RESPONSIBLE CARE® Verification Report

Imperial Oil Ltd. Products and Chemicals Division June 14 -15, 2016



Chemistry Industry Association of Canada



Responsible Care[®] Our commitment to sustainability.

Disclaimer

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

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

EXECUTIVE SUMMARY

The verification of Imperial Oil Products and Chemicals Division was conducted on June 14 and 15, 2016. This was the seventh verification of this division of Imperial Oil Ltd. The 2016 verification focused on the Sarnia ON location and included a review of the 2013 verification, interviews with the Executive Contact, senior managers, applicable functional managers and hourly employees. There was also a physical tour of the Chemicals and Products process area. On July 8, 2016, two team members representing the Sarnia community met with Cal Gardner the City of Sarnia Emergency Planner.

While considering all aspects of the Responsible Care Ethic and Commitments protocol during the verification the team concentrated on company management systems that address current areas of focus by the CIAC. and the Sarnia community. This included:

- The Operational Integrity Management System Critical Verification Measurements. (OCVM)
- The Marine Selection, Shipment and loading Management system.
- The site Pipeline Maintenance and Safety Management System.
- Community Awareness and Emergency Response

The Imperial Oil Products and Chemicals Operational Integrity Management System (OIMS) is a corporate management system based on the Plan, Do Check and Act self-healing model that is fundamental to Responsible Care. There is concern, however, that this management system as applied to certain CIAC. Responsible Care Commitments, described in this report, is not comprehensive enough to support Responsible Care expectations, specifically, in areas such as sharing and coordinating emergency management plans and risk communication. As an example, the sub-sections of OIMS element 10.2 are not aligned with the expectations of the CIAC. in areas such as regular, proactive and measurable risk communication with the community and sharing emergency planning with neighboring industries.

Based on this assessment, the verification team advises the Company to invite the verification team to return within one year of the date of the initial draft report (November 25th. 2016) to assess progress on addressing the report Findings Requiring action and conclude the verification process. The Team has listed eight Findings Requiring Action relating to code elements covering the promotion of Responsible Care, expectations with respect to other parties, employee Responsible Care training, community and employee risk communication, sharing of emergency response plans and management of community contact information. As a specific comment, there is a need to review the OIMS and Responsible Care cross reference document to ensure the intent of all Responsible Care Code elements are supported by OIMS.

Signed:

Date: November 25, 2016

Cameron D Dillabough 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: Chan Lau Supply and Planning Analyst Imperial Oil, Calgary AB 705 476 3136 Chantong.lau@esso.ca

January 21st, 2019

Report addendum

2016 IOL Products & Chemicals Verification

This report addendum will summarize the 2016 Verification status as of January 31st 2019. The addendum will include a time line, to the present, and a recommendation on completing the process.

VERIFICATION TIME LINE:

<u>June 2016</u> the verification visit was conducted. <u>November 2016</u> verification report issued. (5 months) <u>June 2018.</u> (19 months) "official" company response to the report received. There had been telephone calls and email exchanges in 2017. <u>September 2018.</u> (3 months). Team response to the Company requesting additional support information. <u>January 2019.</u> (5 months) Company reply to the team request for additional information. <u>June 2019.</u> (5months) The next scheduled verification Since the team visit in 2016, there has been considerable work invested by the Company and the team in

addressing the outstanding Management System improvements. To deliver some resolution for both the Company and the new team, we provide the following comments with respect to specific Findings Requiring Action:

- FRA#1 Completed
- FRA#2 Completed
- FRA#3 Additional work required
- FRA#4 Additional work required
- FRA#5 Completed

FRA#6 – Completed (This Finding could possibly now be considered a Successful Practice in that the training program is very thorough and well presented.)

FRA#7 – Completed

FRA#8 - Completed

The management system changes and improvements proposed by the Verification Team and accepted by the Company should be verified as a "practice in place". In addition, concepts such as <u>integrating</u> emergency response management systems with fence-line industrial neighbours and the city and continuing with ground-proofing and implementation of subsequent action plans in relation to Operations Code element OP39 should also be verified as a "practice in-place".

