

## Disclaimer

This report has been produced by a team, convened by the Chemistry Industry Association of Canada (CIAC), to provide advice to the member-company and assist it in meeting its Responsible Care<sup>®</sup> commitments. The material in this report reflects the team's best judgment in light of the information available to it at the time of preparation. It is the responsibility of the CIAC member-company that is the subject of this report to interpret and act on the report's findings and recommendations as it sees fit. Any use which a third party makes of this document, or any reliance on the document or decisions made based upon it, are the responsibility of such third parties. Although CIAC members are expected to share the results of this guidance document with interested parties, the Association, its member-companies, their employees, consultants and other participants involved in preparing the document accept no responsibility whatsoever for damages, if any, suffered by a third party as a result of decisions made or actions based on this report.

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

## **EXECUTIVE SUMMARY**

This report documents the observations and conclusions of the independent verification team tasked with conducting a Responsible Care Verification of Dow Canada (Dow), which includes Dow Chemical Canada ULC (DCC) and Dow AgroSciences Canada Inc. (DAS). The verification was carried out on November 8-10 and 15-17, 2016, at the Canadian head office in Calgary, Alberta, and the Fort Saskatchewan, Alberta, Blenheim, Ontario and West Hill, Ontario sites. This was the seventh Responsible Care verification completed for Dow Chemical Canada ULC. The last verification was completed from November 6-8, 2013.

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:

- Determining the impact (if any) of significant changes since the last verification;
- Community outreach and communications; and,
- Promotion of Responsible Care by name.

As a result of the examination conducted, the verification team is of the opinion that the Responsible Care Ethic and Principles for Sustainability are guiding company decisions and actions, and that a self-healing management system is in place to drive continual improvement. The team believes that the company is capable of responding to the range of Findings Requiring Action identified during the verification – summarized below and discussed in detail in the report. The verification is complete and no further involvement is required by the verification team.

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Signed: \_\_\_\_\_\_ Date: February 07, 2017

**Gerry Moss** 

Verification Team Leader

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

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#### SUMMARY OF VERIFICATION TEAM OBSERVATIONS

## **Findings Requiring Action:**

- Blenheim The site shall integrate its emergency management plan with its industrial neighbours into a community emergency plan and communicate the key elements to the employees and the community. (OP35, 36)
- 2. Blenheim The site shall complete a security vulnerability assessment using an appropriate risk based methodology to determine the necessary site security requirements. For example, fencing, card locks, cameras (OP48)
- 3. Corporate The company needs to consider the policy and decision-making aspects of its business continuity process and how it defaults, both inside the company and in external organizations providing essential services or supplies and communicate it to the local facility. (OP55)

## **Works in Progress:**

- Corporate Formalize (written policy and procedures) the management system to address the need for family and staff support during a large-scale emergency that might result in the activation of the corporate business continuity management process. The company should review the Pandemic documents to broaden them to consider other scenarios as well as Pandemics. (OP49-55)
- 2. Corporate The company should finalize the Rail Logistics Service Provider qualification document and follow up with the Railway Association of Canada (RAC) on the short-line safety performance information and major rail line via CIAC. (OP13)
- 3. Corporate The company should complete the addition of Responsible Care language to its feedstock contracts for Dow Chemical Canada ULC. (ST101)
- 4. West Hill The site should continue its efforts in expanding the Emergency Notification system (sirens, call-outs, etc.) to ensure coverage of entire impacted area. (N.B. This may be an ongoing initiative.) (AC129) (OP39-40)

#### **Improvement Opportunities**

- 1. Fort Saskatchewan The company shall establish and document a process to determine the most appropriate hazard assessment tool in their design process. (Loss Prevention Principles) (OP1)
- 2. Fort Saskatchewan The company tracks non-hazardous waste volumes and to further their sustainability journey, should consider setting reduction goals for non-hazardous waste. (OP60-61)
- **3.** Fort Saskatchewan The site should consider allowing the CAP to review and provide comment on the Emergency Response Brochures shared with neighbouring residents prior to production and distribution.
- 4. Corporate The company should review the third-party audits of distributor facilities to ensure that all aspects of the codes are covered, specifically process safety management and community outreach (OP28-30; AC125-136)
- 5. Corporate DAS It is an Improvement Opportunity to provide information about Responsible Care on the product use guide. (ST102)
- 6. Blenheim The site should consider improving the labeling of the blending room tanks. (OP22)
- 7. Blenheim The site should improve their integration and familiarity with the Distribution Emergency Response Plan (transportation). (OP47)
- 8. Blenheim & West Hill The site shall consider increasing the visibility of Responsible Care. See CIAC guidance document entitled Promoting RC Implementation and Guidance.

#### **Successful Practices:**

- 1. Corporate The company provides "unconscious bias" training to leadership and key management groups, and extends it to employees at large (Social Responsibility)
- 2. Corporate The company has a robust Greenbelt/buffer zone Standard. (OP3)
- **3.** Fort Saskatchewan Proactive meeting with municipal officials to express concerns regarding potential adverse impact to proposed development. (AC138)
- 4. Fort Saskatchewan The site completes a Root Cause Analysis on positive events such as a turn around without injuries and done on time and then shares the success story globally. (OP56-57)
- 5. Blenheim The site is using re-usable containers for product shipment. (ST85)
- 6. Blenheim The site identified a gap in the confined space rescue system in that the volunteer fire department would not do this type of rescue. As a result the site created their own confined space rescue team appropriately certified to meet Canadian Labour Code S.11 requirements COHS 10 and Part II Canada Labour Code. (OP31)
- 7. West Hill The site completes practice incident investigations on virtual scenarios. (OP56-57)

#### **About Responsible Care Verification**

As a member of the Chemistry Industry Association of Canada (CIAC), the most senior executive responsible for the Dow Chemical Canada ULC (DOW) operations in Canada attests annually to CIAC and its peers that the company's operations conform to the expectations contained in the Responsible Care Commitments and are guided by *Responsible Care Ethic and Principles for Sustainability*.

## The Responsible Care® Ethic and Principles for Sustainability

We are committed to do the right thing, and be seen to do the right thing.

