RESPONSIBLE CARE®
Verification Report

BASF Canada Inc.

October 15 - 18, 2013

Chemistry Industry Association of Canada

Responsible Care®
Our commitment to sustainability.

Disclaimer

EXECUTIVE SUMMARY

This report documents the observations and conclusions of the independent verification team tasked with conducting a Responsible Care Verification of BASF Canada Inc. (BASF Canada). The verification was undertaken on Oct 15 to Oct 18, 2013 and included team visits to Mississauga, Toronto and Cornwall. A site visit to the Maryhill Research Farm was conducted by the Public-At-Large verifier on Oct. 21, 2013. The verification team also conducted interviews with other company personnel and external stakeholders at locations the team was unable to visit. This was the sixth Responsible Care verification completed for BASF Canada. The last verification was conducted during November and December, 2010

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 sustainability.

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: _____October 20, 2013_____

Gerry Whitcombe
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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Introduction

1.1 About Responsible Care Verification

As a member of the Chemistry Industry Association of Canada (CIAC),the most senior executive responsible for BASF Canada's operations in 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 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, BASF Canada must, every three years, participate in an external verification intended to:

- 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;
- Identify opportunities for assisting the company when benchmarking its own practices and performance against those of its peers, thus supporting continual improvement;
- Contribute to the credibility of Responsible Care amongst company personnel and stakeholders, as well as the stakeholders of the broader industry;
- Identify successful company practices that can be promoted to peers in the CIAC membership; and
- 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.canadianchemsitry.ca). BASF Canada 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 the Responsible Care staff at CIAC at glaurin@canadianchemistry.ca or (613) 237-6215 extension 233.

1.2 About BASF

BASF Canada Inc. (BASF Canada), headquartered in Mississauga Ontario, is part of the global BASF Group (BASF Group) with the group's head office (BASF SE) located in Ludwigshafen, Germany, and with regional headquarters (BASF Corporation) in Florham Park, New Jersey, USA. BASF Canada is responsible for governance of BASF Canada's operations and for development of the Canadian market. In North America BASF Canada operates on a shared services platform for many of the services provided for the Canadian company. BASF Canada operates a number of different business units which report regionally into BASF Corporation and globally into Germany. The business units are in the areas of agricultural protection, chemicals, coatings, care chemicals and plastics. Most BASF businesses operate by selling through BASF Canada to Canadian customers. A few businesses sell directly from BASF Corporation to the customer or a distributor in Canada.

BASF Canada currently has nine manufacturing sites in Canada. These include Toronto, Cornwall, Windsor, Brampton and Smiths Falls in Ontario, St. Leonard in Quebec and Blackie and Nisku in Alberta. The recently acquired Becker Underwood site in Saskatoon is not part of BASF Canada but has governance in Canada. The Smiths Falls site is slated to close at the end of 2013.

BASF Canada is the owner of Automotive Refinish Technologies, Inc. (ART) in Canada. ART operates a chain of 6 stores that sell BASF automotive refinish coatings and other third party coatings related supplies (sand paper, body filler, mixing equipment, etc.) to auto body shops.

The Agricultural Products business group of BASF Canada leases a number of farm locations across Canada.

There are four sales or office locations across Canada.

DNA LandMarks is a BASF owned site in Canada that is not part of BASF Canada. It reports to BASF Plant Science in Germany.

All BASF Canada operations are considered within the scope of this verification, with the exception of the newly acquired Becker Underwood site.

Included in the 2013 verification are:

Toronto site:
The Toronto site develops and manufactures resins for use in polyurethane spray foam insulation and other polyurethane insulating and non-insulating applications. In addition to its production and lab facilities, the site is a major distribution centre for BASF's Construction Chemical and Automotive Coatings divisions. The location is also used for technical training on the application of spray foam, automotive coatings and construction products. Approximately 45 employees work at the site.

The Toronto site has been in existence since 1974 and houses a warehouse, laboratories, production area, and an automotive refinish training centre.

Cornwall site:
The Cornwall site manufactures speciality plasticizers that are distributed across North America and abroad. Customers use these products in conjunction with polyvinyl chloride to create finished products such as swimming pool liners, automobile interiors, wire insulation and packaging materials. The Cornwall site has

approximately 30 employees and has been in existence since 1953.