To that end, the verification team recommends that no further work be assigned to the 2016 verification and that verification be integrated into the 2019 verification scheduled for June 2019. A new verification team would be assigned by the CIAC. at that time.

(ID Mahoux

Signed:

Date: January 31, 2019

SUMMARY OF VERIFICATION TEAM OBSERVATIONS

Findings Requiring Action:

1. There is a Finding Requiring Action to review the cross- reference mapping document for the Responsible Care Code elements and the OIMS elements to ensure the intent and expectations of the Responsible Care Code elements are supported by OIMS.

2.It is a finding requiring action to review OIMS element 10 and ensure that the application of sub-section 10.2 supports the expectations and requirements of the Responsible Care Commitments Operations Code elements OP32,33, 35,36,39 and Accountability Code element AC129. The focus of these various Responsible Care elements is on effective internal and external risk communications and coordinating emergency planning information with the community and neighboring industry.

3.It is a finding requiring action to align the Best practices for External Affairs principles, (BPEA) as quoted in the Detailed Responsible Care Mapping Document, with the requirements and expectations of the following Responsible Care Commitments.

- AC126 requiring stakeholder lists be reviewed and updated annually;
- AC147-150 requiring an updated listing and proactive contact with non- governmental organizations (NGOs); and
- Quantify the effectiveness of the Community Dialogue management system as described in the Purpose and Scope preamble to the Accountability Code and Responsible Care management system Benchmark and Collective Expectation #19.

4. It is a Finding Requiring Action to develop a management system that would ensure Products and Chemicals personnel and contractors are informed of the potential hazards associated with a site emergency at neighboring chemical facilities. (AC-133)

5. It is a Finding Requiring Action that there is not a formal management system in place, within the Chemicals and Products Division, to promote Responsible Care by name. (Operations Code, Section 7)

6. It is a Finding Requiring Action to develop a management system to ensure all IOL Products and Chemicals employees receive the CIAC. (or equivalent) on-line Responsible Care training and periodic reviews.

7. It Is a Finding Requiring Action to develop a management system to ensure employees and contractors working alone in isolated locations have effective safety and security oversite. (reference OIMS 5.5)

8. It is a Finding Requiring Action to revise current customer evaluation management systems to ensure that a review of customer pipeline maintenance and inspection policies and procedures are part of the customer Responsible Care performance evaluation process. (ST118-119)

Improvement Opportunities:

1. There is an Opportunity for Improvement to review all Responsible Care related documents and change any C.C.P.A. references to CIAC.

Successful Practices:

1. The team judges as a Successful Practice the implementation of "Safe Work Practice" teams. These teams are given a budget and work as a group to make small changes in their work place to improve the safety aspects of their job functions. All changes are subject to all the normal OIMS new project and management of change criteria.

2. The team judges as a Successful Practice utilizing specific colored hard hats to identify new short service employees on site.

3. The team judges as a Successful Practice the variety of employee benefit programs beyond current accepted norms such as Higher Education Awards Program (for dependents), Physical Fitness Refund Program and personal fuel purchase discounts.

4. The team notes as a Successful Practice the comprehensive approach to sample collection frequency and sampling locations in relation to the Combined Modeling and Monitoring Program (CAMM). CAMM is a methodology to refine or confirm benzene emission levels across the Imperial Oil Sarnia Site.

5. The team lists as a successful practice the level of commitment of Imperial Oil Products and Chemicals representatives to voluntarily serve on the CIAC. Board of Directors or one of the many CIAC. operational sub-committees.

INTRODUCTION About Responsible Care Verification

As a member of the Chemistry Industry Association of Canada (CIAC), the most senior executive responsible for Imperial Oil Limited Products and Chemicals (IOL P/C) 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, IOL P/C 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 (<u>www.canadianchemistry.ca</u>). IOL P/C 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 <u>www.canadianchemistry.ca</u>, or by contacting Gilles Laurin, Director, Responsible Care at <u>glaurin@canadianchemistry.ca</u> or (613) 237-6215 extension 233.