We dedicate ourselves, our technology and our business practices to sustainability - the betterment of society, the environment and the economy. The principles of Responsible Care® are key to our business success, and compel us to:

- work for the improvement of people's lives and the environment, while striving to do no harm;
- be accountable and responsive to the public, especially our local communities, who have the right to understand the risks and benefits of what we do;
- take preventative action to protect health and the environment;
- innovate for safer products and processes that conserve resources and provide enhanced value:
- engage with our business partners to ensure the stewardship and security of our products, services and raw materials throughout their life-cycles;
- understand and meet expectations for social responsibility;
- work with all stakeholders for public policy and standards that enhance sustainability, act to advance legal requirements and meet or exceed their letter and spirit;
- promote awareness of Responsible Care, and inspire others to commit to these principles.

As an element of this commitment to Responsible Care, DOW must, every three years, participate in an external verification intended to:

- 1. Provide the Executive Contact with an external perspective when assessing if the company is indeed meeting the intent of the Responsible Care Commitments, along with advice on areas that may require attention;
- 2. Identify opportunities for assisting the company when benchmarking its own practices and performance against those of its peers, thus supporting continual improvement;
- **3.** Contribute to the credibility of Responsible Care amongst company personnel and stakeholders, as well as the stakeholders of the broader industry;
- 4. Identify successful company practices that can be promoted to peers in the CIAC membership; and
- **5.** Support the identification of areas of common weakness so that collective tools and guidance can be developed to improve performance in those areas across the CIAC membership.

Verification is conducted according to a common protocol, developed by the association's members and others, including several critics of the chemical industry. The verification is conducted by a team consisting of:

- Knowledgeable industry experts with experience in Responsible Care;
- A representative of the public at large (usually with a public interest background and with experience in Responsible Care gained from serving on the CIAC's National Advisory Panel) and;
- One or more representatives of the local communities where the company's facilities are located.

Once completed, the Verification Report is made publicly available through the CIAC website (<a href="www.canadianchemistry.ca">www.canadianchemistry.ca</a>). DOW 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 <a href="www.canadianchemistry.ca">www.canadianchemistry.ca</a>, or by contacting CIAC Responsible Care at <a href="mailto:glaurin@canadianchemistry.ca">glaurin@canadianchemistry.ca</a> or (613) 237-6215 extension 233.

#### **About Dow Canada**

In Canada, Dow was instrumental in developing Responsible Care® and continues to be a leader in Responsible Care® efforts. Dow's membership is maintained through CIAC for Canadian operations. Dow Canada does not exclude any of its operations from commitment to, participation in and involvement with Responsible Care®. The Dow Canada Family of Companies comprises of Dow Chemical Canada ULC, Rohm and Haas Canada LP and Dow AgroSciences Inc. This section provides an overview of the facilities, products and services of Dow Canada.

#### **Dow Chemical Canada ULC**

At Dow Chemical Canada ULC, daily operations are guided by the principles of Responsible Care®. The company have 1,100 highly skilled employees who work every day to make the world a better place by transforming resources and raw materials such as ethane into value-added products that can be used within our domestic economy or sold internationally. Dow is a leader in science and technology and is re ready to face the challenges of the 21<sup>st</sup> century. From increased collaboration with communities and improved product stewardship and sustainability – to a clear focus on environment, health and safety – the people at Dow Canada are the human elements who help to make a real difference in the world we share.

Throughout history, Dow Canada has manufactured basic chemicals and plastics used to make products in many sectors, including personal care, transportation, health care and home construction. Dow is headquartered in Calgary, Alberta, and together with our affiliates, have manufacturing locations in West Hill, Ontario, Fort Saskatchewan and Prentiss, Alberta; and Varennes, Quebec. Resale business also takes place in Canada for the numerous products Dow makes globally. More information about Dow Canada can be found at www.dowcanada.com

#### **Headquarters: Calgary Alberta**

Calgary is home to Dow Canada's national headquarters including the Dow Canada president/Hydrocarbons and Energy director, as well as the Canadian Legal, Hydrocarbons and Energy, Government Affairs and Accounting groups. With its central location among major petrochemical and oil and gas and corporations, Dow's head office is strategically located to position Dow for ongoing success.

## Fort Saskatchewan, Alberta

The Fort Saskatchewan site celebrated 55 years of operations in 2016, and is one of two sites in the province that comprise Dow Canada's Alberta Operations. Situated on 2128 acres, the Fort Saskatchewan site forms one of the largest petrochemical complexes in Canada. The Fort site has world-scale Dow production units that produce hydrocarbons, ethylene, polyethylene, and electricity, as well as an MEGlobal ethylene glycol plant. Serving North America and the Pacific Rim, the site employs about 500 full-time employees and 300 contractors who produce value-added products using Alberta's abundant natural gas resources.

#### **Prentiss, Alberta**

The Prentiss, Alberta manufacturing location is the other location in the province that comprises Dow Canada's Alberta Operations. Located in the heart of central Alberta near Red Deer, Prentiss is home to a Dow-operated polyethylene plant, and two world-scale ethylene glycol plants operated by MEGlobal., MEGlobal manufactures, markets and supplies ethylene glycol worldwide. In addition, Dow has 50 percent ownership of the nearby E3

ethylene cracker in Joffre, Alberta which is operated by NOVA Chemical Corporation.

Dow's Prentiss site is a positive contributor to the local economy with their operations providing an economic multiplier effect through the purchase of raw materials, products, services, labour and technologies. With more than 200 employees and contractors on site, the Prentiss Site takes advantage of Alberta's natural gas resources and produce value-added products that can be used within our domestic economy, or sold internationally.

#### Varennes, Quebec

Dow Canada's Varennes, Quebec site is located in the greater Montreal area on the south shore of the St. Lawrence River. The 450-acre site is home to a manufacturing plant producing STYROFOAM™ brand insulation. Varennes' competitive advantage is built on skilled labor and easy access to markets in eastern Canada and the northeastern United States. The Varennes Latex plant has been shut-down since December 2008. In 2009, Varennes converted to Zero Ozone-Depleting, no-VOC Foaming Agent Technology. There is a SC Johnson facility operating on the Dow Varennes property which produces Ziploc Brand zipper bags.

## Rohm & Haas Canada LP

Rohm and Haas Canada LP is a wholly owned subsidiary of The Dow Chemical Company. In April 2009, Dow announced that it had completed its acquisition of Rohm and Haas globally. For Canadian operations, the Rohm and Haas West Hill site belongs to the Dow Canada family of companies.

