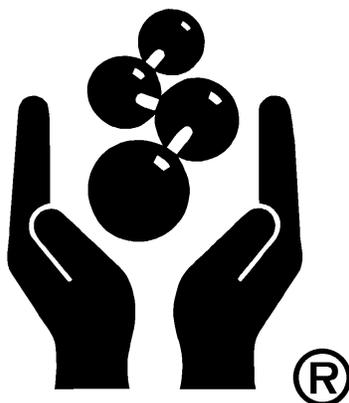


# Canadian Chemical Producers' Association



## Responsible Care® Re-verification 2005-08

of

## BASF Canada Inc. (“BASF Canada”)

(October 2 - 4, 2007)

### DISCLAIMER

This document has been produced by a team convened by the Canadian Chemical Producers' Association (CCPA) to provide guidance to the above company, as a member or partner of the association, in meeting its obligations under Responsible Care. The material in it reflects the team's best judgement in light of the information available to it at the time of preparation. It is the responsibility of the CCPA member or partner company which is the subject of this report to interpret and act on the findings and recommendations in this guidance document 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 CCPA members and partners are expected to share the results of this guidance document with interested parties, the association, its member and partner companies, their employees, consultants and other participants involved in preparing the document accept no responsibility whatsoever for damages, if any, suffered by a third party as a result of decisions made or actions based on this report.

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## **Responsible Care Re-verification: BASF Canada.**

### **EXECUTIVE SUMMARY AND TEAM CONCLUSIONS**

A Responsible Care re-verification for BASF was carried out on September 20, 2007 in Cornwall, Ontario by one member of the Canadian Chemical Producers' Association (CCPA) appointed team, on October 2 & 3, 2007 in Toronto and Mississauga the three-member CCPA appointed team and on October 4, 2007 in Windsor by two members of the CCPA Team, augmented by a local community representative in the communities visited.

In addition to the manufacturing and distribution sites a retail site in Mississauga, associated with the company's Automotive Refinishing Technologies (ART) section, was also visited. As well, a phone interview was conducted with employees located at the company's Blackie AB site. The re-verification included interviews with a cross section of managerial, office, maintenance and production employees and reviews of documents relating to the various topics being addressed.

The Canadian Chemical Producers' Association's "Responsible Care Re-Verification 2005-2008 A Protocol to Help Us Improve" document was used for this re-verification.

The decision-making and actions of BASF are clearly underpinned by the Responsible Care ethic. The company's overall management system is self-healing, seeking to continuously improve, to identify deficiencies and will likely act to correct them in a timely manner.

The re-verification team is satisfied with the approach used by the company to apply and meet the requirements of the Responsible Care ethic and management system. The re-verification process of BASF is now complete with the publication of this report.

### **Summary of Findings, Opportunities for Improvement, Best Practices and Extra Miles**

This section of the report lists all **Findings Requiring Action (FRA)**, *Opportunities For Improvement (OFI)*, Best Practices (BP) and Extra Miles found in the body of the text. In all, the team recorded 8 findings, 21 opportunities and discovered 4 best practices during our visits.

Progress on action to resolve the Findings Requiring Action will require follow-up at each Leadership Group Meeting, with the local community dialogue process, in the company's annual CEO re-commitment to CCPA, and in the next Responsible Care re-verification (where the next re-verification team will expect to see decisions pertaining to resolution of the Opportunities For Improvement). The wording of each Finding Requiring Action, Opportunity and other comments found in this Executive Summary is identical to the wording used in the body of the report to avoid any possible misunderstanding of the team's intent.

## Findings Requiring Action

- 1). It is a finding requiring action that the Crop Protection Division operations are not included in the corporate Environment, Health and Safety (EH&S) audit process.
- 2). It is a finding requiring action to do quantitative risk assessment, including worst case scenarios, for the Automotive Refinishing Technology (ART) facilities in order to define the geographic scope of impact and, if necessary, to expand the communication program to accommodate this geographic scope.
- 3). It is a finding requiring action that the company does not have a process to assess and evaluate suppliers of chemical goods from a Responsible Care perspective.
- 4). It is a finding requiring action that not all items from the security vulnerability assessments (SVA) have been completed.
- 5). It is a finding requiring action at Windsor that a documented schedule for emergency response plan testing is not in use.
- 6). It is a finding requiring action that BASF Canada does not have “flow-down” emission and waste reduction targets.
- 7). It is a finding requiring action that the Cornwall site safety work order process is not responsive to employees submitting safety suggestions and work orders.
- 8). It is a finding requiring action at some second party warehouses and tollers that a community dialogue and risk communication program is not in place. Either the second party or BASF can implement the program.

## Opportunities For Improvement

- 1). *An opportunity for improvement exists to examine, on an on-going basis, that the intent of all code of practice elements are being met by the recorded response in the Responsible Care management database.*
- 2). *There is an opportunity for improvement for the Responsible Care Steering Committee (RCSC) to broaden its mandate to include the review and analysis of the suite of Responsible Care related performance measures in order to focus on those which best satisfy the ethic of Responsible Care.*
- 3). *There is an opportunity for improvement to modify the current management of change (MOC) process to include appropriate review when a process hazard analysis (PHA) trigger criteria has been met.*

- 4). *There is an opportunity for improvement for the company to follow through on its stated intention at the Windsor site to resurrect the CAER group in the area.*
- 5). *There is an opportunity for improvement in Windsor to provide guidance on criteria for use, coverage, responsibilities, authorities, limits etc. for the dislocation policy. This is a useful exercise for community related emergency response as well as transportation emergency response.*
- 6). *There is an opportunity for improvement for the company to follow through on its stated intention to conduct an energy audit at Blackie in late 2007.*
- 7). *There is an opportunity for improvement for the Responsible Care Steering Committee (RCSC) to develop an oversight role in the development and monitoring of environmental emission and waste reduction targets.*
- 8). *There is an opportunity for improvement to move forward from 1993 as the base reporting year in all trend charts.*
- 9). *There is an opportunity for improvement to examine the use of heat recapture technology and/or air composting to reduce heat loss from air emission treatment at sites where this is economically and technically practical.*
- 10). *There is an opportunity for improvement for the executive contact to sign the posted Responsible Care ethic statement.*
- 11). *There is an opportunity for improvement to update the Ecology and Safety Policy to include the Responsible Care ethic statement instead of the old Guiding Principles.*
- 12). *There is an opportunity for improvement to add a reference to Responsible Care in employee brochures where this is not done already*
- 13). *There is an opportunity for improvement to post the Responsible Care Commitment statement at the Toronto facility*
- 14). *There is an opportunity for improvement at Windsor to post an up-to-date signed EH&S policy, Responsible Care Commitment statement, and Responsible Care Ethic statement.*
- 15). *There is an opportunity for improvement at Windsor to include Responsible Care as a regular agenda item for Joint Health and Safety Committee (JH&SC) meetings and minutes.*
- 16). *There is an opportunity for improvement at the Cornwall site to implement a policy to ensure proper drum vents are utilized through out the site.*
- 17). *There is an opportunity for improvement at Cornwall to improve the management system that ensures Material Safety Data Sheet (MSDS) copies are current.*
- 18). *There is an opportunity for improvement to develop a separate value added statement related to social responsibility for Canadian operations*

19). *There is an opportunity for improvement for the company to follow through on its stated intention at the Windsor site to add to its outreach activities by involvement in the local neighbourhood watch program.*

20). *There is an opportunity for improvement to implement a process to check that people do know what to do in an emergency as part of the process to periodically visit with site neighbours.*

21). *There is an opportunity for improvement to have regular contact with commercial and industrial neighbours on risk and what to do in an emergency (and in particular to ensure TransportAction has been communicated with).*

## **Best Practices/Extra Miles**

1). The Responsible Care Scorecard, because of its immediate impact in understanding the current overall (and local) Canadian Responsible Care status is a best practice.

