routine work, critical safety behavior monitoring to observe actual work being done, job safety analysis to review non-routine work prior to commencement, safe work permit system and a process for planned workplace inspections. Qualified and trained personnel perform all such work. Both sites have excellent safety records, and active Joint Health and Safety Committees.

A good example of this in action is the replacement of ion exchange resin with reverse osmosis system for water generation; resulting in the elimination of both acid and base (hazard reduction). Also, the special pouches of neutralizing agent carried by all employees are a successful practice.

A corporate industrial hygiene program regularly assesses the potential for workplace exposures and defines job specific personal protection requirements, together with pre-employment medicals and on-going health surveillance programs, ensure the well-being of workers.

The corporate occupational health program includes medical surveillance requirements (where required), annual medical testing, annual corporate health campaigns, eg. heart disease, baseline health testing; eyes, hearing, lung capability, fitness test, blood pressure, weight; then an annual (confidential) case assessment communication between the provider and employee.

There is a contractor safety management system in place, with annual refresher. All contractors carry a card and have a badge to demonstrate compliance.

ii. Process Safety Management (OP28-30)

Process safety management is the same at all three North American H2O2 manufacturing plants. There are dedicated local and corporate resources in place. In the last two years there has been an elevated emphasis on this topic, with an ongoing gap analysis, and plans in place to close identified gaps. As part of the review of best

practices, the new proposed Canadian Society for Chemical Engineering (CSChE) process safety management standard, soon to be a Canadian Standards Association (CSA) national standard, will be met or exceeded by the Evonik Canada plants.

iii. Emergency Management (OP31-47)

There is a corporate internal emergency response network in place, which includes adequate training and resources. Risk assessments are carried out and reviewed annually. As well, sites have the ability to share resources with other peroxide producers in case of emergency. The company needs to have a process in which they identify and obtain updated information regarding local officials and the media in order to effectively liaise and communicate their Emergency Plan to the community. The carrying of small pouches of neutralizing agent for acids and bases is a successful practice. Consideration should be given to sharing this information with carriers, first responders and customers. The company needs to incorporate a dislocation policy into the Maitland Emergency Plan.

iv. Malicious Intent (OP48)

Regular security vulnerability assessments are done internally. The company needs to develop a program to address acts of malicious intent by those outside or inside the company. Specifically, the program should include the following: site security (Maitland site management should have a good understanding of the chemical park-security system (the security provider) in place and close any gaps), and product storage.

v. Critical Infrastructure/ Business Continuity (OP49-55)

The company needs to fully embrace the CIAC guidelines for implementation of a comprehensive Business Continuity plan.

vi. Incident Reporting and Investigation (OP56-57)

Incident root cause analysis (RCA) is carried out as required on incidents, depending on categorization of the incident. Lessons learned are shared within the company and externally with association members, where appropriate. An incident investigation system is in place with a process, using email (all employees have access), to assign responsibilities for corrective actions and track the status of completions and close out. This 'variance system' is used to communicate corrective actions arising out of inspections, near misses, etc. is and this is reviewed every two weeks.

Findings Requiring Action:

The company needs to have a process in which they identify and obtain updated information regarding local officials and the media in order to effectively liaise and communicate their Emergency Plan to the community.
OP34

The company needs to develop a program to address acts of malicious intent by those outside or inside the company. Specifically, the program should include the following: site security (Maitland site management should have a good understanding of the chemical park security system in place and close any gaps), and product storage.
OP48

The company needs to develop a Business Continuity Plan and the team suggests using the CIAC Responsible Care Operations Code Business Continuity/Critical Infrastructure Implementation Aid. (OP 49-55)

Works in Progress:

The company needs to incorporate a dislocation policy into the Maitland Emergency Plan. (OP38, OP46)

Improvement Opportunities:

Share Emergency Management Plan in more depth with CAP, i.e. reference the Gibbons one-page scenario summaries as an example. OP36

Successful Practices:

Neutralizing agent packets for acids and bases – employees carry small supply with them in the field.

Environmental Protection (OP58-75)

The company is guided by clear corporate policies directed towards sustainability and reducing its environmental footprint. Corporate goals and targets drive local targets and performance monitoring is routine. Procedures guide the selection and assessment of waste contractors. This area fully meets our expectations on the implementation of Responsible Care. As noted in the successful practices below, waste reduction stories like the alumina to recycling, and reducing water treatment chemicals are good examples of the implementation of these elements.