#### West Hill, Ontario

The West Hill plant consists of 45 acres and manufactures water based emulsions. These emulsions go into a variety of products, the biggest single application being latex paint. More than half of what is produced at the West Hill Plant is exported to the U.S. The West Hill Plant is certified under both ISO 9001 and ISO 14001. The West Hill Plant is a modern plant with leading edge technology for processing, safety and environmental protections. The company continues to invest in our site and to add new technology. There are approximately 100 employees at West Hill who all have a strong commitment to the community.

## Dow AgroSciences Inc.

Dow AgroSciences Canada Inc. is a research based, agricultural sciences company with a diverse product portfolio including weed, insect and disease management for agricultural/horticultural crops and products for forestry and industrial vegetation management. The company has also made significant investments in developing a plant genetics and biotechnology platform in canola and corn. This investment is focused on a range of research for the development of input production traits and value-added quality traits. Dow AgroSciences has established field research capabilities across western and eastern Canada including a plant breeding and cell biology group based in Saskatoon, Saskatchewan. With employees throughout Canada, the Dow AgroSciences' Canadian commercial head office is in Calgary, Alberta with seed plants, offices and research facilities across Canada.

#### Calgary, Alberta

The Calgary office is Dow AgroSciences' Canadian commercial head office, and hosts approximately 50 full time employees. This office is home to regulatory affairs, marketing, communications, logistics and supply chain, business services and administration for the crop protection, pest management and Nexera seed businesses, as well as the Canadian Solutions Centre which supports customers online and over the phone.

#### Vernon, British Columbia

Vernon is home to the Nexera Canola Parent Seed Production Center. This site is responsible for taking elite Nexera canola inbred lines from R & D and producing a high quality, reliable supply of canola parent seed to support the manufacturing of Nexera hybrid canola. The three full time employees and seasonal contractors

manage all aspects of field production, seed conditioning, and management of canola parent seed for the Nexera canola operations team.

## Saskatoon, Saskatchewan

The Saskatoon, Saskatchewan site is the headquarters for Dow AgroSciences global canola breeding operations. Situated in Innovation Place park on the University of Saskatchewan campus the site is a fully integrated crop research facility with greenhouses, a molecular marker lab, a doubled haploid lab, a pathology lab and a field breeding group. Dow has approximately 40 full-time employees and contractors who produce canola hybrids adapted to Western Canada, the United States, Australia and Europe.

## St. Marys, Ontario

St. Marys is home to one of Dow AgroSciences key research facilities focusing on corn and soybean breeding. The location employees 10 full time and 40 summer positions. The research from St. Marys supports the development of new varieties and hybrids for the Dow Seeds and Enlist line of products for Dow AgroSciences and is the Northern silage corn breeding station. Located in the heart of farming country in Ontario, the research facility also has fields located at 20 locations across Ontario, two locations in Quebec and three locations in Manitoba they use for research as well.

#### Blenheim, Ontario

Blenheim is home to the Dow Seeds production and warehousing facility. It employees 21 full time and 2 contract employees and up to 16 seasonal employees who oversee production, bagging and logistics for Dow Seeds products across Canada.

Blenheim is also home to the commercial head office for Dow Seeds. Employing 13 full time staff, this office manages marketing, communications, administration, and business services for the Dow Seeds business. The Blenheim office provides support to a Seed Partner network of over 200 retails and farmer dealers throughout Canada. The Dow Seeds product line includes grain corn, silage corn, soybeans, edible beans, cereals and alfalfa.

#### **About This Verification**

The verification of Dow Chemical Canada ULC was conducted on November 8-10, and 15-17, 2016 and included team visits to the Calgary head office, and the Fort Saskatchewan, Blenheim and West Hill sites. 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 is the seventh verification exercise completed for Dow Canada. The previous verification was completed from November 6-8, 2013.

The verification team was comprised of the following individuals.

Name	Affiliation	Representing	
Gerry Moss	CIAC	Team Leader	
Dave Mack	CIAC	Industry Verifier	
Debbie Krukowski	CIAC	Public-At-Large Verifier	
Mary Chartrand	<b>Private Contractor</b>	Community Representative	
		(Fort Saskatchewan)	

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

During the verification of Dow, the verification team looked for evidence that the company was addressing the expectations documented in the Responsible Care Commitments. A sampling of the 152 code elements, a review of the 28 benchmark and collective expectations and the company response to the Ethic and Principles for Sustainability was undertaken. While considering all aspects of the Responsible Care Commitments during the verification, the team placed an emphasis on conducting a more in-depth examination of certain company aspects identified by the company or the team. These were related to specific aspects of the company's community initiatives and Responsible Care branding.

The Dow Chemical Company has in place an extensive and comprehensive global management system entitled "Operating Discipline Management System", ODMS (see Team Observations on Company Management System). Overall, the team was impressed by the dedication and commitment of the site management teams, and corporate senior management to the ethic and principles of Responsible Care and their application to all aspects of the Canadian company operations.

#### **TEAM OBSERVATIONS CONCERNING OPERATIONS CODE**

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

## **Design and Construction of Facilities and Equipment (OP1-6)**

At the sites, all capital projects are managed by the Dow Global Project Methodology (GPM) (which includes compliance components). On-site work is engineered for < \$10MM projects, otherwise corporate engineering controls. This includes hazard and risk assessments (multi-layered reviews). The company has established minimum design requirements. This is all integrated into the ODMS system, which supports RC codes, other external and internal requirements, and, also extends to the Management of Change work process. Pre-startup review findings are entered into the Event Action Tool (EAT) to ensure timely follow-up. Of note was the established corporate buffer zone standard, (GreenBelt Buffer Zone L3 Fac. Req.). One improvement opportunity, as part of the GPM, is the fact that there is no clear process for deciding which tools to use in carrying out risk and hazard analyses. The process simply defaults to a Hazard and Operability Analysis.

For the codes that were reviewed all expectations for Responsible Care implementation have been met.

## **Findings Requiring Action:**

None.

## Works in Progress:

None.

## Improvement Opportunities:

Fort Saskatchewan – The company shall establish and document a process to determine the most appropriate hazard assessment tool in their design process. (Loss Prevention Principles) (OP1)

#### Successful Practices:

Corporate – The company has a robust Greenbelt/buffer zone standard. (OP3)

#### **Operations Activities (OP7-21)**

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

## i. General Considerations (OP7)

Strengths noted here were the many layered management system (ODMS) approaches, including internal and external audits, self-assessments, review of critical procedures, and the use of a Management of Change (MOC) process. Results of audits are captured into the EAT (Event Action Tool), ensuring effective and timely follow-up and completion of actions.