Agricultural Products (AP) division & research farms:
BASF Canada supplies crop protection products, including herbicides, fungicides and insecticides for cereal, oilseed, pulse (dried peas, edible beans, lentils and chickpeas), corn, soybean and specialty crops. AP research farms are leased sites in Canada where research plots are established. (eg – Maryhill, Ontario)

1.3 About This Verification

The verification of BASF Canada was conducted on Oct 15 to Oct 18, 2013 and included team visits to Toronto and Cornwall. A site visit to the Maryhill Research Farm was conducted by the Public-At-Large verifier on Oct. 21, 2013. 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, as well as stakeholders external to the company. Attachment 2 contains a list of those individuals interviewed and their affiliations.
This was the sixth Responsible Care verification completed for BASF Canada. The last verification was conducted during November and December, 2010

The verification team was comprised of the following individuals.

Name	Affiliation	Representing
Gerry Whitcombe	CIAC Verifier	Industry (team leader)
Rolly Blondin	CIAC Verifier	Industry
Ron Ormson	CIAC Verifier	Public-At-Large
Phil Vallance	CIAC Verifier	Industry
Jason Jesmer	Community rep	Cornwall community
Zig Maleszewski	Community rep	Toronto community

2. Team Observations Concerning the Responsible Care Commitments (Codes and benchmark and Collective Expectations)

During the verification of BASF Canada, the verification team looked for evidence that the company was addressing the expectations documented in the Responsible Care Commitments (152 Responsible Care code elements (Codes) 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 sustainability.

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

1. **Findings Requiring Action** document instances where the verification team observes specific company actions (or the absence of company actions) which are inconsistent with the detailed codes and benchmark and collective expectations contained in the Responsible Care Commitments. Where possible, the 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

The company has strong structures for direct management of and for providing shared services to its manufacturing operations. Corporate support for providing guidance and direction on specific CIAC Responsible Care topics is in place and shared service providers understand and are sensitive to the requirements of Responsible Care. Processes that allow the discovery of issues related to code implementation are in place and functioning effectively.

The team observed that all Operations Code areas meet Responsible Care code implementation expectations. Specific comments related to each sub area are given below.

2.1.1 Design and Construction of Facilities and Equipment

The company has a capital project review process (Step Review Process) and in conjunction with their Management of Change process all aspects related to this code area are sufficiently implemented.

2.1.2 Operations Activities

The team is of the opinion that the company meets Responsible Care code implementation expectations for this area. Specific comments for each sub-section are given below.

a. General Considerations

The company has several review processes where the reviews and review criteria specified in OP7 are applied. In addition it is implementing a new Occupational Safety Assessment process which will augment existing reviews. The team views this as an excellent opportunity to review the design of the new process relative to the requirements of this section.

> There is an improvement opportunity to review the new Occupational Safety Assessment being deployed to determine that all code elements contained in 3.Operations Activities (i) General Considerations, ii) Laboratory Practices and iv) Maintenance) have been adequately considered.

b. Laboratory Practice

The company regularly reviews its laboratory procedures. At the Toronto site, this occurs on a three year frequency as is required in their ISO 9000 registration. The labs were viewed by the team and housekeeping was observed to be good to excellent. In Toronto a program was underway to revamp (rather than replace like-for-like) the sash mechanism for all fume hoods as a result of a recent incident. A global review is underway to incorporate more widely the learnings from this incident.

c. Transportation and Physical Distribution

There is little local (plant) involvement in this area and most activities are the responsibility of shared-service partners. However, in Cornwall the team observed a situation where an effort by plant personnel to go beyond their bulk bag recycling program and promote reuse of the bulk bags with the raw material supplier was not successful. In the spirit of Responsible Care it is the team's view that a mechanism to engage corporate champions to assist in working these opportunities would be beneficial to all. An improvement suggestion is presented in the Management System section of this report.

d. Maintenance

Corporate standards adequately drive maintenance activities. Procedures are reviewed on a regular basis. Preventative maintenance is routine and predictive preventative maintenance is in place on critical equipment.

2.1.3 Safety and Security

The company is very strong in this area with global direction and support for the achievement of ambitious improvement goals. The "Journey to EHS Excellence" and “Safety by Choice” programs are designed to drive culture changes and program improvements. The company fully meets Responsible Care code implementation expectations for this area. Specific comments for each sub-section follow:

a. Occupational Health and Safety

The company has excellent programs and communications related to occupational health and safety. The team observed excellent housekeeping in all areas and interviews with employees demonstrated that a safety culture is well entrenched.

The company’s analysis of incidents shows behavioural factors to be common, and thus the company is expanding its approach to BBS (Behavioural Based Safety).