2). BASF's leadership in bringing ag-product container recycling to the marketplace is a best practice.

3). Hourly employee involvement in selecting and leading safety meetings are an industry best practice.

4). The company's Risk Based Distribution Management program is a best practice

The team recommends that CCPA officially recognize this re-verification with an award at the next suitable occasion.

Signed: **Gerry Whitcombe**  
Team Leader

Date: March 30, 2008

For more information on this or a previous re-verification or on the company's original report for verification of Responsible Care-in-Place, please contact your local company site or the company's overall Responsible Care coordinator:

**RC Coordinator: David Peters**  
**phone: 289-360-6072**  
**e-mail: david.peters@basf.com**

## 1) INTRODUCTION AND OVERVIEW

### 1a) *The Company*

This is the report by the verification team on those operations of BASF Canada which are covered by the company's commitment to the Responsible Care initiative of the Canadian Chemical Producers' Association. A description of the company in Canada and which operations are covered by this report can be found in Appendix 1.

### 1b) *Responsible Care*

Responsible Care is an initiative of the Canadian Chemical Producers' Association (CCPA) by which the association's members and partners commit to be, and to be seen as, responsible companies within Canadian society. It is based on an ethical approach to the safe and environmentally sound management of chemicals – an approach which started in Canada but has since spread to over 45 countries around the world.

#### ***The Responsible Care Ethic:***

*We are committed to do the right thing and be seen to do the right thing.  
We are guided towards environmental, societal, and economic sustainability by the following principles:*

- *We are stewards of our products and services during their life cycles in order to protect people and the environment.*
- *We are accountable to the public, who have the right to understand the risks and benefits of what we do and to have their input heard.*
- *We respect all people.*
- *We work together to improve continuously.*
- *We work for effective laws and standards, and will meet or exceed them in letter and spirit.*
- *We inspire others to commit themselves to the principles of Responsible Care.*

The ethic is supported in Canada by six codes of practice covering relations with the communities where members' facilities are located and also responsible management throughout the product life cycle. Information on these codes of practice and related activities is available from company personnel listed in Appendix 2 of this report, or via the CCPA web site [www.ccpa.ca](http://www.ccpa.ca) (click on the "Who we are" tab for Responsible Care).

### **1c) Expectations of CCPA members and partners**

Each CCPA member or partner company must formally commit to the ethic, principles and codes of practice of Responsible Care as a condition of membership in the association.

Progress in implementing these obligations must then be reported to CCPA, both to peers at special networking meetings and also via a formal reporting system to the association. Three years is the typical time allowed to new members for implementation. The association monitors progress and follows up by arranging for assistance where necessary to ensure that each company eventually meets its commitment.

When a company considers that its management processes are sufficiently comprehensive that they meet each of the 151 individual code requirements, it advises the association that implementation is complete to the stage of “Responsible Care-in-Place”. Completion in this sense does not imply that nothing further needs to be done, but that a key milestone has been reached in a process of continuous improvement.

### **1d) Verification**

A company's declaration that the expectations of Responsible Care are being met is an important first step in the verification process, which leads to confirmation and recognition of this by a team of industry and public representatives. Verification is conducted to strict protocols, developed by the association's members and others including several critics of the chemical industry and its operations. The first verification takes place when the company first states that its performance meets the expected level (*Responsible Care-in-Place*). This verification is designed to confirm, for the company's peers in CCPA and the public, the existence of a company wide ethic and management systems which ensure that the principles and codes of practice of Responsible Care are not only in place but are also practised and continuously improved within the organization.

Subsequent verifications are also conducted using a different protocol, approximately every three years after formal acceptance of the first verification, to ensure that the ethic and management systems of Responsible Care are firmly rooted in all the company's operations. This is known as *ongoing re-verification*.

Each 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 CCPA's national advisory panel) and
- one or more representatives of the local communities where the company's facilities are located.

### **1d) i) Verification of Responsible Care-in-Place**

For the purposes of this examination, a portion of the 151 code requirements is sampled in depth. These items are grouped into seventeen management systems, each of which is examined using a series of questions. Some of the questions are sent to the company in advance of the verification visit, so that supporting documentation, etc. can be available for prompt examination if desired. Additional questions are asked at the discretion of the team during the visit.

The approach is “top-down” rather than the “bottom-up” used in conventional audits, and the style of questions is intentionally open-ended, so that the answer cannot be a simple yes/no but calls for explanation. The questioning process starts with the executive responsible for chemical operations in Canada, and works down through the organization to examine the senior level intent and the corresponding support by action at the operating level.

Questions are generally of the following nature:

- does the organization have an effective management system in place to ensure understanding of Responsible Care?
- what is the process to determine and communicate the acceptable level of performance?
- what is the process for assessing the performance of the system and effecting follow-up to meet or exceed the acceptable level of performance?
- what is the process for ensuring up-to-date documentation?
- do sufficient resources appear to be, or are thought by employees to be, in place?

The findings are summarized in a report which highlights:

- actions required by the team before they consider the company meets the expectations of Responsible Care;
- opportunities for improvement, which are recommended but not mandatory;
- recognition of any exemplary practices of the company which could be a model for other CCPA members.

The report is given to the company and CCPA, and the company is expected to share the report with interested persons in its communities as part of its dialogue process. If the team considers that actions are required before sign-off, they will arrange for follow-up to confirm that these are complete, and advise the company and CCPA in writing when these have been met to their satisfaction.

#### **Responsible Care-in-Place verification** of BASF Canada

Company Name at the time: BASF Canada Inc. (“BASF Canada”)

Date of “In-Place” verification (visit): May 29-31, 1995

Locations visited: Toronto, Brantford

Team follow-up needed: No

Date of final sign-off: July 1995

This Responsible Care-in-Place verification report is available from the contact at the company from whom you accessed this report, or from the company contact shown on page 5 of this re-verification report.

## **1d) ii) Re-verification**

Approximately every three years after team acceptance of Responsible Care-in-Place, the CCPA schedules further verifications using a modified approach. The team is similar to that for the original verification, with at least one team member from the previous verification but a different leader.

This is the third re-verification of BASF, the first being conducted in 1999.

Previous Responsible Care re-verification of BASF Canada:

Date of re-verification visit: May 10-14, 2004

Locations visited: Toronto, Cornwall, Windsor

Locations contacted by phone: Abbotsford, B.C., Blackie, AB., Georgetown, ON.

Team follow up needed: No

Date of final sign-off: August 30, 2004.

In re-verification the team probes more deeply to examine how well the ethical basis of Responsible Care is understood and adopted within the company, and also how effective are the company's management systems in applying the ethical principles throughout the company's operations. This involves not only whether the company intends to do the right things, but also how it monitors activities and results and takes corrective action when deviations occur (often referred to as the Plan-Do-Check-Act parts of the management system).

For re-verification the company is given a more comprehensive list of documentation the team will need to see. Part of this must be sent to the team so they can study it in advance. The questioning process is also more open, in that the team does not have to cover every topic in depth but can probe where they feel it is most relevant for that individual company, plus any areas where the company itself would like feedback on its performance.