## ii. Laboratory Practice (OP8-11)

Generally, no research and development work is done in Canada, and laboratory activities are confined to plant support roles, such as quality controland analytical work. Laboratory employees are actively engaged in environment, health and safety initiatives, and expectations are clearly defined. Waste management has evidence of good oversight, training, and record keeping. Contract laboratories are used for environmental and industrial hygiene work.

#### iii. Transportation and Physical Distribution (OP12-16)

Carrier selection, route selection, auditing and oversight are well organized and controlled. Distribution warehouses and terminals used are certified by various third parties such as AgriChemical Warehousing Standards Association (AWSA), and Responsible Care Partners. DAS has a very good empty used container, and packaging program.

#### iv. Maintenance (OP17-21)

Maintenance procedures are well integrated operating processes and preventive maintenance is routine. Standards and tools are in place for frequency of inspections. All employees and contractors must be qualified and tested.

#### **Findings Requiring Action:**

None.

#### Works in Progress:

Corporate – The Company should finalize the Rail Logistics Service Provider qualification document and follow up with the Railway Association of Canada (RAC) on the short-line safety performance information and major rail line via CIAC. (OP13)

## Improvement Opportunities:

None.

## Successful Practices:

None.

## Safety and Security (OP22-57)

The company has health and safety standards in place to provide employees and all other involved personnel with the necessary knowledge and tools to recognize potential safety, health and environmental hazards. Their goal is zero incidents (their current rate results are excellent). Dow is committed to the "Vision of Zero", striving to achieve zero incidents, injuries, illnesses and environmental harm. The team reviewed all six subsections in this area and concluded that Responsible Care code expectations are being met.

## i. Occupational Health and Safety (OP22-27)

Overall occupational health and safety requirements are well managed. Examples include hazard process assessments that are posted, pre-task field assessments for routine work procedures, and job safety analysis required for contractors to get a safe work permit. Procedures are reviewed every three years, and emergency procedures reviewed every year. Strong employee participation and behaviour based safety is integral to the safety system.

## ii. Process Safety Management (OP28-30)

Process safety is mandated by Dow corporate standards, with the addition of Canadian Standards Association (CSA) standards added for Canada, plus applicable local regulations. The Dow Loss Prevention Principles (LPP) have very robust procedures and training programs. The entire system is reviewed every 5 years. Corporately, Dow has the best, latest technology, and is very prescriptive on the most effective technology.

## iii. Emergency Management (OP31-47)

Emergency management systems and dedication were evident at all locations visited. Included were emergency response planning, regular training and drills, documentation of same, use of the Incident Command System, and integration with local first responders, including joint exercises.

#### iv. Malicious Intent (OP48)

Evidence of security systems in place was seen except as noted below. Employee training on such topics as active shooters, cyber-crime, was also reviewed.

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

Corporately, a crisis management system is in place, includes pandemic planning, weather events, etc., has notification system to call out to all employees and key management of an emergency. Dow has a substantial information technology (IT) network. Identification of critical infrastructure done by various data means, including IT, employee, financial, accounting, payroll, invoicing systems.

#### vi. Incident Reporting and Investigation (OP56-57)

Demonstrated excellent performance with various health and safety measurements. Root-cause investigations are required when corporate, business, or local triggers are met. Employee training to report incidents, including near misses, reporting roles and responsibilities, deadlines in place.

#### **Findings Requiring Action:**

Blenheim – The company shall integrate its emergency management plan with its industrial neighbours into a community emergency plan and communicate the key elements to the employees and the community. (OP35, 36)

Blenheim – The company shall complete a security vulnerability assessment using an appropriate risk based methodology to determine the necessary site security requirements. Examples may include fencing, card locks, cameras, etc. (OP48)

Corporate – The company needs to consider the policy and decision-making aspects of its business continuity process and how it defaults, both inside the company and in external organizations providing essential services or supplies and communicate it to the local facility. (OP55)

#### Works in Progress:

West Hill – The Company should continue its efforts in expanding the Emergency Notification system (sirens, call-outs, etc) to ensure coverage of entire impacted area. (N.B. This may be an ongoing initiative.) (OP 39 & 40)

Corporate – Formalize (written policy and procedures) the management system to address the need for family and staff support during a large-scale emergency that might result in the activation of the corporate business continuity process. The company shall review the Pandemic documents to broaden them to consider other scenarios as well as Pandemics. (OP49-55)

## Improvement Opportunities:

Corporate – The company should review the third party audits of distributor facilities to ensure that all aspects of the codes are covered, specifically process safety management and community outreach (OP28-30; AC125-136)

Blenheim – The company should consider improving the labeling of the blending room tanks. (OP22)

Blenheim – The company should improve their integration and familiarity with the Distribution Emergency Response Plan (transportation). (OP47)

## Successful Practices:

Fort Saskatchewan – The company completes a Root Cause Analysis on positive events such as a plant turn around without injuries and done on time and then shares the success story globally. (OP56-57)

Blenheim – The site identified a gap in the confined space rescue system in that the local volunteer fire department would not do this type of rescue. As a result the site created their own confined space rescue team appropriately certified to meet Canadian Labour Code S.11 requirements COHS 10 and Part II Canada Labour Code. (OP31)

West Hill – The company completes practice incident investigations on virtual scenarios. (OP56-57)

## **Environmental Protection (OP58-75)**

This area fully meets our expectations on the implementation of Responsible Care.

#### i. Emissions and Waste Reduction (OP59-63)

As of 2015 the company achieved on average a 75% improvement of key indicators for EH&S operating excellence from 2005 baseline. Specific reductions in priority chemicals such as VOCs and NOx are part of Dow global goals, with a target of a 30% reduction. Work processes are in place for decommissioning, demolishing, site cleaning, up to and including repurposing equipment and remediation. Dow's global mandate is to minimize, reduce or reuse, not create waste in the first place.

## ii. Handling, Treatment and Disposal of Wastes (OP64-75)

Each facility or site must manage wastes and wastewater to minimize adverse environmental impact and meet or exceed applicable government requirements. Management of waste includes handling, storage, analysis or characterization of waste streams, and employee and contractor hazard communication program maintained through hazard awareness, and safety data sheets.