It mostly uses lagging indicators and is working to incorporate more leading indicators. One interesting approach is to translate their total reportable incident rate statistics into a more intuitive and informative measure of incident frequency. By simply adjusting the exposure hours from the standard 200,000 hours used

in TRIR (Total Recordable Incident Rate) calculations to duration reflective of a typical career for an individual, they end up with an incident frequency metric that is much more easily internalized by employees at large. This Career Safety Rate reflects the percentage of employees that can expect to complete their career without an injury if current incident frequencies continue.

> The company's Career Safety Rate is a successful practice.

Related to OP22 (...evaluate workplace health and safety hazards and implement suitable means of control...) the team was told in Cornwall that in certain circumstances drums are moved by hand. As drum grabbers are commonly used in the industry for this purpose the team suggests the following:

> There is an improvement opportunity to conduct a safety hazard assessment on the current practice of moving drums by hand and if found deficient upgrade drum handling to the best practice level of peer companies.

The company has developed an internal employee television network (eTV) to communicate information to employees. The TVs are strategically located throughout facilities and messages are continually broadcast. Employees are encouraged to develop videos that, for instance, highlight new employees when they come on board or present novel safety messages. One such video with a safety theme, Ernesto's Journey, was produced by employees in Toronto. In the video, Ernesto is seen to develop from an off-the-street new employee (devoid of any safety acumen) to a fully safety aware employee. It is a well thought out, well executed video and a superb example of how to effectively use communication tools.

> The company's employee TV network (eTV) is a successful practice

b. Process Safety Management

The company's standards, programs and practices for process safety management meet Responsible Care code implementation expectations. In particular, the team observed that the company has an extensive process safety management system that includes new global directives that establish minimum requirements for plant safety concepts for process safety, periodic reviews of process plants during their life cycle and maintaining minimum process safety related documentation at all operating facilities. In addition the company uses the CIAC Process Safety Assessment as a component in both the annual RC Program review and the Canadian RC Scorecard.

c. Emergency Management

The team reviewed emergency management at the Toronto and Cornwall sites. In general, site procedures and practices meet expectations.

Cornwall

As a result of the recent incident the team understood that there were cases of neighbours who were unclear about the process of shelter in place. The message should be reinforced with nearest neighbours and the company should evaluate that what is communicated is effective and understood.

The team also observed that it was not well understood how well the reverse 911 system worked for the notification of the community.

It is also important that persons at the plant with responsibility for emergency management understand how well the reverse 911 system worked for notification of the community. The same 911 system is the mechanism by which the facility is notified of an emergency in the community and exactly which telephone line(s) the call would come in on has not been reviewed lately.

These observations resulted in the following:

> There is an improvement opportunity in Cornwall to review the facility's emergency response plan relative to community knowledge of shelter in place as well as the effectiveness of the reverse 911notification system for the community and for the facility.

In consideration of the mechanics of the aforementioned incident the team would emphasize that in utilizing incident investigation methodologies it is important to always challenge assumptions and apply out-of-the-box thinking when considering emergency scenarios.

Toronto
The team encourages the Toronto facility to continue its efforts to engage with the local fire department. The team recognizes that the effort to engage first responders is appropriately and effectively guided by the company's Community Outreach standard and that the plant is required to continue this effort annually.

d. Malicious Intent
The company has excellent corporate programs guiding the facilities on managing this area. The facilities are audited on a regular basis by internal independent auditors as well as by external auditors for specific regulatory programs. The internal program is based on the ACC SVA protocol which is acceptable under CIAC guidance.

e. Critical Infrastructure/Business Continuity
The company has business specific business continuity plans which, generally, do not directly involve the facilities. The team is of the opinion that there should be a review to ensure the intent of this code area is being met.

> There is an improvement opportunity to sample the company's business continuity plans and review them relative to CIAC guidance.

f. Incident Reporting and Investigation
The company's AIM (Accident, Incident Management) system is used to report and respond to incidents. Serious events covered by this system are sent to pre-determined email lists as a FLASH report. Suggestions are entered into the SOAR (Stop Observe Act Report) suggestion/ improvement program.

2.1.4 Environmental Protection
BASF Group provides strong global direction in this area and in 2012 published its goal of reducing its global greenhouse gas emissions (in manufacturing as well as along the entire value chain) per metric ton of product sales by 40% compared with 2002 by the year 2020. Using the same base and target years BASF Group is also committed to reducing air pollutants by 70% and has shown significant reductions in ozone-depleting substances and heavy metals Responsible Care code implementation expectations have been met for this code area. Specific comments for each sub-section follow:

a. Emissions and Waste Reduction
BASF Group's ambitious goals for emission reductions generally result in a focus on facilities with the largest emissions. The Canadian facilities have very small emission footprints and don't tend to participate in these larger emission reduction projects. In order to ensure the emphasis on reduction doesn't get lost in this situation BASF Canada requires each of its facilities to have one tangible environmental improvement goal per year.

b. Handling, Treatment and Disposal of Wastes

BASF Group has a stated goal to prevent and reduce waste. If waste must be sent to external facilities then a program to vet and continually assess waste handlers is used.