After studying the information the team meets with the company to plan the visit stage of the verification, at which a schedule is agreed covering people the team wishes to interview in depth during the subsequent visit stage of the verification process. Most of these will be company personnel, but some will be representatives of organizations with which the company has business relationships – customers, transporters, etc. – and of local communities where plants, etc. are located.

The team examines to determine how strongly the Responsible Care ethic appears to be part of the company's way of doing business, including awareness of Responsible Care and its implications among the company's employees. The examination then progresses into a broad-ranging review of the company's management systems for Responsible Care, with a special investigation into certain topics highlighted by CCPA in the verification protocol.

The team looks at how effectively the company's management systems ensure that Responsible Care principles and code obligations continue to be met, as established in the initial Responsible Care-in-place verification. In subsequent verifications, however, the questioning process also considers how the company tracks and improves its performance regarding these obligations, including how performance measures are established and targets met (what is measured, what are the goals and how are they achieved). Actions taken on concerns, suggestions and recommendations raised in the last verification report are examined, as are significant issues and incidents that have arisen since the previous verification. The team then looks at how the company shared the results of this verification with the local community, and examines how robust the ongoing process of community dialogue appears to be and how issues and concerns are being identified and addressed.

The highlighted topics of special focus are ones where the feedback from the verification process and from the association's members has suggested the value of a closer examination of the general membership performance and comparison with the intent of the codes of practice. This does not necessarily imply that any given company is not performing well, but reveals the range of performance and identifies both cases where some improvement is recommended and also examples from which others can learn.

The highlighted topics include community dialogue, process safety management, site emergency preparedness and response, security regarding malicious threats that could impact public safety or well-being, health effects of products and plant emissions, product stewardship and "TransCAER" outreach. Also examined are emissions of greenhouse gases, and how companies with emissions of volatile organic compounds are meeting the intent of a CCPA agreement on this topic with the federal and provincial governments and environmental groups. Although CCPA has no defined performance expectations for broader social responsibility, the team also looks at how the company sees and fulfills its role in this area. The team may also comment on other specific topics where the company has requested feedback.

The report below presents the findings of the team from this re-verification of BASF Canada. The report does not address all aspects of Responsible Care, as this was covered by the report of the original Responsible Care-in-Place verification. Instead, it focuses more on the items where the team felt there was an opportunity or need for improvement, plus any improvements or practices which are so significant that they should be shared with other CCPA members and partners as possible examples.

For more context or explanation of any of the items below, please get in touch with the contact at the company from whom you accessed this report.

In the following sections of this report, **findings requiring action are shown in bold face**. *Opportunities for improvement (recommended but not considered mandatory) are shown in italics*, while "extra miles" and best practices are shown underlined.

## 2. General Findings of the Team

### 2a) Statement on the Ethic

Throughout the interview process the team checked for evidence that the Responsible Care ethic was visible and at work in the company, guiding the company's judgment, decisions and actions.

#### Team Findings

The team found that the ethic is well understood and does indeed guide actions and decisions of most people. There have been many improvements noted since the last re-verification and a very strong Canadian management positioning of the ethic has been put in place. Robin Rotenberg, the President of BASF Canada and the Executive Contact to the CCPA has established an environment where Canadian managers are increasingly exercising appropriate autonomy within an integrated, matrix style corporate structure. The overall effort and in particular, that of the Responsible Care Steering Committee, to develop sustainable Canadian Responsible Care solutions was very evident.

### 2b) Employee Awareness

#### Team Findings:

Please refer to section 3e) on page 19.

### 2c) Overall Responsible Care Management System

It is a requirement of Responsible Care that companies have documented, sound management systems capable of ensuring that all operations of the company across all business units, functions and sites meet the ethic, codes of practice and other expectations of Responsible Care on an ongoing basis. A sound management system drives continuous improvement, and has the following attributes:

Plan	Do
<ul style="list-style-type: none"><li>● review code requirements</li><li>● benchmark best practices</li><li>● get input from stakeholders</li><li>● decide on best approach</li><li>● set targets for performance</li><li>● assign responsibility</li></ul>	<ul style="list-style-type: none"><li>● document</li><li>● train people</li><li>● assign resources</li><li>● carry out activities</li></ul>

Check	Act
<ul style="list-style-type: none"> <li>● audit</li> <li>● measure performance of system</li> <li>● measure performance from system</li> <li>● obtain stakeholders' feedback</li> <li>● assess employees' performance</li> </ul>	<ul style="list-style-type: none"> <li>● follow-up on audit findings</li> <li>● communicate performance, get feedback</li> <li>● reward or correct employees</li> <li>● repeat Plan steps</li> </ul>

There must be such management systems both for the overall management of the company and for each code element. This section covers the team's findings with respect to this overall management system, and section 3 below covers the specific code elements that were reviewed in the re-verification.

### Team Findings

There is a comprehensive and competent Responsible Care Management System (RCMS) in place at the company. It results from the implementation of global company initiatives and strong Canadian management with some excellent follow up to the last re-verification. Since that time, the parent company has implemented (in North America) the American Chemistry Council's (ACC) Responsible Care Management System (ACC-RCMS) and they have recognized and strongly supported the Canadian Responsible Care initiative. During this same period, BASF Canada has put in place a strong management structure including top level teams to ensure all branches of the organization are complying and a supporting team to manage daily (and annual) Responsible Care necessities.

The ACC-RCMS has brought systems standardization to all parts of the company and recognition of the requirement to comply with Canadian Responsible Care has established a clear direction for Canadian Management. The current upper level organization structure consists of a President and reporting to her, the Canadian Executive Committee (CEC), the Canadian Business Team (CBT) and the Direct Reports Team (DRT).

Reporting directly to the CEC (and to the President upon request) the Responsible Care Steering Committee (RCSC) consists of the Responsible Care Overall Coordinator and all Code Coordinators. Their mandate is to ensure all 151 code elements are fully integrated into the BASF Canada culture and to annually provide recommendations to the President about attesting to the status of Responsible Care in the company to the CCPA.

A RCSC report is a routine agenda item at the CEC meetings and they also report quarterly to the CBT. In this way, all important Responsible Care issues and successes get disseminated throughout the organization and, importantly, the resources necessary for success are discussed and committed where necessary.

The RCSC has implemented a Responsible Care management database that houses all information related to the implementation and upkeep of all 151 code elements across all facilities in Canada.

Each Code coordinator is responsible to ensure that the status of all items (within their area) are updated at least once per year and this along with relevant audit data and findings and opportunities data from the last re-verification constitute the information utilized in annually analyzing the status of Responsible Care within the company. This analysis is then used to recommend to the President to sign (or not sign) the attestation required by the CCPA. The team did discover, however, that although the corporate EH&S audit process contributed heavily to an understanding of the overall level of compliance the Crop Protection Division was not a part of the process.

**1). It is a finding requiring action that the Crop Protection Division operations are not included in the corporate Environment, Health and Safety (EH&S) audit process.**

*1). An opportunity for improvement exists to examine, on an on-going basis, that the intent of all code of practice elements are being met by the recorded response in the Responsible Care management database.*

The system used by the RCSC has been simply documented by the use of an operational flow chart which, amongst other things, clearly specifies the requirement for annual review leading to attestation.

The RCSC has developed a Responsible Care Scorecard which measures the performance of all facilities opposite a suite of Responsible Care areas-of-interest and displays the results using a colour coded index. This has the effect of immediately and clearly identifying areas needing work.