There is a waste management hierarchy at Dow; source reduction/elimination, recycle, recover, convert, treatment, containment to contribute to waste reduction efforts and energy, water and materials conservation. The Dow External Waste Management Standard provides a process for auditing and approving waste management companies.

## Findings Requiring Action:

None.

#### Works in Progress:

None.

## **Improvement Opportunities:**

Fort Saskatchewan – The company tracks non-hazardous waste volumes and to further their sustainability journey, should consider setting reduction goals for non-hazardous waste. (OP60-61)

#### Successful Practices:

None.

## **Resource Conservation (OP76-80)**

The company has a commitment to reduce water consumption, greenhouse gases and energy consumption. Dow promotes resource conservation at every stage of the life cycle of their products.

For example, Dow has an internal award system, Waste Reduction Always Pays (WRAP) to encourage and reward waste reduction. The management systems supporting continual improvement in reducing the footprint of its operation are in place and meet expectations for Responsible Care.

## **Findings Requiring Action:**

None.

### Works in Progress:

None.

## **Improvement Opportunities:**

None.

## Successful Practices:

None.

## **Promotion of Responsible Care By Name (OP81-84)**

The company has done a very good job in promoting Responsible Care with its employees, contractors and in the community. The Dow use of social media as a tool for outreach and promotion of Responsible Care is well done. The use of TransCAER outreach opportunities to promote RC is also noted. In its review of the activities undertaken by the company the team is of the opinion that Responsible Care implementation expectations are being met.

## **Findings Requiring Action:**

None.

#### Works in Progress:

None.

## **Improvement Opportunities:**

Blenheim and West Hill – The company shall consider increasing the visibility of Responsible Care. See CIAC guidance document entitled Promoting RC Implementation and Guidance.

#### Successful Practices:

None.

#### **TEAM OBSERVATIONS CONCERNING STEWARDSHIP CODE**

The Stewardship Code addresses all company raw materials, products and services and definesexpectations for the care and control of same throughout their life cycle. The team is of the opinion that the company meets Responsible Care expectations for all reviewed Stewardship Code elements.

## **Expectations of Companies (ST85-114)**

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

The example provided of the Advanced Analytical department at Fort Saskatchewan, using measurement science to collaborate with suppliers for better measurement, and sharing knowledge gained by publication of analytical methods is a good example.

The activities of the Dow global product stewardship group, and their involvement with assessment of new commercial offerings, business risk review, managing change, and risk characterization is commendable.

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

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

- a. Raw Materials, Products and Services Characterization and Evaluation (ST93-99)
  For packagers, distributors, terminal operations, suppliers, contractors, a selection process is in place.
- b. Promotion of Responsible Care by Name (ST100-102)
  See the previous section on this subject for more details.
- c. Security (ST103)

Of note for security, is the subject of illicit diversion, and Dow's participation in ChemWatch with the RCMP.

- d. Communication Through the Value Chain (ST104-110) Nothing to report here
- e. Historical Hazardous Waste Practices (ST111-114)

Good coverage and seem to have a good handle on historical waste located on-site.

#### **Findings Requiring Action:**

None.

#### Works in Progress:

Corporate – The Company should complete the addition of Responsible Care language to its feedstock contracts for Dow Chemical. (ST101)

#### **Improvement Opportunities:**

Corporate DAS – It is an Improvement Opportunity to provide information about Responsible Care on the (DAS) product use guide(s). (ST102)

#### Successful Practices:

Blenheim – The site is using re-usable containers for product shipment. (ST85)

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

The company has procedures in place for the selection and management of third party products and service providers, has Responsible Care contractual language already in place, and is working to add more. There is an

approved contractor list in place, and contractors can be terminated if not in compliance. The External Manufacturing work process is followed throughout the life cycle of any external manufacturing project and/or activity. This includes, but is not limited to best practices related to the following: selection of external manufacturers who adhere to sound EH&S and Responsible Care, or similar guidelines. Every supplier contract contains a requirement that they meet the supplier code of conduct and notes Responsible Care. For distributors, expectations are around the principles of Responsible Care or Responsible Distribution. In general, the team has determined that DOW meets Responsible Care implementation expectations.

## Findings Requiring Action:

None.

## Works in Progress:

None.

## Improvement Opportunities:

Corporate – The company should review the third party audits of distributor facilities to ensure that all aspects of the codes are covered, specifically process safety management and community outreach (OP28-30; AC125-136)

## Successful Practices:

None.

#### **TEAM OBSERVATIONS CONCERNING ACCOUNTABILITY CODE**

The Accountability Code defines expectations for communication and dialogue with communities local to company manufacturing and distribution operations and transportation corridors, as well as other stakeholders with an interest in company activities. The team is of the opinion that the company meets Responsible Care expectations for all reviewed Accountability Code elements.

## **Operating Site Communities (AC125-136)**

With the exception of the following, code expectations have been implemented to meet Responsible Care expectations. The company has a clear definition of community, i.e. the direct neighbours to their facilities. Stakeholder that the company interacts with include direct neighbours and those who they would have a direct effect on, the neighbours employees and family members, customers, suppliers, first responders, first nations. This list is maintained and updated annually.

## **Findings Requiring Action:**

None.

## Works in Progress:

None.

#### Improvement Opportunities:

None.

## Successful Practices:

None.

## Other Stakeholders (AC137)

In general the company meets Responsible Care implementation expectations for all seven sub categories in this section.

## i. Public Policy (AC138-140)

Advancement of the Responsible Care ethic with municipal and provincial elected officials, was evident both corporately and at the site level.

#### ii. Finance (AC141-143).

The shareholders reports include Responsible Care.

#### iii. Consumers (AC144)

Omitted; no direct consumer contact.

#### iv. Transportation Corridor (AC145)

The company is an active participant in the national, regional and local TransCAER committees and activities. A Dow Employee is also the National TransCAER chair.

#### v. General Public (AC146)

Complaints are handled through 1-800 number, and managed depending on severity.

## vi. Non-Governmental Organizations (AC147-150)

Interactions with public interest groups are identified through social media, environmental contacts, relevant associations, community groups, anywhere there could be concern, they are engaged and also monitored.

#### vii. Business (AC151-152)

The team has no specific information about this topic.

#### **Findings Requiring Action:**

None.

## Works in Progress:

None.

#### **Improvement Opportunities:**

None.