Findings Requiring Action:

None.

Works in Progress:

None.

Improvement Opportunities:

None.

Successful Practices:

In maximizing waste reduction, the company has removed most of the alumina from its waste stream (ie. landfill) to recycling instead by sourcing a buyer. OP61

In conjunction with their water treatment supplier, the company has been successful in reducing steam by 20%+ and realized a significant reduction in water treatment chemicals. OP61

Resource Conservation (OP76-80)

Evonik's parent company has a global commitment to reduce water consumption, greenhouse gases and energy consumption. Global goals are translated into local targets for which Evonik is held accountable.

The management systems supporting continual improvement in reducing the footprint of its operation are in place and meet expectations for Responsible Care. As an example, control room operators are given authority to run the plant and optimize production resources independently.

Findings Requiring Action:

None.

Works in Progress:

None.

Improvement Opportunities:

None.

Successful Practices:

The company production is bench-marked against itself on an ongoing basis thus setting continuous improvement goals. Additionally, optimization of all resources is managed at the control room level. OP77

Promotion of Responsible Care By Name (OP81-84)

The company needs to focus some effort in promoting Responsible Care on all stakeholder fronts. It is recommended that this be built into its ongoing communication plan, and that goals and benchmarks be set to provide measurable improvements. The team has provided some general guidance in this endeavour. However, the team toured the Maitland site and did not find evidence of Responsible Care signage displayed and discussions with employees, in most cases, showed past knowledge of Responsible Care was limited. The team feels that the following areas should be considered in efforts to promote Responsible Care:

- business cards and letterhead
- Canadian internet & intranet pages
- Safety and Health policy (business unit and site)
- community newsletter and employee communication vehicles
- customer training, contractor training and visitor site orientation
- RC badges on coveralls, hardhats and wherever "Safety at Evonik" logo exists
- RC logo on signage at site entrances
- RC site flags and banners
- Inclusion of the RC logo on e-mail correspondence
- Inclusion of wording in all products and services contracts to identify expectations related to Responsible Care.
- The posting of an executive contact signed "Ethic and Principles of Sustainability" document on both the company's Canadian website and the employee intranet as well as at prominent locations throughout the site.

Findings Requiring Action:

The team recommends a concerted effort to promote RC to all stakeholders as well as providing visibility in as many places as possible at both facilities. (OP81-84; ST 100-102; AC132; AC140; AC143; AC150)

Works in Progress:

None.

Improvement Opportunities:

None.

Successful Practices:

None.

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. Code expectations in this area are considered to be appropriately addressed.

Expectations of Companies (ST85-114)

i. Research and Development (R&D) Expectations (ST85-92)

The only R&D carried out is at the parent company. Our review of this R&D area showed that it conforms to the expectations for Responsible Care implementation.

Findings Requiring Action:

None.

Works in Progress:

None.

Improvement Opportunities:

None.

Successful Practices:

None.

ii. Expectations Beyond Research and Development (R&D) (ST93-114)

The team reviewed various aspects of the codes related to the five areas of this code section and is of the opinion that Responsible Care code expectations are being met.

a. Raw Materials, Products and Services Characterization and Evaluation (ST93-99)

A list of approved uses for the product is maintained. The properties of hydrogen peroxide are environmentally friendly, replacing chlorine in certain pulp and paper applications. There is a reduction of risk by replacing chlorine, and there are no residuals after bleaching. Process hazard analysis (PHA) is carried out at all plants on a regular schedule; this uses the variance report system to manage findings. On the people side; job safety analysis (JSA) are also done. Legal requirement changes trigger reviews; monitoring of various publications like the Canada Gazette is part of an ongoing process.

b. Promotion of Responsible Care by Name (ST100-102)

See the previous section on this subject for more details.

c. Security (ST103)

Many facets of security are in place, including routine audits, security vulnerability assessments. Issues such as the potential for misuse, contractors, computer security, etc., have been addressed and are part of the system. Sites are access controlled, and have internal and external cameras.

d. Communication Through the Value Chain (ST104-110)

There is an ongoing dialog with customers; the company is proactive if they haven't seen the customer in a while. The corporate sustainability report is part of customer contact. SDS are automatically distributed, paper copies are sent to terminals and a request for sign off is included. Training is done periodically with customers. In the area of distributors, only Responsible Distribution members are used, to ensure compliance with Responsible Care ideals. New contracts for distributors with Responsible Care content is coming, as well, specific issues for Active Oxygen will also be included.

e. Historical Hazardous Waste Practices (ST111-114)

Environmental risks are routinely reviewed, waste manifests kept, audits of waste service providers are done.