**2d) Follow-up on Findings in Last Verification Report.**

The team reviewed how the company addressed the findings requiring action and opportunities for improvement cited by the previous verification team in their report to the company. Certain follow-up items are covered in the specific topics below.

**Team Findings**

The company has developed an excellent process to deal with findings and opportunities cited in the previous re-verification report. The items are generalized, added to the Responsible Care management database and assigned to all facilities who qualify. In this way each affected facility gets an individual action item which is then tracked to completion utilizing the reporting features in the database. The RCSC reviews all outstanding action items and reports to the CEC on progress. In addition, the RCSC has developed a Responsible Care Scorecard with two of the twelve component measures being findings and opportunities.

**2e Response to Incidents and Concerns since the last Verification**

Since the way in which unplanned situations are handled shows the influence of the Responsible Care ethic and responsiveness of the management system, the team looked at the issues, incidents and concerns that have arisen since the last verification and how the company has handled them. Some of these may be covered under individual topics below, as noted.

## **Team Findings**

The company's North American "Journey to EHS Excellence" initiative is based upon their "7-element Health & Safety" program. An indication of the importance the company places on incident and accident reporting and analysis is that it is one of the seven elements. A fundamental principle in the "journey to EHS Excellence" is that of a "Zero Incident Mindset (ZIM)" and a commitment to significantly reduce injuries and incidents by a target date of 2012. This has produced a very strong attitude towards reporting and analysis and the team found a well established and documented incident investigation and reporting process in place. Environment, health and safety (EH&S) related incidents are covered by Performance Standard ES-5402, security incidents are treated similarly but separately in that they must be reported to the corporate US Security Department and the response to incidents is governed by Performance Standard ES-5903.

The company utilizes an integrated approach to handling accidents and incidents. In North America, the company uses an Accident Incident Module (AIM) database to record accident or incident data. They report local as well as North America wide benefits from their system such as easier sign-off, e-mail reminders for follow up and company wide trend analysis. The latter allows for independent assessment of the quality of root cause investigation and the development and implementation of specific programs to deal with existing or emerging problem areas.

The company maintains a group of EH&S and key site and business employees trained in root cause analysis techniques.

The North American organization distributes a weekly "ECOWEEK" summary of incidents of concern whose intended audience included top North American management. Local distribution includes a cut of Canada only data. Significant incidents are shared globally through the double red arrow reports.

## **2f) Performance Measurements**

The 'check' step of a management system is the part that shows the effectiveness of the system, and a key question is: "What does the company check as its indicator of performance?" For a few items – emissions & wastes, occupational safety & health, incidents related to transportation or process operations – C.C.P.A. specifies measures for reporting under Responsible Care. Most other areas are left to the discretion of each member or partner. The team was asked to review and comment on the measures used by the company to track and improve performance. Some of these are covered under specific sections below, but general comments are given here.

## **Team Findings**

The team found a very comprehensive suite of performance measures in use by the company and they easily satisfy the intent of this important management system element. Many of the measures are set corporately but BASF Canada has implemented many of their own. Management review of measures and their trending and the ability of management to make adjustments as required was observed.

Of particular note is the Responsible Care Scorecard for manufacturing sites. It contains a suite of twelve measures relating to Canadian Responsible Care status including two related to community outreach. One of five levels of performance is assigned to each category for each facility and also colour coded to emphasize current status. Although the scorecard idea is not unique the selection of the twelve reporting areas related specifically to Responsible Care is a best practice.

- 1). The Responsible Care Scorecard, because of its immediate impact in understanding the current overall (and local) Canadian Responsible Care status is a best practice.

The team found that the RCSC did not have review of Responsible Care related performance measures in its mandate and would encourage them to get it included.

- 2). *There is an opportunity for improvement for the Responsible Care Steering Committee (RCSC) to broaden its mandate to include the review and analysis of the suite of Responsible Care related performance measures in order to focus on those which best satisfy the ethic of Responsible Care.*

### **3. Team Findings for Specific Code Management Systems**

In examining how the company is fulfilling the specific expectations of Responsible Care, the team focused first on four topic areas identified as priority items by the CCPA board of directors for the period 2005-2008. These are process safety management and the related site emergency response, product stewardship and environmental management.

#### **3a) Process Safety Management (PSM)**

The team looked at how the hazards and risks from potential episodic ('sudden') incidents are identified and controlled at the company's sites, including awareness and understanding of the methods used for assessment and the techniques for hazard control, and how these are applied and kept current. This includes how the company's sites rank based on the *Site Self-Assessment Tool* of the Chemical Institute of Canada – whether they meet criteria for the “essential” level of PSM, and how the company has assessed the value of aspects beyond the essential level

#### **Team Findings**

The company has added the requirement for each facility to define their plan to advance beyond the “Essential” level to their Responsible Care management database. Thus, this PSM requirement has become institutionalized alongside the 151 code elements and is managed in the same way. This is an excellent response to FRA #11 from the previous re-verification.

Also in response to the previous re-verification, the company has trained six employees to be able to conduct process hazard analysis (PHA) and has developed a schedule performing 12 or 13 PHAs per year covering the next eight years. The baseline PHA schedule is set by the US Risk Management Plan (RMP) or ACC Process Safety Management (PSM) requirements. The company uses a paper management of change (MOC) process in Canada and will modify it to add PHA criteria now that employees are trained to perform the analysis.

- 3). *There is an opportunity for improvement to modify the current management of change (MOC) process to include appropriate review when a process hazard analysis (PHA) trigger criteria has been met.*

Worst Case Scenarios (WCS) were redone for all facilities using PHAST except for Abbotsford and Georgetown where a dust explosion scenario could not be modeled using PHAST. They have not been done for the ART facilities.

- 2). **It is a finding requiring action to do quantitative risk assessment, including worst case scenarios, for the Automotive Refinishing Technology (ART) facilities in order to define the geographic scope of impact and, if necessary, to expand the communication program to accommodate this geographic scope.**

### **3b) Product Stewardship**

For this aspect of Responsible Care, the team examined the company's processes for:

- assessing the exposures of people to its products over their life cycles, assessing the potential health implications of these exposures, communicating information to those potentially affected and taking action to prevent health impacts;
- ensuring that their products are not used by terrorists, the illegal drug industry or others who might use them for illegal purposes; and
- ensuring that suppliers of chemicals are meeting the intent of Responsible Care.

### **Team Findings**

The company has built many processes to ensure that the risks associated with their products are understood by their customers and other second parties. Customers are required to provide self assessments for high and medium hazard products. High and some medium risk customers receive EH&S and sales evaluations and product training seminars (e.g. Toluene Diisocyanate (TDI) and Diphenylmethane Diisocyanate (MDI) customers receive Safe Handling of Isocyanates Training). Similarly, distributors undergo self assessments and audits; toll operators undergo 3<sup>rd</sup> party and BASF EH&S audits; suppliers do self assessments; carriers and storage facility operators undergo 3<sup>rd</sup> party audits (QRC or Crop Life) and waste contractors undergo BASF EH&S audits.

The company's Crop Protection Division has made a decision to support (in a rather large way) involvement in their trade association, The Crop Life Institute. Through the implementation of the many programs associated with the Institutes's **stewardshipfirst™** initiative the company has shown leadership in Canada in managing their products throughout their life-cycle. These programs, listed below, set standards for members that place Canada in the lead with respect to care and handling of agricultural chemicals.