The team observed that in Toronto not a lot a waste is generated but they do handle out-of-date product which gets routed through the Toronto facility.

In Cornwall a bio-ox facility is used for a portion of site generated wastes otherwise an exclusive external waste handler looks after most of the rest. In consideration of this facility the team makes the following suggestion:

> There is an improvement opportunity to assess Cornwall's on-site Biological Effluent Treatment facility (clarifier, pond liner, aerators, pumps and associated equipment) with a view to determining whether further proactive management and preventive maintenance measures are warranted.

2.1.5 Resource Conservation

BASF Group has a very strong (and public) corporate sustainability direction which includes goals for resource conservation. Specifically identified are the efficient use of energy and raw materials, replacing fossil fuel based raw materials with those derived from renewable sources, water conservation and understanding and managing the company's carbon footprint.

2.1.6 Promotion of Responsible Care by Name

BASF Canada takes many opportunities to promote Responsible Care by name, including in their Canadian internet presence, and in various external documents and presentations.

Nevertheless, as a current CIAC focus area an opportunity related to the overall management of this topic is presented in the Management System section of this report.

2.2 Team Observations Concerning Stewardship Code

The company in many cases exceeds Responsible Care code implementation expectations for this code area. Examples of going the extra mile are given in the sub-sections below.

The one finding in this report occurs in this area and is described in full in Section 2.2.2 (Expectations with Respect to Other Parties).

The team acknowledges the contribution by the company in the development of CIAC's Stewardship Guide.

2.2.1 Expectations of Companies

The company has sophisticated processes to guide and manage:

- research and development,
- sustainability aspects related to raw materials and products and
- stewardship activities throughout the value chain

and meets Responsible Care code implementation expectations for this area. Specific observations and comments are given below:

a. Research and Development (R&D) Expectations (85-92)

The company uses a comprehensive Phase Gate process to initiate, manage and eventually pass on research projects to manufacturing.

A sustainability check tool is part of Gate 2 reviews of projects and provides a consistent sustainability context. Initially developed in North America, this tool has now been deployed globally.

The team is of the opinion that the company exceeds implementation expectations for these Responsible Care codes.

b. Expectations Beyond R&D (93-114)

a. Raw materials, Products and Services Characterization and Evaluation (93-99)

Globally the company is committed to the stewardship of raw materials and products as demonstrated by:

- The performing of risk evaluations on all of its products (with sales of greater than one metric ton per year) by 2020 (have currently achieved 45% of that target).
- Determining that none of BASF Group's raw materials can be characterized as being 'conflict minerals', that is, sourced from the Democratic Republic of Congo or its neighbouring countries.
- Being actively involved in research leading to replacing fossil fuel based raw materials with those sourced from renewable resources (notably by researching paths for producing industrial sugar from wood based biomass). Currently about 3% of purchased raw materials are from renewable resources.
- Determining that 2% of its production sites (excluding oil and gas sites) are located next to internationally recognized wetlands (Ramsar Sites) and that none are located next to UNESCO protected areas (with no impact on biodiversity being observed from the mentioned sites).

BASF Canada seeks to include critical aspects of environmental, health and safety management into its contracts with its appropriate 3rd party providers such as tollers and warehouses. Beginning in 2013, it will seek to include the following clause in its new or amended toller contracts in Canada as part of the BASF Canada contract negotiation and approval process: *BASF is committed to Responsible Care and expects its tollers to make similar commitments to continuously improve their sustainability performance'*

In North America the company has an excellent Product Stewardship review process that formally reviews all products against an extensive criteria list. Raw materials are reviewed frequently using this process, but there is no formal process to ensure all raw materials meet the intent of these codes.

> There is an improvement opportunity to assess the completeness (relative to codes 93-98) of processes that drive periodic assessments of raw materials.

b. Promotion of Responsible Care by Name (100-102)

The company has demonstrated that it actively promotes Responsible Care by name. Two areas where the team observed possible opportunities are:

In the chemical value chain there are many employees who interact directly with third party service providers and the team encourages the company to recognize that these employees are excellent ambassadors for promoting Responsible Care by name.

In its Agricultural Products (AP) Division, the company uses contract research partners who conduct trials using company formulations. Those partners are university researchers who have small test plots at a handful of sites in Southern Ontario. Although such contract research partners are audited by company personnel, the company does not discuss Responsible Care by name with them.