Findings Requiring Action:

While the team only visited the Maitland site, there was no visibility of Responsible Care branding i.e. logo, name, etc. The team recommends a concerted effort to implement RC branding in as many places as possible at both facilities. (ST100-102)

Works in Progress:

None.

Improvement Opportunities:

Include Responsible Care dialogue as part of the Pre-Delivery Inspection process. (ST100-102)

Successful Practices:

None.

Expectations of Companies With Respect to Other Parties (ST115-124)

The company has procedures for the selection and management of third party goods and services providers. Evonik is working to add Responsible Care contractual language, and some is already in place. All service providers go through the same approval/selection/auditing process. Regular meetings are held with carriers to discuss issues, trends, etc. Of note is the fact that new equipment and repair sites for rail-cars and trailers are also included in these processes. In general the team has determined that Evonik meets Responsible Care implementation expectations.

Findings Requiring Action:

None.

Works in Progress:

Inclusion of wording in all product and services contracts to identify expectations related to Responsible Care. (ST115-116)

Improvement Opportunities:

None.

Successful Practices:

None.

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. The team reviewed this area in detail and had the opportunity to discuss the company's programs and performance with some of their Community Advisory Panel (CAP) members as well as with non-management company employees. In general the company has implemented programs meeting all Responsible Care expectations.

Operating Site Communities (AC125-136)

The company has designated people in place to manage their community dialogue process. They are engaged with their CAP at both locations. They also have a process to handle inquiries. The company should work in conjunction with the other company partners to increase and reinvigorate the community membership in the Maitland CAP. In addition, a Terms of Reference for the CAPs, outlining Company and Community expectations and responsibilities, would be helpful. More work is needed to communicate with CAP members on various aspects of the company's business and potential threats to the community, environment and emergency procedures. With the exception of the following, code expectations have been implemented to meet Responsible Care expectations.

Findings Requiring Action:

While the team only visited the Maitland site, there was no visibility of Responsible Care branding i.e. logo, name, etc. The team recommends a concerted effort to implement RC branding in as many places as possible at both facilities. AC132

Works in Progress:

Clarify the worst-case incident scenarios for both facilities, its off-site impact zone and communicate findings to the community. AC129

Improvement Opportunities:

The company should work in conjunction with the other company partners to increase and reinvigorate the community membership in the Maitland CAP, along with development of a Terms of Reference for the CAPs. Communication with CAP members on various aspects of the company's business and potential threats to the community, environment and emergency procedures is necessary. (AC129-130)

Successful Practices:

None.

Other Stakeholders (AC137)

In general the company meets Responsible Care implementation expectations for all seven sub categories in this section, except where noted below.

i. Public Policy (AC138-140)

Similar to what is already in place at the Gibbons site, it is recommended that the (relatively) new site manager at Maitland seek out, inform and engage with local, provincial and federal representatives to promote the company and Responsible Care.

ii. Finance (AC141-143)

There is regular contact at the sites with insurance providers, for the purpose of conducting insurance audits. It is recommended that these be included in the promotion of Responsible Care by Name.

iii. Consumers (AC144)

The team has no specific information about this topic.

iv. Transportation Corridor (AC145)

The team has no specific information about this topic.

v. General Public (AC146)

The team has no specific information about this topic.

vi. Non-Governmental Organizations (AC147-150)

The team observed that there was limited or no contact with non-governmental organizations, relying instead on corporate communications. It is recommended that both Gibbons and Maitland site management, in conjunction with corporate communications, identify, seek out and communicate at planned intervals with relevant non-governmental organizations.

vii. Business (AC151-152)

The team has no specific information about this topic.

Findings Requiring Action:

While the team only visited the Maitland site, there was no visibility of Responsible Care branding i.e. logo, name, etc. The team recommends a concerted effort to implement RC branding in as many places as possible at both facilities. (AC140, AC143, AC150)

Works in Progress:

The teams recommends that senior management at Maitland seek out, inform and engage with local, provincial and federal representatives to promote the company and Responsible Care. AC138

Improvement Opportunities:

It is recommended that both Gibbons and Maitland site management, in conjunction with corporate communications, identify, seek out and communicate at planned intervals with relevant non-governmental organizations. (AC147-150)

Successful Practices:

None.