#### Successful Practices:

Fort Saskatchewan – Proactive meeting with municipal officials to express concerns regarding potential adverse impact to proposed development. (AC138)

#### APPENDICES TO CODES: SOCIAL RESPONSIBILITY

This is relatively well understood and practiced throughout DOW. There is a corporate Global Citizenship Strategy. All employees are trained in business conduct and ethics. To improve food safety, DAS provides support for the Canadian Foodgrains Bank. Of note in the area of workplace diversity, over the last two years, managers were required to take unconscious bias training. There is a Women's Innovation Network is a group of Dow people working together to maximize the contributions of Dow women to the company's success. There is a Disability Employees Network, focuses on improving perception about people with disabilities, and raising awareness about the contributions they make. The GLAD network works on fostering an inclusive accepting environment so that people can excel at Dow, regardless of sexual orientation, gender identity, or gender expression. To improve local communities' social well-being, DOW contributes to local programs and projects, and uses these opportunities to showcase Dow's commitment to being a socially responsible company when donations are made. The employees at the site level participate in various charity campaigns, such as the

United Way. There is an excellent process in place, called the Dow Foundation, to assist in managing these contributions.

## **Findings Requiring Action:**

None.

## Works in Progress:

None.

#### Improvement Opportunities:

None.

#### Successful Practices:

Corporate – The company provides "unconscious bias" training to leadership and key management groups, and extends it to employees at large.

#### **APPENDICES TO CODES: INVOLVEMENT IN PUBLIC POLICY PROCESS**

See above under Other Stakeholders, i. Public Policy.

#### **Findings Requiring Action:**

None.

## Works in Progress:

None.

## Improvement Opportunities:

None.

## Successful Practices:

None.

#### **TEAM OBSERVATIONS ON THE COMPANY MANAGEMENT SYSTEM**

It is a requirement of Responsible Care that companies have a documented, self-healing management system or systems capable of identifying and responding to deficiencies and otherwise supporting continual improvement across all company business units, functions, and sites and as a framework for implementing the Responsible Care Commitments.

Globally, Dow has developed an integrated management system called Operating Discipline Management System (ODMS). ODMS is the company's comprehensive corporate management system that integrates the management systems for Manufacturing, Quality, Environmental, and Health and Safety with links to the People Systems. ODMS integrates common management processes within Dow to drive overall performance improvement. ODMS provides access to company policies, requirements, processes, best practices and procedures. ODMS is based on the plan-do-check-act cycle. Although Section 6.0 of ODMS is titled Responsible Care® (EH&S), it is the overall ODMS that ensures the Responsible Care® ethic is sustained throughout Dow globally and in Dow Canada. Each element of ODMS contains four levels of documents that seek to define the "who, what, when and how" of doing work as well as the proof that you did it.

The verification team studied the DOW management system (ODMS) and compared and contrasted the attributes of that system to those of a self-healing overall management system as discussed in the CIAC Management System Guide. The verification team's related observations to the company management

system(s) are as follows: the company's management system for Responsible Care is complete and comprehensive.

## **Findings Requiring Action:**

None.

## Works in Progress:

None.

#### Improvement Opportunities:

None.

#### Successful Practices:

None.

## **Observations on the PLAN Step**

In considering the PLAN Step of the DOW management system (ODMS), the verification team observed that staff actively seeks input from various sources, such as Responsible Care Commitments, stakeholders, business imperatives including various goals and objectives, laws and regulations, standards and benchmarks, that are then used in planning activities.

Plan of the PDCA cycle is covered under Leadership Responsibility and 05.02 Planning, which also incorporates Objectives and Targets, as well as Work Process Management.

The team agrees that the PLAN part of the company's management system meets all implementation expectations for Responsible Care.

## **Findings Requiring Action:**

None.

#### Works in Progress:

None.

## Improvement Opportunities:

None.

## Successful Practices:

None.

#### **Observations on the DO Step**

During the DO Step in the management system, the company converts the decisions of the PLAN Step into action and ensures awareness and understanding by all involved. The team observed that the company has implemented an effective organizational structure, has assigned responsibilities to appropriate personnel, supplies sufficient training and resources to execute planned actions and has developed and documented standards, procedures and programs generally covering all aspects of Responsible Care.

The Do step of the PDCA cycle is covered under Implementation and Operation. This covers Training, Communication, Document and Record Management, Procedures, and Management of Change.

The team agrees that the DO part of the company's management system meets all implementation

Findings Requiring Action: None.
Works in Progress: None.
Improvement Opportunities: None.
Successful Practices: None.
Observations on the CHECK Step In considering the CHECK Step of the DOW management system (ODMS), the verification team observed the following: key performance indicators are routinely monitored for alignment with expectations; regular internal and external audits are conducted to ensure compliance with regulations, standards, company policies and procedures, and the incident investigation process addresses requirements for root cause analysis.
The Check step of the PDCA cycle is covered under Checking and Corrective Action. This covers Measurements, Corrective & Preventive Actions, Self-Assessments, Investigations and Audits.
The team agrees that the CHECK part of the company's management system meets all implementation expectations for Responsible Care.
Findings Requiring Action: None.
Works in Progress: None.
Improvement Opportunities: None.
Successful Practices: None.
Observations on the ACT Step

In considering the ACT Step of the DOW management system (ODMS), the verification team observed the following: the company performs a range of activities on a routine and regular basis satisfying this part of their management system. The activities are comprehensive and tie the CHECK step with the PLAN step.

The Act step is the final step of the PDCA cycle and is covered under Management System Review. Organization Leaders must review their management system at defined frequencies to ensure the continuing suitability, adequacy, and effectiveness of the overall system. It also dictates that leaders initiate and/or leverage changes and improvements. Each management system review must include review of all ODMS elements applicable to the organization.

The team agrees that the ACT part of the company's management system meets all implementation

expectations for Responsible Care.

Findings Requiring Action: None.		
Works in Progress: None.		
Improvement Opportunities: None.		

Successful Practices:

expectations for Responsible Care.

None.

#### 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 are 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 the DOW 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 team is of the opinion that the Responsible Care Ethic and Principles for Sustainability are guiding company decisions and actions, and that the company aligns very well with all eight Principles for Sustainability and DOW is encouraged to continue making progress in all areas.

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

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

**DCC:** Dow Canada produces raw materials that its customers turn into everyday products that enhance people's lives through the application of chemistry, such as recyclable plastics, thinner films for food preservation, and energy efficient insulation with no CFCs. The safety culture and management systems ensures that everyone operates in a safe and reliable manner.