The opportunity related to the above is presented in the Management System section of this report.

c. Security (103)

The company fully understands the aspects of this code element and meets code implementation expectations.

d. Communication through the Value Chain (104-110)

The company has a strong global initiative to provide information to customers and the public through a central database that produces safety data sheets in 30 languages. Environment, health and safety data is updated continually resulting in the latest information being available.

The MSDSs (Material Safety Data Sheets) are available on the internet at the BASF Canada home page.

Emergency information is available within North America from a central hotline.

In Toronto the team viewed extensive training facilities for coatings and foam insulation applications and were informed that foam applicators are randomly, routinely inspected to ensure they are personally protected and are applying the product correctly.

The company meets Responsible Care code implementation expectations for this code area.

e. Historical Hazardous Waste Practices (111-114)

In 2012 BASF Group began collecting data on its contaminated sites worldwide with the objective of creating a global standard for the management of the sites.

In Canada, the company is in the process of shutting down its Smiths Falls facility and has completed a Phase 1Environmental Site Investigation to identify, and if necessary remediate, contaminated areas for which it may be responsible under lease arrangements with the former owner of the facility

In Cornwall a former waste disposal site is present along the site's easterly fence line. Given the presence of this former waste site, the nearby industrial land use and the history of the Cornwall site which includes areas where old production facilities existed, the team suggests the following:

> There is an improvement opportunity to consider an assessment of the historical industrial land uses and their environmental effects on and nearby the Cornwall site.

2.2.2 Expectations with Respect to Other Parties

The company has very strong and well documented processes to ensure all aspects of this code area are implemented to meet Responsible Care code expectations. However, the team's one finding is located in this section and is described below:

The team focused on how the company verifies that other parties conduct activities in a manner conforming to Responsible Care expectations and observed the following:

- Core carriers are audited on a regular basis by a 3rd party
- Contract warehouses are audited on a regular basis by a 3rd party
- AP (agricultural) tollers and warehouses are audited as required to certify through Crop Life Canada and AWSA (Agrichemical Warehousing Standards Association) and are also audited on a regular basis by independent company auditors
- Waste management handlers are audited on a regular basis by a 3rd party
- Raw Material suppliers – 210 were audited in North America in 2012
- Toll manufacturers self-assess but are audited based on a risk trigger; exceptions are a few high hazard chemical manufacturers who are audited routinely.

Code ST116 states:

> "Ensure that parties that provide a service (i.e. warehouse, terminal, toll manufacturer or packager, contract R&D lab, carrier) to the company meet the same applicable expectations of Responsible Care as the company would if it was performing those activities itself. "

Since toll manufacturing is (in most cases) a chemical manufacturing operation that the company would, in other circumstances, carry out itself, the team believes that self-assessment by toll operators might not meet the same standard as the company would impose upon itself (all BASF manufacturing facilities in North America are audited on a 1 to 7 year cycle, based on risk, by independent company auditors).

We are of the opinion that the standard to be applied should be that independent audits conducted by manufacturing aware auditors are required on all toll operations but, based on risk, the company may decide to allow closely monitored self-assessments for certain operations.

We are aware that guidance provided by CIAC does not specify that tollers are required to be audited but it has been observed that best practice in the industry has been to ensure a physical, independent audit of tolling operations occur on a regular basis.

We also observe that the company has almost universally implemented independent audit processes for contracted companies. We believe in the spirit of Responsible Care the company will be guided by the above observations and by comparing itself to its CIAC peers:

> There is a finding requiring action for the company to benchmark its contracted manufacturing (toll) assessment process with a sampling of its CIAC peer member companies and act in accordance with observed best practices .

With respect to the analysis of the performance of rail carriers the team noted that the company should confirm whether or not short haul rail carriers are used to carry company product and if so whether they meet the expectations the company has for Class 1 carriers. With motor carriers the company should ensure they have documented the process for how they are meeting Responsible Care expectations.

> There is an improvement opportunity to review carrier assessment processes to determine whether expectations related to short haul rail lines and 3rd party motor carrier assessments are being met.

2.3 Team Observations Concerning Accountability Code

The company has done an outstanding job in understanding the codes of practice for operating site communities that has resulted in industry leading practical guidance and specific requirements for its facilities. The company meets or exceeds Responsible Care code implementation expectations for this code.