- Manufacturing Code
- Warehousing Standards
- Marketing Standards
- Certified Crop Science Consultant
- Grower Safety
- Research and Development
- Responsible Use and Integrated Pest Management
- Material Safety Data Sheets
- Container Management
- Collection and Disposal of Obsolete Pesticides
- Behind The Farm Gate

The company has been active on most Crop Life Institute committees but notable helped shape the Container Management committee and was the first company to include a reminder to growers on its package labels to recycle the package through the Crop Life Institute's Container Management program. Roughly 70% of all containers are recycled in Canada, the highest percentage in the world.

2). BASF's leadership in bringing ag-product container recycling to the marketplace is a best practice.

The commitment to Product Stewardship was recently demonstrated by participation in a multi-stakeholder, Ontario MOE sponsored initiative to improve knowledge of isocyanate emissions from surface coating operations. BASF and others contributed their refinish coating training facilities to conduct the experiments and they participated in the experimental design and the analysis of results. As a result of the initiative the MOE has more accurate isocyanate emission factors, customers have a better understanding of the requirements they must meet to obtain a permit and subsequently the public will be better protected.

The company demonstrated, through the use of their SAP order system and transportation procedures, how they ensure that all product shipments are destined for legitimate customers.

The company's Procurement group has an approval process for chemical suppliers but it does not involve self assessment but rather the level of risk associated with the country of origin of the chemical. There is no plan to include a performance based assessment commensurate with the hazard of the chemical.

- 3). **It is a finding requiring action that the company does not have a process to assess and evaluate suppliers of chemical goods from a Responsible Care perspective.**

### **3c) Site Security & Emergency Response**

The team looked at how the company had identified and assessed the security vulnerability of its sites, and how it had selected and implemented countermeasures to address security concerns. The team also examined how the company assesses the full range of risks its site operations may present to their communities, together with the process for liaison with local emergency officials at each site, and for developing, coordinating and testing site emergency plans with those of the community.

#### **Team Findings**

Company security vulnerability assessments (SVA) have been completed and most findings addressed in an initial surge, recently however, activity to complete the few remaining items has fallen off although all items are in action lists.

- 4). **It is a finding requiring action that not all items from the security vulnerability assessments (SVA) have been completed.**

All sites have good relations with local responders and have tested their site plan since the last re-verification. Recently the Toronto site participated in a test with the West Toronto CAER group and the Cornwall site participated in a city wide test. Windsor has had several false alarms which provided ER Plan tests, but the team feels a documented plan for testing should be in place. Windsor has also begun discussions on a path forward to get the local CAER group going again and the team encourages them to follow through.

- 5). **It is a finding requiring action at Windsor that a documented schedule for emergency response plan testing is not in use.**

- 4). *There is an opportunity for improvement for the company to follow through on its stated intention at the Windsor site to resurrect the CAER group in the area.*

Toronto has local first responders tour the site annually, reviews the plan annually and also tests components of their plan 3 to 4 times per year. At Cornwall the city has developed a comprehensive ER plan that is integrated with the BASF plan. The Cornwall site manager sits on the city emergency management committee and the site community representative is the city ER coordinator. The city of Cornwall's biggest concern is a chlorine trans-loading facility near the BASF site. The BASF site hazards are low and the WCS is a site fire. In Windsor the ER Plan has been tested, but the component relating to the dislocation of affected people has not been fully tested and an emergency is not the time to figure out how to use the policy.

- 5). *There is an opportunity for improvement in Windsor to provide guidance on criteria for use, coverage, responsibilities, authorities, limits etc. for the dislocation policy. This is a useful exercise for community related emergency response as well as transportation emergency response.*

### **3d) Environmental Management**

In addition to examining in general the company's performance in reducing its environmental "footprint, the team looked specifically at the company's performance history and 5-year projections regarding greenhouse gas emissions. This included actions both taken and planned, and whether through direct reduction of emissions or indirect reduction through such measures as improved efficiency in use of energy or materials, changes in technology, etc.

For fact-finding purposes only, to assist CCPA in developing recommendations for addressing growing concerns over water consumption, the team also reviewed any actions taken by the company to identify and reduce its usage of water.

#### **Team Findings**

There is a comprehensive environmental management system in place with a focus on waste streams from the plant sites as well as such customers as farmers and body shop owners. Almost all greenhouse gas emissions are from natural gas usage at manufacturing sites. The Canadian organization trends data on a variety of environmental issues, and each facility has specific reduction targets, but there is no oversight nor flow-down in these measures.

- 6). *There is an opportunity for improvement for the company to follow through on its stated intention to conduct an energy audit at Blackie in late 2007.*
- 6). It is a finding requiring action that BASF Canada does not have "flow-down" emission and waste reduction targets.**
- 7). *There is an opportunity for improvement for the Responsible Care Steering Committee (RCSC) to develop an oversight role in the development and monitoring of environmental emission and waste reduction targets.*
- 8). *There is an opportunity for improvement to move forward from 1993 as the base reporting year in all trend charts.*
- 9). *There is an opportunity for improvement to examine the use of heat recapture technology and/or air composting to reduce heat loss from air emission treatment at sites where this is economically and technically practical.*

Water usage is tracked but reduction plans are not in place.

In addition to examining how the company has performed in the four priority topic areas, the team then looked into some additional selective areas of focus, as noted below.

### **3e) Visibility & Employee Awareness of Responsible Care**

Here the team looked at how the company seeks to make Responsible Care a visible part of its facilities and its internal and external communications, and how it ensures that all employees understand the essence of Responsible Care and its relevance to their job activities and decisions.

## Team Findings:

The team found a very high level of employee understanding and visibility of Responsible Care at all facilities. A significant improvement was noted at Cornwall, Responsible Care material was visible at every corner at headquarters, and was amply visible at the Toronto site. There are site banners and flags and in Windsor the Responsible Care logo is proudly displayed on each and every hard hat.

The President conducts quarterly town hall meetings during site visits that are televised to all other sites. Responsible Care is part of management review meetings both in Canada and at an international corporate level.

The Canadian corporate training system has a Responsible Care component, both initial and refresher which must be completed annually. This does not extend to the union employees who receive this type of training via safety meetings.

In a walk around at the Windsor plant every employee interviewed (total of six, including one with only one year of experience) related Responsible Care to EH&S (as expected), but also connected it to community outreach in some manner. Good work BASF.

- 10). *There is an opportunity for improvement for the executive contact to sign the posted Responsible Care ethic statement.*
- 11). *There is an opportunity for improvement to update the Ecology and Safety Policy to include the Responsible Care ethic statement instead of the old Guiding Principles.*
- 12). *There is an opportunity for improvement to add a reference to Responsible Care in employee brochures where this is not done already*
- 13). *There is an opportunity for improvement to post the Responsible Care Commitment statement at the Toronto facility*
- 14). *There is an opportunity for improvement at Windsor to post an up-to-date signed EH&S policy, Responsible Care Commitment statement, and Responsible Care Ethic statement.*
- 15). *There is an opportunity for improvement at Windsor to include Responsible Care as a regular agenda item for Joint Health and Safety Committee (JH&SC) meetings and minutes.*

### 3f) Occupational Health & Safety

The team looked at the company's processes for continuous improvement in protecting the safety and health of employees, contractors and visitors.

#### Team Findings

The basic management system for occupational health and safety is the corporate "7-element Health & Safety Program" that has been used in Canada since the early 1990's. The seven elements are:

1. Management Commitment and Support
2. Responsibility, Authority and Accountability
3. Working Conditions to Minimize EHS Impact
4. Training
5. Incident Reporting and Analysis
6. Emergency Procedures and Programs
7. Personal Accountability

Recently in North America, BASF launched the "Journey to EHS Excellence" program which strives to significantly improve EH&S performance – notably by the creation of a "Zero Incident Mindset" or "ZIM".