APPENDICES TO CODES: SOCIAL RESPONSIBILITY

This is relatively well understood and practiced at the facilities as appropriate. The local communities are sites where the employees live. Evonik contributes to local charities, establishments, (donate lab equipment to local schools), etc., and uses these opportunities to publicize Evonik when donations are made. Publicity in local media is used for awards (eg. GE Betz), safety milestones, ie 25 years without a lost time incident, or to provide writeup in local media at time of the acquisition by Evonik.

Findings Requiring Action:

None.

Works in Progress:

None.

Improvement Opportunities:

None.

Successful Practices:

None.

APPENDICES TO CODES: INVOLVEMENT IN PUBLIC POLICY PROCESS

See above under Other Stakeholders, *i. Public Policy.*

Findings Requiring Action:

None.

Works in Progress:

None.

Improvement Opportunities:

None.

Successful Practices:

None.

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 the EVONIK 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: the company's management system for Responsible Care is complete and comprehensive. The company's management team charged with ensuring the performance of the Responsible Care Management System is well placed to guide the organization in certain code areas where focused management may be synergistic. For example:

Promotion of Responsible Care by name is required in 8 specific areas covering all three major codes. An overall management system approach, consistent with best practice guidance developed by CIAC, to increase brand awareness of Responsible Care, internally and externally, should be considered. (Please see the section entitled "Promotion of Responsible Care by Name" for additional information.)

Findings Requiring Action:

None.

Works in Progress:

None.

Improvement Opportunities:

None.

Successful Practices:

None.

Observations on the PLAN Step

In considering the PLAN Step of Evonik's management system, the verification team observed that staff actively seeks input from various sources, such as Responsible Care Commitments, stakeholders, business imperatives including corporate and regional goals and objectives, laws and regulations, standards and benchmarks, that are then used in planning activities. This list of planning activities makes clear the connection between these activities and meeting the Responsible Care commitment. From these examples and from more general observations, the management system expectations in this area are considered to be appropriately addressed.

Findings Requiring Action:

None.

Works in Progress:

None.

Improvement Opportunities:

None.

Successful Practices:

None.

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. The team observed that the company has implemented an effective organizational structure, has assigned responsibilities to appropriate personnel, supplies sufficient training and resources to execute planned actions and has developed and documented standards, procedures and programs generally covering all aspects of Responsible Care.

In considering the DO Step of Evonik's management system, the verification team observed management system implementation expectations had been met.

Findings Requiring Action:

None.

Works in Progress:

None.

Improvement Opportunities:

None.

Successful Practices:

None.

Observations on the CHECK Step

In considering the CHECK Step of the Evonik management system, the verification team observed the following: key performance indicators are routinely monitored for alignment with expectations. Regular internal and external audits are conducted to ensure compliance with regulations, standards, company policies and procedures. The incident investigation process addresses requirements for root cause analysis. A thorough variance management system is used to track any incidents, includes audit findings, actions are assigned to individuals and the status is tracked to completion. Management system expectations in this area are considered to be appropriately addressed.

Findings Requiring Action:

None.

Works in Progress:

None.

Improvement Opportunities:

None.

Successful Practices:

None.

Observations on the ACT Step

In considering the ACT Step of the Evonik management system, the verification team observed the following: the company performs a range of activities on a routine and regular basis satisfying this part of their management system. The activities are comprehensive and tie the CHECK step with the PLAN step. The team agrees that the ACT part of the company's management system meets all implementation expectations for Responsible Care.

Findings Requiring Action:

None.

Works in Progress:

None.

Improvement Opportunities:

None.

Successful Practices:

None.

Team Observations on the Responsible Care Ethic and Principles for Sustainability

The verification team carefully observed the EVONIK 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:

The facility was seen to be guided by the *Responsible Care Ethic and Principles for Sustainability* in the following aspects:

WORK FOR THE IMPROVEMENT OF PEOPLE'S LIVES AND THE ENVIRONMENT, WHILE STRIVING TO DO NO HARM:

The product produced at the Gibbons, Alberta and Maitland, Ontario facilities is a well researched chemical with respect to its potential hazards which are well communicated to those who might be impacted. The production processes at the sites are considered to be safe by design, and are well controlled.

BE ACCOUNTABLE AND RESPONSIVE TO THE PUBLIC, ESPECIALLY OUR LOCAL COMMUNITIES, WHO HAVE THE RIGHT TO KNOW THE RISKS AND BENEFITS OF WHAT WE DO:

The facilities have identified their communities as adjacent industrial operations and surrounding areas. There are active community advisory panels in place in Gibbons and Maitland, with a broad range of membership interests.