2.3.1 Operating Site Communities

The company has developed a performance standard (ES-5416, Community Outreach) that, in this team's opinion, sets a benchmark for operating site community dialogue requirements (and, equally as important, guidance). It is clear and concise, defines responsibilities and accountabilities and is written to include all code elements specific to an operating facility and to corporate support functions. It includes a tool (Appendix 1, Community Potential Impact Rating Profiles for BASF Canada Operating Sites) that sets expectations for the level of activity for a facility and, as well, it describes what is required to meet those expectations. It includes the CIAC SCOPE (System for Community Outreach Performance Evaluation) measure and an example of a corporate-approved community brochure.

> The corporate performance standard ES5416 (Community Outreach) is a successful practice.

As an example of this process in action, at both sites visited, transparency regarding worst case scenarios was evident. Scenarios were openly communicated with neighbours through mechanisms such as one-to-one visits with neighbours, and in meetings with community members.

A recent verification theme is investigating how companies inform their immediate neighbours about shelter in place. In this verification the team determined that the company delivers their message via:

- neighbourhood walk-abouts
- brochures
- in Cornwall, engagement with the Cornwall Clean Air Committee, and
- plant tours

An additional approach is suggested below;

There is an improvement opportunity to consider supplying outreach information/brochures to additional community groups to keep residents informed (eg: economic development committee).

Today's connected society has mountains of information available immediately via social media, not all of which is accurate. Companies are encouraged to get on board with the latest tools and to proactively engage when the need arises. The recent incident in Cornwall was such a case and the company provided accurate and timely information countering false information and speculative 'news'. This is a rapidly changing environment and the team recognizes the inroads the company is making in utilizing social media to quickly, sensitively and accurately provide information.

The company's use of social media (particularly in the context of crisis management) is a successful practice.

With respect to code AC135 the company has protocols and procedures for shutting down and decommissioning facilities. It is currently going through the process for its Smith's Falls manufacturing facility and the team observed that the company understands its obligations relative to the code.

However, in consideration of code AC129 (relating to the proactive and responsive provision of information to the community covering a variety of topics including social impact) and code AC130 (include a regular process of communication and dialogue with the community and respond to questions, concerns, suggestions, etc.) The team recommends the following:

There is an improvement opportunity in Smith's Falls to engage community stakeholders regarding the shutdown and to provide information and respond to questions, concerns and suggestions.

2.3.2 Other Stakeholders

The codes representing this area have been implemented by various functional areas within the company. An improvement suggestion is presented in the Management System section of this report.
The team is of the opinion that code implementation expectations are being met for this area.

1. Public Policy

This area is specifically covered in the Community Outreach (ES5416) and Responsible Care Commitment (ES5410) standards. Examples of interactions with public policy makers included:

- The Cornwall site manager actively participates in the Cornwall emergency management committee.
- In Toronto the facility invites federal, provincial and municipal elected officials to all open houses. Also, the Toronto West CAER group, which the facility is a member of, routinely invites the same group of politicians to attend meetings. A representative from the Toronto Economic Development group is now a member of the CAER group and provides a link to Toronto council.

- CIAC arranged parliamentary days are attended by the company President, corporate Communications Manager and the Responsible Care Coordinator.

2. Finance

BASF Group's vision for sustainability rests upon the three typical pillars of economy, ecology and society. Its direction in this code area adequately covers code implementation expectations.
As well, the Canadian CEO takes every opportunity to talk about sustainability and promote Responsible Care when he talks with or makes presentations to various financial institutions.

3. Consumers

In Canada the company does not have a direct retail consumer presence but it does sell directly into end use application. Examples are automotive aftermarket paint applications, residential urethane foam insulation applications and agricultural pesticide applications. In these cases the company works closely with the applicators, and with paint and foam have a training facility in Toronto where the field technicians are trained. Technical support is available for all areas mentioned.

4. Transportation Corridor

The BASF Canada transportation safety group actively participates in the regional TransCAER committee.

The company took the opportunity to bring its US based mobile railcar training facility ("Mr. T" – a rolling tank car classroom equipped with an assortment of railcar equipment and GPS security technology) to Cornwall as part of the facilities open house event in 2011. Members of the company's Transportation Safety group attended to provide tours.

5. General Public

The company has an email form and phone contact information page easily available from its Canadian home page. A protocol/procedure is in place to handle questions should they arrive at a site location.
The home page also prominently features the Responsible Care logo.

6. Non-governmental Organizations

The Cornwall site manager actively participates on the Clean Air Cornwall committee which provides another vehicle for staying aware of community concerns and to share information about site operations and issues. This group includes community members with environmental interests as well as business leaders.

General information about current and trending opinion is available by participation in the sustainability community (e.g.: Vancouver GLOBE 2012, The Sustainability Consortium, Sustainable Brands conference, Toronto Sustainability Speakers Series (TSSS), etc.)