In the overall scheme of things the company envisions a hierarchy of dependency with their "2015 Pillars: Sustainable Development" at the top depending upon "Global Responsible Care", and then "Journey to EHS Excellence", then "RCMS", the Responsible Care Management System and finally supporting the hierarchy is their "Seven Elements". Their "Journey" involves employees transitioning from dependent, to independent and finally arriving at interdependent. It is a very ambitious program, but one that is capable of delivering the sought after improvement in EH&S performance.

The company realizes it has a long way to go and there are some particular situations at play across the Canadian sites, which is increasing the difficulty of the task. Interviews at Toronto and Windsor supported a vibrant system with good buy-in from the work force including the JH&SC. At Toronto, hourly employees are encouraged to select the monthly safety topic and lead the monthly safety meeting. As well, the hourly employees receive annual evaluations of their safety performance. At Cornwall, because of the confrontational environment, the union has withdrawn from participation on the JH&SC. The company has involved the Ministry of Labour (MOL) in negotiations but the union is holding their ground and the MOL has given the company permission to maintain the JH&SC process without union involvement. The company is in discussions with recent hourly hires about becoming involved with the JH&SC. In spite of this environment the site safety performance is good.

- 7). **It is a finding requiring action that the Cornwall site safety work order process is not responsive to employees submitting safety suggestions and work orders.**
- 3). Hourly employee involvement in selecting and leading safety meetings are an industry best practice.
- 16). *There is an opportunity for improvement at the Cornwall site to implement a policy to ensure proper drum vents are utilized through out the site.*

- 17). *There is an opportunity for improvement at Cornwall to improve the management system that ensures Material Safety Data Sheet (MSDS) copies are current.*

### **3g) Transportation Security**

The team looked at how the company assesses the risk of deliberate misuse of products or raw materials in transit and provides protection against such risks.

#### **Team Findings**

The team found that the company excels in this important area. The company's Distribution Risk Assessment is updated annually and carrier and warehouse audits are completed every two or three years. Security seals are required on incoming and outgoing bulk shipments to BASF sites, affiliated warehouses and tollers.

### **3h) Risk Communications**

The team reviewed the company's system for regularly assessing the full range of risks its site operations present to their communities – from worst imaginable and worst credible scenarios down to more likely but lower risks – and for ongoing communication to and dialogue with the potentially affected communities.

#### **Team Findings**

The company has redone its worst case scenario calculations using the PHAST model for all locations except Abbotsford and Georgetown where, due to the WCS being a dust explosion, this particular modeling tool doesn't work (appropriately, the original models are still in use). The revised scenarios, along with the updated "What to do in a chemical emergency" pamphlet have been shared with the Blackie, Cornwall, Toronto and Windsor communities. Processes are in place to determine new neighbours and ensure they receive the proper risk communication.

The management system's Responsible Care Scorecard is reviewed by senior management and gives an immediate visual on a suite of Responsible Care measures. Two components of the twelve relate to community outreach for each site.

ART sites have completed risk communication but have not performed the risk assessment necessary to define the geographic scope of worst case scenario impact. This needs to be done and the risk communication program for these sites should be expanded, if necessary, to accommodate this geographic scope (refer to FRA #2 under PSM/Risk Assessment)

### **3i) Social Responsibility**

The team investigated the ways the company has provided benefits to, and worked to understand and further the social aspirations of, its local communities and broader society beyond the boundaries of EH&S performance.

## Team Findings

The company has a very strong corporate initiative in social responsibility. The German and U.S. parents set direction, however the situation in Canada is often different and some corporate direction (e.g. policies on diversity in the workplace) is not all that applicable here. The Canadian organization has devoted effort to community giving and some examples of this generosity are given at the end of this section. A policy for charitable donations (CO-1802) guides committees, within a budget, to focus and prioritize “in areas that leverage commitment to science education, Environment, Health & Safety and other programs, initiatives, and organizations that are important to the quality of life in site communities”.

18). *There is an opportunity for improvement to develop a separate value added statement related to social responsibility for Canadian operations*

Another example of social responsibility is the tool developed by BASF based on the concept of eco-efficiency developed by the World Business Council For Sustainable Development. The tool, called eco-efficiency analysis, compares processes to arrive at an end point (product) factoring in economic and ecological efficiency, not just return on investment.

### Examples of BASF Corporate and Site donation activity

- The head office had grade five students sing to its employees for the Holidays and BASF donated money to be spent towards their science program.
- Adopt-a-family for the Holidays where employees donate gifts or money based on the make-up of the family.
- The Women & Business Issues group from the Windsor site was launched in 2006 and members volunteered in the mentoring pilot project sponsored by the provincial government with Windsor Women Working with Immigrant Women. Since, BASF Canada was recognized with Employer Recognition Award and its diverse recruiting strategy as well as participated in various activities supporting the program.
- The Toronto, Montreal and Cornwall sites donate annually to the local Hospital.
- The Blackie site donates in support of the local Canada Day celebrations and donates to a local school for the school's year-end celebrations. For the fourth year in row, the site has given a Chemistry Scholarship to a Grade 12 student who obtains an 80% average in chemistry, geology and physics and enrolls in a post secondary institution.
- Windsor Site's Medical Department held a poster contest for the employee's children to promote, "Safety is Job 1 at BASF".
- BASF Toronto and Georgetown sponsors "PlastiVan" at local schools, a "science on wheels" van that travel throughout Canada and the United States teaching students, educators and the public about the chemistry, history, manufacturing and environmental issues involved with making plastics.
- Some sports activities are also supported at a local level.
- Robin Rotenberg was a speaker at the ECCO 2007 Environment and Energy Conference in Toronto and at a sustainability conference in Niagara-on-the-Lake in 2007
- The Windsor site has been very involved with a local public school in areas such as environmental responsibility. They have also been involved with the University of Windsor with site visits and talks on Responsible Care.

- The Toronto site has developed a relationship with a local high school and with Sheridan College. This has resulted in many site tours and talks on EH&S and Responsible Care and recently a Sheridan College student consulted with employees regarding his project examining Responsible Care and its role in Canada.
- Various employee managed activities (e.g. Christmas Drive for Ernestine's Women Shelter)
- Numerous individual employee activities (e.g. Dorothy Lea Hospice, Tooney Friday for the Parr Family Scholarship)
- Miscellaneous corporate/business activity:
  - National Chemistry Week (CIC)
  - United Way – corporate donation and site campaign
  - Canadian Cancer Society
  - Science Screen Report Video series for schools in manufacturing site locations
  - Children's Wish Foundation
  - Habitat for Humanity
  - Daily Bread Food Bank
  - Donate to charity-of-request at employee's funerals
  - Jewish General Hospital Fund
  - Montreal Children's Hospital Foundation
  - Big Brothers and Big Sisters
  - William Osler Health Center
  - Heart and Stroke Foundation
  - Neighbourhood Watch
  - United Counties Science Fair

### **3j) *TransCAER Outreach***

TransCAER is the CCPA program for Transportation Community Awareness and Emergency Response. It involves the company's approach to preventing transportation incidents, its transportation emergency response plan, and also outreach to communities through which chemicals are transported. Company responsibilities are decided by regional TransCAER committees formed from the members and partners in each region. The team looked at how the company has participated in TransCAER outreach in each region where it has facilities, and how effectively the Responsible Care ethic drives the building of relationships with targeted stakeholder groups.