**DAS:** Dow AgroSciences Nitrogen Stabilizers products, eNtrench and N-Serve, are applied with fertilizer in the fall or spring. They stabilize the applied nitrogen in the root zone where the plant needs it and reduce losses due to volatilization and leaching. The benefits include higher crop yields per acre, as well as environmental protection. On average eNtrench and N-Serve reduce greenhouse gas emissions by 51% and leaching by 16%.

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

**DCC:** Dow Canada engages to protect their communities by sharing worst case scenarios and educating on public safety through an integrated public information program that includes Community Advisory Panels, public outreach events, social media, and an emergency alert system.

**DAS:** In response to concerns around pollinator safety, a one page resource was developed to assist local councils with educating their constituents on roadside spraying programs. The document explains how herbicides work and how they help in the establishment of a positive habitat for pollinators in rights of way and roadsides.

#### TAKE PREVENTATIVE ACTION TO PROTECT HEALTH AND THE ENVIRONMENT:

**DCC:** Dow Canada is helping reduce Greenhouse Gas emissions across all manufacturing sites in Canada. In addition, Dow Canada's Fort Saskatchewan Power & Utilities plant has successfully reduced NOx emissions by more than 90%.

**DAS:** Researchers at Dow AgroSciences through Nexera Canola and the resulting Omega-9 Canola Oil provide food service operators and packaged food companies a functional, healthier oil alternative. Omega-9 Oils feature zero transfat, a long shelf life, and their nutritional advantages have resulted in the removal of over 1.5 billion pounds of trans and saturated fats from the North American diet.

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

**DOW:** To encourage innovative solutions to technical challenges, Dow Alberta Operations has introduced an annual Innovation Day in which new technologies and best practices are showcased and shared across all businesses and functions.

**DAS:** In 2016, Dow AgroSciences registered the Sentricon termite control system for use in Canada. This unique delivery system ensures that there is minimal human, animal and environmental exposure versus traditional liquid application.

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

**DCC:** Through a collaborative effort to explore an alternative for plastic waste, Dow partnered with the Flexible Packaging Association, Republic Services, Agilyx, Reynolds Consumer Products and the city of Citrus Heights, California, to establish the Energy Bag Pilot Program, which aimed to divert non-recycled plastics from landfills and optimize their resource efficiency across the product lifecycle. Through this program, Dow helped turn 6,000 pounds of previously non-recycled plastic waste – juice pouches, candy wrappers and plastic dinnerware – into 512 gallons of fuel.

**DAS:** In order to allow growers to experience the technology, but protect against issues with the trade channel, DAS developed a comprehensive stewardship protocol for the Enlist Weed Control System. Farmers must follow strict guidelines to avoid problems such as cross contamination. DAS, along with the grower, monitor and document the entire life cycle from field selection to harvest.

## **UNDERSTAND AND MEET EXPECTATIONS FOR SOCIAL RESPONSIBILITY:**

**DCC:** Dow Canada has a robust citizenship strategy for its operating communities that supports STEM outreach and community well-being. This includes national partnerships with organizations such as FIRST Robotics, Habitat for Humanity, Let's Talk Science, as well as localized programs that include employee engagement opportunities.

**DAS:** In 2016, Dow AgroSciences Canada formalized their outreach program to educate the public about agriculture with active engagement at three key points – student (Ag in the Classroom, Ag for Life), industry (internal Grow the Conversation, external Ag More than Ever, Confident Conversations) and public (founding member of the Canadian Centre for Food Integrity and Farm and Food Care).

## 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:

**DCC:** Dow Chemical Canada works to proactively engage with regulators and legislators to identify areas of cooperation and improvement in areas such as rail safety, ambient air monitoring, land use and buffer zones around industrial sites, and climate change initiatives.

**DAS:** Dow AgroSciences Canada has led the effort to engage with the Pest Management Regulatory Agency (PMRA), Health Canada to reduce animal testing of pesticide products.

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

**DCC:** Dow Chemical Canada actively advocates Responsible Care® through social media to promote Dow's application of the ethic and principles of Responsible Care® with a wider public audience, such as the "What Responsible Care Means to Me" video series.

**DAS:** A joint commitment to Responsible Care is included in section four of the DAS Annual Crop Protection Product Agreement with each one of its distributors. Within this section, specific stewardship practices (for both Dow AgroSciences and the Distributor) are outlined that align with the principles of Responsible Care and each company representative signs to indicate their agreement and commitment.

## **VERIFICATION TEAM CONCLUSION**

This report documents the observations and conclusions of the independent verification team tasked with conducting a Responsible Care Verification of Dow Canada (Dow). The verification was undertaken on November 8-10 and 15-17, 2016, at the Canadian head office in Calgary, and the Fort Saskatchewan, Blenheim and West Hill sites. This was the seventh Responsible Care verification completed for the corporation.

During the verification of Dow, the verification team looked for evidence that the company was addressing the expectations documented in the Responsible Care Commitments (152 code elements plus 28 benchmark and collective expectations). The team considered all aspects of the Responsible Care Commitments during the verification.

As a result of the examination conducted, and in consideration of the observations communicated within this report, the verification team is of the opinion that the Responsible Care Ethic and Principles for Sustainability are guiding company decisions and actions, and that a self-healing management system is in place to drive continual improvement. The team believes that the company is capable of responding to the range of Findings Requiring Action identified during the verification, as summarized in the Executive Summary and discussed in detail in the report. The verification is complete and no further involvement is required by the verification team.

## **APPENDIX 1: COMPANY RESPONSE TO VERIFICATION REPORT**

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

In Canada, Dow was instrumental in developing Responsible Care® and continues to be a leader in Responsible Care® efforts, applying Responsible Care® principles not only at a Canadian level, but also across Dow global operations. Dow embraces constructive opportunities for continuous improvement within our Canadian operations and welcomes the management systems review that verification brings as part of our transparency and accountability to our communities and stakeholders. The benefits of our business – products and services that make life better for people around the world – are accompanied by a commitment to Responsible Care in the manufacturing and safe management of chemicals worldwide.

Dow Canada 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 our employees and 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 and those Works in Progress where completion of such is action required to close gaps with respect to requirements, as identified by the verification team. Our progress in implementing those plans will be discussed when preparing our Annual Statement of Re-Commitment to Responsible Care, and communicated to the verification team at the time of our next verification.