7. Business

The team has no specific information about this area.

3. Team Observations on the Company Management System

The verification team studied BASF Canada's 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 company has a documented (ES5410, Responsible Care Commitment), self-healing management system 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 system is implemented by the Canadian Responsible Care Coordinator and the Responsible Care Steering Committee (RCSC). The Coordinator and the RCSC are accountable to the Canadian Executive Committee chaired by the Canadian CEO. The RCSC is comprised of Program Champions, individuals whose day-to-day responsibility it is to manage the functional areas covered by the codes of practice. A cross reference between the codes of practice and internal programs defines individual responsibilities for ensuring code requirements are being met.

The recently acquired Becker Underwood site in Saskatoon, SK is not part of BASF Canada but has governance in Canada. The team understands that BASF Canada plans to include this newly acquired facility under its Responsible Care commitment.

> The integration of the Becker Underwood acquisition into BASF Canada's commitment is a work in progress.

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 BASF Canada's management system, the verification team observed the following:

The company has many processes at most levels of the organization resulting in effective goal setting and continual improvement and fully meets implementation expectations for this aspect of the management system.

Some code areas typically provide challenges for implementation and continual improvement. With the objective of optimizing resources and pushing the Responsible Care envelope the RCSC could consider providing guidance and direction (and management, if appropriate) for such areas and other leveraging opportunities. Three such areas are:

- Promotion of Responsible Care by name (eight specific code areas) e.g.
  - With A.P. external research partners
  - On the Canadian web site (including updating the site to reflect the new codes of practice
  - In the indoctrination process for manufacturing site contractors
  - By employees involved with external stakeholders (recognizing that employees are excellent ambassadors for Responsible Care)
- The Accountability Code area of "Other Stakeholders".

- As a champion for site projects where corporate leveraging might influence results (as was the case in Cornwall where employees did not meet with success in attempting to promote reuse of super sacs with the sac's supplier)

Additional benefits to this approach are to focus company efforts in achieving CIAC objectives and an overall improved ability to report progress to leadership groups and verification teams.

There is an improvement opportunity for the RCSC to provide guidance and direction (and, if appropriate, management) of certain code areas and leveraging opportunities (e.g. Promotion of Responsible Care by Name amongst others).

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 BASF Canada's management system, the verification team observed that the company has excellent structures and appropriate processes to ensure all aspects mentioned above have been implemented to meet expectations.

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 BASF Canada's management system, the verification team observed the following:

The company has excellent processes to measure and monitor performance against goals, in particular its Responsible Care scorecard keeps track quarterly of programs put in place to meet company commitments. Similarly, environmental, health and safety performance is monitored using a monthly scorecard.

Audits and less formal reviews are conducted on a regular basis and cover all aspects of company operation. Internal audits are conducted by independent company personnel while contracted service providers are normally audited by 3rd party assessors.

All facilities and virtually all contracted facilities and services are independently audited with the one exception being toll operators. A finding was presented earlier in this report related to this observation.

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 BASF Canada's management system, the verification team observed the following:

The company has sound accident and incident recording and investigation systems including root cause analysis. Action items are tracked through to completion with validation of the corrective action taken in some instances.

Targets, goals and plans are monitored frequently and adjustments are made when deemed necessary.

The Responsible Care Scorecard is reviewed quarterly, an annual review is conducted by the Responsible Care Steering Committee and an annual review of the management system is held with the sites and businesses. These events all lead into the annual attestation/recommitment by the CEO.

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 BASF Canada's 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 company's strong active focus and position on sustainability is a successful practice.

Observations on each of the eight principles for sustainability are given below:

Work for the improvement of people's lives and the environment, while striving to do no harm;

- Specific reference to this commitment on its Canadian Sustainability page
- Very strong corporate direction - "We Create Chemistry for a Sustainable Future", two examples of which are:
  - Insulating Concrete Form (ICF) blocks made with company expanded polystyrene foam (EPS) allowing for improved insulation from a thinner foundation wall thickness thus saving materials and energy. (Neopor® EPS))
  - Reducing malaria through the use of company manufactured insecticide treated mosquito netting. (Interceptor® nets treated with Fendona® insecticide)

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;

- Implementation of the corporate Community Outreach (ES-5416) standard.
- Use of social media including Facebook, Twitter, YouTube, Linkedin, Flickr and SlideShare.

Take preventative action to protect health and the environment;

- Corporate goal of becoming <u>the</u> industry leader in EHS practices
- Corporate goal by 2020 to decrease absolute emissions of air pollutants by 70% based on 2002 amounts.