#### ***Team Findings***

The company participates with its regional group (the GTA TransCAER Committee) on a routine and regular basis and has been involved in Police Awareness Training and Safety Training. In-depth Police Awareness Training was scheduled for late 2007.

### **3k) *Carrier Selection***

The team looked at the company's process for establishing criteria for the selection of road, rail, marine, pipeline and air carriers, and for ongoing assessment of those carriers against those criteria.

### ***Team Findings***

The team reviewed how the company selects and manages tollers, marine and road carriers and conclude that they excel in these important areas handling third party providers. Individual provider-type (e.g. road) processes are based on the Risk Distribution Management program and utilize specific provider-type policies (e.g. BASF Canada's Carrier Safety Standards policy OS-7501 and similar policies for the U.S. parent). In the case of road, all carriers in or into Canada are subject to third-party audits (QRC) on rotation. Marine carriers must have had an assessment based on the SHIBAS questionnaire developed by the European Chemical Distribution Institute (CDI). The company also makes shipments by air and utilizes an approved specialized third party.

- 4). The company's Risk Based Distribution Management program is a best practice

### **3l) *Engagement with Elected Officials***

Since part of Responsible Care is a commitment to assist in the processes of sound public policy development consistent with the criteria for sustainable development, the team reviewed the company's process for establishing ongoing relationships with elected officials (i.e., MPs, MPPs, city councilors, etc.) in constituencies where the company has a presence, to acquaint those officials with the nature of the company's operations, economic impact, Responsible Care commitment, activities and public policy concerns, and to understand the elected officials' interests and concerns. Also reviewed were the company's engagement in CCPA activities aimed at assisting in the development of sound public policy (e.g., Parliamentary Day, policy discussions, lobbying, etc.).

### ***Team Findings***

The company is guided by a policy (5416) and has participated in both Parliamentary Day and Queen's Park day (Ontario) which have led to invitations for politicians to visit facilities in their ridings. Site managers have included interactions with local politicians in their SCOPE report (thus becoming a measure in the Responsible Care Scorecard report). One such interaction has led to the passing of a private members bill (introduced by Toronto MP Roy Cullen) making government agencies interested in collecting user fees more accountable.

### **3m) *Community Dialogue***

The team looked at how the company's broader process for dialogue with its communities has been working since the previous verification, including the identification of stakeholders, community issues and concerns, how concerns were addressed and the choice of dialogue methods. They looked at the effectiveness of the management system in ensuring the company is planning, implementing, evaluating and continuously improving its relationship with the community.

### ***Team Findings***

The team found that the community dialogue process is covered by a policy (5460) and is a requirement for all sites. In Windsor they have a very comprehensive program where an extended management group has developed a weighted-score community outreach spreadsheet. At this site the reality of the plant location, an older mixed industrial, commercial and residential neighbourhood, creates language, trust and transient population barriers to efficient outreach.

Leaflets and flyers have been printed and delivered and door-to-door visits attempted. The site is continually trying to understand and improve the effectiveness of its programs, has used CAP and local stakeholder input and is currently investigating piggybacking its efforts on the local neighbourhood watch program.

- 19). *There is an opportunity for improvement for the company to follow through on its stated intention at the Windsor site to add to its outreach activities by involvement in the local neighbourhood watch program.*

Dialogue activity is a component in the Responsible Care Scorecard and, as noted before, updates are required quarterly for all facilities and results are reviewed by top management. This has been an important improvement to the overall Responsible Care management system.

- 20). *There is an opportunity for improvement to implement a process to check that people do know what to do in an emergency as part of the process to periodically visit with site neighbours.*

Telephone calls to folks on the contact list have generally yielded positive comments about the company and their efforts in keeping the community informed, including the ART (Automotive Refinishing Technology) retail facilities added to the re-verification this time around. However, a call to the Toronto company, TransportAction, revealed the situation where the company's former contact had retired and his replacement did not know about the risk and what to do in an emergency.

- 21). *There is an opportunity for improvement to have regular contact with commercial and industrial neighbours in Toronto on risk and what to do in an emergency (and in particular to ensure the company, TransportAction, has been communicated with).*

- 8). It is a finding requiring action at some second party warehouses and tollers that a community dialogue and risk communication program is not in place. Either the second party or BASF can implement the program.**

### ***3n) Areas of Focus Identified by the Company***

In addition, the company asked the team to investigate the following aspects of Responsible Care.

#### ***Supplier, Customer and Distributor Assessments:***

The company has truly excellent processes in dealing with the assessment of customers, distributors, tollers and carriers. The team has no improvements to suggest in this area.

The company is not doing as well with regard to suppliers. As in many large companies the responsibility for interacting with suppliers has moved to the procurement area where the understanding of and commitment to Responsible Care is not as great as in those areas where chemicals are handled directly.

It will probably require agreement from upper management in the Canadian and North American companies in defining the risk levels (that trigger performance qualification) that will satisfy the Canadian and U.S. Association requirements.

### ***Significant Improvements:***

The team agrees that the company has made significant improvements in the following areas (based on the list provided and for those areas where the team has sufficient information)

- Overall Responsible Care management system
- Worst Case Scenarios
- Global Transportation and Distribution Safety Review
- Company e-newsletter
- Accident/incident investigation

### ***Best Practices***

The team found four “gone the extra mile” or “best practices” and many examples of excellent processes and work practices.. The ones mentioned in the report relate the Responsible Care Scorecard, the company's leadership in ag-chemical container recycling, hourly employee involvement in selecting and leading safety meetings, and the company's Risk Based Distribution Management program.

We would suggest that the “Journey to EHS Excellence” is a significant and powerful initiative that a company demonstrating the ethic of Responsible Care would implement to make significant strides in improving EH&S performance. A job well done, but not necessarily unique to BASF.

### ***3o) Additional Areas Addressed During the Re-verification***

None

## **4. Conclusion**

The team was very impressed with the company's implementation of a Canadian Responsible Care management system. They have shown an extremely positive response to the previous re-verification and have worked diligently to integrate the Canadian system within the context of a global Responsible Care Management System structure based on the ACC RCMS. Key components of the Canadian management system, the Responsible Care database, the Responsible Care Scorecard and the responsibility of the RCSC to obtain data allowing the President to attest on an annual basis to the status of Responsible Care within the company, will all tend to ensure the sustainability of the process and keep it self-healing. The ethic of Responsible Care is clearly evident throughout the company and the message of Responsible Care has clearly made its way to all levels throughout the company. It was particularly satisfying to hear floor-level employees relate Responsible Care to, among other things, community outreach.

The team recommends that CCPA officially recognize this re-verification with an award at the next suitable occasion.

## **5. Company Comments**

The process of re-verification is critical to the success of Responsible Care in BASF Canada. It is of great benefit to have external industry experts and representatives from the community not only confirm that our behaviours demonstrate the ethic of Responsible Care and that our management system drives continuous improvement but to identify areas for improvement.

On behalf of BASF Canada, I would like to thank the re-verification team, including our community representatives for their professionalism, keen interest, many suggestions and for the thoroughness of their assessment of how we demonstrate the Responsible Care ethic and apply the codes of practices. This report presents a fair and accurate picture of our management systems and how BASF Canada follows the ethic.

I agree with the findings and opportunities and commit to ensure that action plans are developed to address all findings requiring action and evaluate and address as appropriate all opportunities for improvement.

I would also like to thank the employees of BASF Canada for continuing to live the ethic of Responsible Care and for their hard work in continuing to make Responsible Care an integral part of how we do business.