Courtenay Boyda Dow Canada Responsible Care® Code Coordinator Dow Chemical Canada ULC

## **APPENDIX 2: INTERVIEW LISTS**

## **A: Company Personnel Contacted During Verification Process**

NAME	POSITION	LOCATION
Courtenay Boyda	Dow Canada Responsible Care® Code Coordinator	Fort Saskatchewan, AB
	EH&S Regulatory Specialist	
Janet Melnyk	Operations Code Coordinator	Fort Saskatchewan, AB
	Polyethylene Operations Leader	
Jim Hanna	Stewardship Code Coordinator	West Hill, ON
	Product Regulatory Services Specialist	
Shawna Bruce	Accountability Code Coordinator	Fort Saskatchewan, AB
	Public Affairs Leader	
Deborah Stephens	Dow Chemical Canada President	Calgary, AB
Brad Orr	Dow AgroSciences Canada President	Calgary, AB
Loralee Orr	Communications Leader	Calgary, AB
Michael Burt	Director, Government Affairs & Public Policy	Calgary, AB
Chad Grekul	Regulatory Manager	Calgary, AB
Carol Roesler	Senior Administrative Specialist, Calgary Emergency Preparedness & Response Focal Point	Calgary, AB
Mike Dziarmaga	AB Operations Maintenance Director	Fort Saskatchewan, AB
Jacint Domenech	AB Operations Responsible Care Leader	Fort Saskatchewan, AB
Christopher Schober	AB Engineering Solutions Resource Leader	Fort Saskatchewan, AB
Karen deMontarnal	Engineering Solutions Regional Operations Leader	Fort Saskatchewan, AB
Richard Brausen	Senior Analytical Technologist	Fort Saskatchewan, AB
Alvin Loh	AB Operations Site Logistics Leader	Fort Saskatchewan, AB
Doug James	Distribution Risk Mgmt. and Rail Leader	Hahnville, LA, USA
Regina Scarborough	Associate Director, Transportation Regulatory Compliance and Risk Management	Freeport, TX, USA
Rolando Garcia	EH&S Delivery Leader	Fort Saskatchewan, AB
Amit Sangha	Process Safety Focal Point, Hydrocarbon Products & Wells	Fort Saskatchewan, AB
Eric Anderson	Process Safety Focal Point, Polyethylene	Fort Saskatchewan, AB
Trevor Griffith	Emergency Services & Security Leader	Fort Saskatchewan, AB
Gerald Weissbach	Human Resources Technical Advisor	Fort Saskatchewan, AB
Gonzalo Beltran	AB Operations Site Director, Vice-President Dow Chemical Canada ULC	Fort Saskatchewan, AB
Carol Janz	Work Place Services Delivery Lead	Fort Saskatchewan, AB
Marcella deJong	EH&S Regulatory Manager	Fort Saskatchewan, AB
Stephanie Kozey	EH&S Regulatory Specialist	Fort Saskatchewan, AB
Elaine Wasylenchuk	Environmental Operations & Energy Systems Operations Leader	Fort Saskatchewan, AB
Randy Mak	Operating Technician, Hydrocarbon Products	Fort Saskatchewan, AB
Ronda Gras	Analytical Sciences Associate	Fort Saskatchewan, AB
Jim Luong	Fellow, Analytical Sciences	Fort Saskatchewan, AB
Audrey Sidebottom	Canadian Remediation Leader	Fort Saskatchewan, AB
Neji Isaac	Strategic Sourcing Specialist	Fort Saskatchewan, AB
Stephen Tong	Prentiss Maintenance Leader	Prentiss, AB
Don McColman	EH&S Delivery Technician	Fort Saskatchewan, AB
Rory Ollenberger	Operating Technician, Hydrocarbon Products	Fort Saskatchewan, AB
Sukhdeep Bansal	Site Analytical Leader	Fort Saskatchewan, AB

Pete Howard	EH&S Delivery Technician	Fort Saskatchewan, AB
Amy Burkholder	Health & Safety Coordinator	Fort Saskatchewan, AB
Lindsey Watson	EH&S Lead	Fort Saskatchewan, AB
Mike Curtain	EH&S Delivery Technician	Fort Saskatchewan, AB
Eva Serrano	EH&S Delivery Leader	Fort Saskatchewan, AB
Luc Van Belleghem	Western North America Process Safety Leader	Fort Saskatchewan, AB
Kelly Jenereaux	Associate EH&S Delivery Specialist	Blenheim, ON
Mike Gardiner	Production Engineer II, M&E	Blenheim, ON
Tom Hoy	Eastern Canadian Seed Production Manager	Blenheim, ON
Ron Sullivan	Customer Service / Logistics Manager	Blenheim, ON
Christine DeRooy	Technician III, M&E	Blenheim, ON
Paul Welton	Corn Plant Production Operator	Blenheim, ON
Mike Hall	Corn Plant Production Operator	Blenheim, ON
Phil Holden	Quality Control	Blenheim, ON
Mike Sullivan	Contractor	Blenheim, ON
David Gilliland	R&D Site/Operations Leader	Saskatoon, SK
Sherry Gore	Research Biologist	Saskatoon, SK
Kim Steckler	Lab Manager	Saskatoon, SK
Greg Johnston	Plant Manager	West Hill, ON
Dale Stevenson	EH&S Leader	West Hill, ON
Wolfram Esser	EH&S Specialist	West Hill, ON
Maureen Lyn	EH&S Contractor (Kelly Services)	West Hill, ON
Paul Spicer	Activity Coordinator/Gate Keeper	West Hill, ON
Shawn Talbot	Bulk Terminal Technician	West Hill, ON
Connie Deford	Director, Product Sustainability & Compliance,	Midland, Michigan, USA
	Product Regulatory Management	
Melissa Schisler	Associate EH&S Product Stewardship Manager, EH&S	Midland, Michigan, USA
John Heater	Associate Supply Chain Transportation EH&S Manager, North America	Philadelphia, PA, USA
	Manager, North America	

## **B: External Stakeholders Contacted During Verification Process**

NAME	POSITION	LOCATION
Joan Lampkin	Dow MEGlobal Fort Saskatchewan CAP	Fort Saskatchewan, AB
Jim Nelson	Dow MEGlobal Fort Saskatchewan CAP	Fort Saskatchewan, AB
Jim Gendron	Dow MEGlobal Fort Saskatchewan CAP Facilitator	Fort Saskatchewan, AB