TAKE PREVENTATIVE ACTION TO PROTECT HEALTH AND THE ENVIRONMENT:

There is a good safety record at both facilities, sustained by proactive hazard identification and work monitoring programs. A primary environmental focus is on energy reduction and replacement of hazardous chemicals with safer processes.

INNOVATE FOR SAFER PRODUCTS AND PROCESSES THAT CONSERVE RESOURCES AND PROVIDE ENHANCED VALUE:

The desire to address the above is evidenced in the Evonik Industries corporate values which includes a statement that the company stands for a balance between economically successful, ecologically responsible and socially appropriate behaviour, and that such behaviour needs to be followed by employees as well as expressed towards shareholders, business partners, local communities and other stakeholders.

ENGAGE WITH OUR BUSINESS PARTNERS TO ENSURE THE STEWARDSHIP AND SECURITY OF OUR PRODUCTS, SERVICES AND RAW MATERIALS THROUGHOUT THEIR LIFE CYCLES:

Evonik has established appropriate policies, procedures and/or contracts with its business partners to ensure Responsible Care practices, involving their raw materials and products, are carried out beyond company facilities.

UNDERSTAND AND MEET EXPECTATIONS FOR SOCIAL RESPONSIBILITY:

This is relatively well understood and practiced at the facilities as appropriate.

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:

Facility personnel are actively involved with stakeholder groups in the immediate area which focus on responsible industrial development and potential impacts.

PROMOTE RESPONSIBLE CARE® AND INSPIRE OTHERS TO COMMIT TO THESE PRINCIPLES:

Opportunities are taken as appropriate to promote the initiative externally.

VERIFICATION TEAM CONCLUSION

This report documents the observations and conclusions of the independent verification team tasked with conducting a Responsible Care Verification of Evonik Canada Inc. (EVONIK). The verification was undertaken on November 3 and 4, 2015 and included the team visit to Maitland, ON. This was the first Responsible Care verification completed for the Maitland, ON site, and the fourth for the Gibbons, AB site.

During the verification of EVONIK, 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). The team considered all aspects of the Responsible Care Commitments during the verification.

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 Findings Requiring Action identified during the verification, as summarized in the Executive Summary and discussed in detail in the report. The verification is complete and no further involvement is required by the verification team.

APPENDIX 1: COMPANY RESPONSE TO VERIFICATION REPORT

Evonik Management personnel were in agreement that the verifiers were very helpful during the planning stages. This led to meaningful and open discussions at the time of the verification itself. We are appreciative of the recommendations for continual improvement with our Responsible Care efforts. In addition, we want to thank the verifiers for their professional approach throughout the entire process.

APPENDIX 2: INTERVIEW LISTS

A: Company Personnel Contacted During Verification Process

NAME	POSITION	LOCATION
Nancy Hamilton	ESHQ engineer for North America	Maitland, ON
Mike Warren	Lab Technician	Maitland, ON
Janice Stolz	ISO Resource NA	Gibbons, AB
David Harsulla	Procurement group	Gibbons, AB
Larry Vail	Applications Manager	Parsippany, NJ
Doug Woods	Director of Reg. Affairs & EHS	Ontario
Stephanie Bryars	Manager, Terminal & Equipment	Theodore, Alabama
Larry McDaniel	ESHA Manager for Active Oxygen NA	Theodore, Alabama
Paul Radczenko	Site Manager	Maitland, ON
Hans Schuhbauer	Site Manager	Gibbons, AB
Andrew MacKay	Supply Chain Leader	Maitland, ON
Andrew Bennett	Industrial Mechanic (JH&SC)	Maitland, ON
Spencer Moreau	Operator Controller (JH&SC)	Maitland, ON
David McCue	Production Technician (JH&SC)	Maitland, ON
Mike Warren	Laboratory Technician (JH&SC)	Maitland, ON

B: External Stakeholders Contacted During Verification Process

NAME	POSITION	LOCATION
Rebecca Redding	CAP – Local high school teacher	Gibbons, AB
Ian Rogers	CAP – local retiree/resident	Maitland, ON



CHEMISTRY INDUSTRY ASSOCIATION OF CANADA

Suite 805, 350 Sparks Street

Ottawa (ON) K1R 7S8

T: 613 237-6215 F: 613 237-4061

www.canadianchemistry.ca