Robin Rotenberg,  
President,  
BASF Canada  
Feb. 13, 2008

## Appendix 1: Company Description

BASF Canada is part of the BASF Group of Ludwigshafen, Germany with regional headquarters in New Jersey, USA. BASF Corporation is responsible for the operations of the BASF Group in the North American region. BASF Canada is responsible for governance of BASF's operations in Canada. It operates on a shared services platform with BASF Corporation. BASF operates a number of different business units which report regionally into BASF Corporation and globally into Germany. Most BASF Businesses operate by selling through BASF Canada to Canadian customers. Some businesses are currently, or are planning to sell directly from BASF Corporation to the customer or a distributor in Canada.

BASF Canada (BCI) is headquartered in Mississauga ON. There are six manufacturing/distribution sites located in Abbotsford BC, Blackie AB, Cornwall, Georgetown, Toronto and Windsor ON. Animal nutrition products are blended in the Abbotsford and Georgetown facilities while the Cornwall facility manufactures and distributes plasticizers, the Windsor facility manufactures automotive OEM (Original Equipment Manufacturer) paint coatings and the Toronto facility blends polyurethanes and operates a general distribution center.

BASF Canada is the owner of Automotive Refinish Technologies, Inc. (ART) in Canada. ART operates a chain of 7 stores that sell BASF automotive refinish coatings and other 3<sup>rd</sup> party coatings related supplies (sand paper, body filler, mixing equipment, etc.) to auto body shops. ART is operated out of the BASF Coatings business, based in Southfield, Michigan. The ART facilities in Canada are located in Winnipeg MB, Quebec City and Laval QC and Belleville, Mississauga and Windsor, ON.

BASF Canada is also the owner of BASF Construction Chemicals Canada Ltd (BCCC). BCCC is formerly Degussa Construction Chemicals Canada Ltd. which was acquired in July 2006. This business is run from Cleveland, Ohio. The BCCC facilities in Canada are located in Nisku AB, Montreal QC and Brampton and Mississauga ON.

The company has an Crop Protection Division office in Winnipeg MB, a research facility in Saskatoon SK and research farms in Regina SK, Edmonton and Lethbridge AB, Reinfeld MB and London and Westminister ON.

## Appendix 2: Team and Contacts

This section identifies:

- the members of the verification team, including community reps.(unless shown in the body of the report);

Name	Affiliation	Representing
Gerry Whitcombe	C.C.P.A. verifier	Industry (team leader)*
Cam Dillabough	C.C.P.A. verifier	Industry*
David Powell	C.C.P.A. verifier	Community at large*
Lisa Harvey	Community representative	Cornwall local community
Zig Maleszewski	Community representative	Toronto local community
Leslie Chaif	Community representative	Windsor local community

Team members assigned by C.C.P.A. are shown by an asterisk (\*).

- the persons contacted during the verification, both inside and outside the company;

Name	Position
Robin Rotenberg	President, BASF Canada
David Peters	Manager, EHS and Responsible Care
Patty Vandierendonck	R&D code coordinator
Barry Nicholas	Manufacturing Co-CAER code coordinator, Toronto site manager
Ivan Videc	Transportation and Co-Distribution code coordinator
Kerry Bowman	Business Representative – Co-Distribution code coordinator
Martine Despatie	Communications – Co-CAER code coordinator
Tom Vandemoortele	Hazardous Waste code coordinator
Katrina Gabriel	Transportation code coordinator (future)
Wayne Barton	Field Biology Manager, APN
Kent Jennings	Toxicology and Biotechnology Manager, APN
Bob Bradshaw	Toll Manufacturing and New Product Development Leader, APN
Greg Elkins	North America Logistics Transportation Manager
Greg Buza	Global Marine/North America Rail Manager, BASF Corporation
Mike Georgescu	Plant Engineer, Toronto
Greg Gardin	Site R&D Code Coordinator, Toronto
Jeff Wildman	Operations Manager, ART and bodyshopmall.com
Mary Cormier	Regional Operations Manager , ART
Pete Carter	Branch Operations Manager , ART
David Sinclair	Production Manager, Windsor
Dean Clevett	T.E.S. Manager, Windsor

Mark Thibeault	EH&S Team Member, Windsor
Adam Bickel	Michigan/Canada EHS Hub Manager
Edwin Kwan Lap Tam	Assistant Dean, Student Affairs, University of Windsor
Justin Durham	Employee, Windsor
Mike Rosella	Employee, Windsor
Terry Harrison	Employee, Windsor
Eli Lyons	Employee, Windsor
Maria Stojanov	Employee, Windsor
Christina Zemlak	Employee, Windsor
Jeff Meloche	Employee, Windsor
Thuy Dao	Employee JH&SC rep, Windsor
Paul Shank	Employee JH&SC rep, Windsor
Rob Slikboer	Employee JH&SC rep, Windsor
Scott MacDonald	Employee JH&SC rep, Windsor
Brian Shuttleworth	Employee JH&SC rep, Windsor
Brian Charron	Employee JH&SC rep, Windsor

- **A brief summary of the process by which the information was obtained:**

The re-verification took place over several days during August, September and October, 2007. On August 21 the re-verification team (3 members) held a planning meeting in Toronto, Ontario. The purpose of the meeting was for team building, for review of the information package, to meet with the principal re-verification contact. During our meeting with the company contact we established which sites would be visited and who would be interviewed.

The first day of the re-verification was Thursday September 20, 2007. One member of the CCPA Team (the industry representative from the previous re-verification) augmented by the local community representative met with the Overall Coordinator and plant representatives in Cornwall ON.

Days 2 and 3 were held in Toronto and Mississauga on October 2 and 3, 2007, where the industry representative, the community-at-large representative and the local community representative met with the Canadian President and senior company representatives and visited facility sites. The team leader had taken ill and unfortunately had to participate by teleconference.

On the final day (October 4, 2007) the venue moved to Windsor ON. Here the team leader and the community-at-large representative augmented by the local community representative met with the Overall Responsible Care coordinator and facility representatives and visited the site and met with employees. The team had lunch with members of the plant JH&SC.

## Acronyms Used In This Report

ACC – American Chemistry Council  
AIM – Accident Incident Module  
ART – Automotive Refinish Technology  
BP – Best Practices  
CAER – Community Awareness Emergency Response  
CBT – Canadian Business Team  
CCPA – Canadian Chemical Producers' Association's  
CDI – Chemical Distribution Institute  
CEC – Canadian Executive Committee  
CEO – Chief Executive Officer  
DRT – Direct Reports Team  
EH&S – Environment, Health and Safety  
EHS – Environment, Health, Safety  
ER – Emergency Response  
FRA – Finding Requiring Action  
GTA – Greater Toronto Area  
JH&SC – Joint Health and Safety Committee  
JHSC – Joint Health Safety Committee  
MOC – Management Of Change  
MOE – Ministry of the Environmental  
MSDS – Material Safety Data Sheet  
OFI – Opportunity For Improvement  
PDCA – Plan, Do, Check, Act  
PHA – Process Hazard Analysis  
PHAST – Process Hazard Analysis Software Tool  
PSM – Process Safety Management  
RC – Responsible Care  
RCMS – Responsible Care Management System  
RCSC – Responsible Care Steering Committee  
RMP – Risk Management Plan  
SCOPE – System for Community Outreach Planning and Outreach  
SVA – Security Vulnerability Assessment  
WCS – Worst Case Scenarios  
ZIM – Zero Incident Mindset