Innovate for safer products and processes that conserve resources and provide enhanced value;

- In 2012 3% of world-wide raw material purchases were from renewable resources
- Research is underway for producing industrial sugar from wood based biomass

Engage with our business partners to ensure the stewardship and security of our products, services and raw materials throughout their life-cycles;

- In addition to economic criteria suppliers are selected and evaluated on environmental, social and corporate governance criteria.
- 210 audits were conducted of suppliers in 2012. Six contracts were terminated for failure to comply.
- Corporate worldwide goal to reduce transportation incidents by 70% based on 2003 rates.

- Use internal and external auditors to assess approximately 500 logistics service providers worldwide in 2012.

Understand and meet expectations for social responsibility;

- Local facilities donate to community projects, e.g. United Way
- Implementation of Kids' Lab program to promote science education in site communities.
- Contacted community leaders in Alberta to offer support in recent flooding natural disaster and provided financial support to Red Cross relief.

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;

- Long list of participation with sustainability groups and a growing list of awards recognizing the company's efforts:
    - Corporate Knights' Global 100 list of most sustainable corporations
    - Disclosure Project's Carbon Disclosure Leadership Index.
    - Dow Jones Sustainability Index (12th consecutive year)
    - BLOOM Sustainability, one of three finalists for sustainability leadership in Canada.

Promote awareness of Responsible Care, and inspire others to commit to these principles.

- BASF Canada web site
- Third party contracts
- CEO interactions

5 Verification Team Conclusions

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 Finding Requiring Action identified during the verification.

The verification is complete and no further involvement is required by the verification team.

Company Response to Verification Team Report

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

We want to sincerely thank the re-verification team for providing us with the external perspective necessary to critically review our processes, and specially, for their insightful analysis and proposals, on which we agree. As a proud member of Responsible Care since its inception, BASF Canada and its human team welcome all opportunities to demonstrate their deep commitment to continuous, sustainable improvement.

BASF 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.

Carles Navarro
President
BASF Canada Inc.
Dec 17, 2013

Interview Lists

A: Company Personnel Contacted During Verification Process

Name	Position	Location
Carles Navarro	President, BASF Canada Inc.	Mississauga
Peter Hasfeld	Director of Finance and Business Services	Mississauga
Dan Steinmetz	EHS Product Stewardship Manager	Wyandotte, MI
Kent Jennings	Toxicology and Biotechnology Manager	Mississauga
Barry Nicholas	Site Manager	Toronto
Greg Gardin	Polyurethane Lab Manager	Toronto
Grant Edwards	Regional Logistics Manager	Florham Park, NJ
Richard Hundertmark	Manager, Procurement Governance	Florham Park, NJ
Sean Cammaert	Toll Manufacturing and New Product Development Leader, AP	Mississauga
Sue Carter	Responsible Care Coordinator	Mississauga
Dan Miller	EHS CoE Director	Florham Park, NJ
David Peters	EHS Senior Specialist II	Mississauga
Dean Clevett	Manager Technical Engineering Services	Windsor
Chris Zawistowicz	EHS Hub Manager	Wyandotte, MI
Oleta Larush	Communications Manager	Mississauga
Christine Mariotti	Plant Manager	Smiths Falls
Greg Elkins	Logistics and Procurement Manager	Mississauga
Tom McGourty	Manager Distribution Safety/Security	Florham Park, NJ
Esther Lawrence	Senior Transportation Support Specialist	Mississauga
Bob Hewett	Regional Manager Security	Florham Park, NJ
Diana Rourke	Site Manager	Cornwall
Jason Veinot	Operations Manager	Cornwall
Donna McCallum	Site Coordinator	Cornwall
Don Larin	Instrument and Electrical Supervisor	Cornwall
Victor Guay	Operations Coordinator	Cornwall
Fraser Cross	EHS Specialist III	Cornwall
Frances Obrien	Lab Coordinator	Cornwall
David White	EHS Emergency Response Manager	Florham Park, NJ
Wayne Barton	Manager Research and Commercial Development, AP	Mississauga
Drew Thompson	Field Biologist, AP	Maryhill
Ruby Joseph	JH&SC member	Toronto
Henry Medwinter	JH&SC member	Toronto
Mike Cater	JH&SC member	Toronto
Scott McNaughton	JH&SC member	Cornwall
Conrad Leger	JH&SC member	Cornwall

B: External Stakeholders Contacted During Verification Process

Name	Company/Organization	Postion	Location
10 members	Cornwall Clean Air Committee		Cornwall

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