Name	Affiliation	Representing
Cameron Dillabough	CIAC	Team Leader
Debbie Krukowski	CIAC	Community at Large Representative
James Anger	The Blue Water Community Advisory Panel Co-Chair	The Sarnia community

The verification team was comprised of the following individuals.

About IMPERIAL OIL LIMITED PRODUCTS AND CHEMICALS

Imperial Oil-Chemicals, headquartered in Calgary, is a division of Imperial Oil Limited and is a major producer and seller of petrochemicals, ranging from primary petrochemicals to plastic resins and aliphatic and aromatic solvents.

Exxon Mobil Corporation is the major shareholder of Imperial Oil Ltd., having an equity position of 69.6 %, unchanged for more than a century. The balance of the ownership is widely dispersed and held by minority shareholders. Imperial Oil is self-financing and governance is provided by a Canadian board of directors, consisting of five non-employee directors and two employee directors.

As an affiliate of Exxon Mobil Corporation, IOC has access to Exxon Mobil Research and Development (R&D) for both processes and products. Imperial and Exxon Mobil also operate an employee interchange program to provide relevant technical and management development opportunities.

Imperial's chemicals business is managed within the Products (petroleum) & Chemicals Division, with a senior executive - the Manager of Imperial Oil Petrochemicals, reporting directly to Imperial Oil's Chairman, President and Chief Executive Officer. Imperial Oil, at a corporate level, develops and maintains up-to-date key policies for which all employees, associates, suppliers, and contractors are expected to follow.

The Manager of Petrochemicals has full accountability for all elements of the chemicals business. He is the CIAC signing executive and is fully responsible for the company's commitment to Responsible Care. Most of IOC's principal functions (i.e. production, sales, and business development) are structured within an organization reporting to the Manager of Petrochemicals. IOC also receives services from other

functional organizational units within Imperial -- such as distribution, public affairs, materials procurement, legal, medical, and accounting. IOC has three main business entities: Basic Chemicals, Intermediates (solvents, fluids) and Polymers. The chemical production units are located at one large, multi-unit manufacturing site in Sarnia that produces approximately 1.1 million tonnes per year of chemical products. Feed stocks are obtained from externally purchased sources and from intermediate (petroleum) refinery streams at the site, principally light hydrocarbons (ethane, propane, butanes, propylenes, butylenes and naphthas).

Sarnia-produced chemical products are sold both domestically in all parts of Canada and internationally (primarily USA) using rail, truck and marine modes of transportation, with rail and truck the dominant modes

Additionally, the direct chemicals sales organization manages the sale of some Exxon Mobil chemical product lines to Canadian customers, such as the additives to soften plastics. It also manages the direct sales function of domestically produced chemicals to customers in the United States through its CIOL subsidiary (Canada Imperial Oil Limited).

Planned site changes for 2016 include cessation of sales and production of cyclopentane and the installation of a high-energy efficiency gas cracker furnace.

For more information on Imperial Oil-Chemicals and links to Imperial Oil please see: <u>http://www.imperialoil.com/Canada-English/products_chemical.aspx</u>

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

2.1 Operations Code:

The Operational Integrity Management System (OIMS) is the overarching management system for Imperial Oil which encompasses Imperial Oil-Chemicals operations. This management system in comprised of eleven elements and sixty- four related "expected outcomes" that directly correlate to the Responsible Care® Operations Code elements described in sub-sections 2.1.1, 2.1.2, 2.1.3 and 21.4. This statement is supported by the gap analysis conducted by the company in preparation for this verification. In 2013 the Lloyd's Register Quality Assurance group certified that the OIMS met or exceeded the requirements of ISO 14000:2004 Environmental Management Standard and the OHSAS 18001:2007 Occupational Health and Safety Standard.

2.1.1 Design and Construction of Facilities and Equipment

(See comments above pertaining to the Operations Code)

2.1.2 Operations Activities

While site operations activities are generally well managed and various auditing processes are in-place to ensure compliance with the expectations of the corporate OIMS and various government legislated requirements, there is a concern by the verification team that the functional application of the OIMS does not take into account the aspirations of the Responsible Care Ethic in areas which relate to the sharing of emergency response plans with the community (the city of Sarnia) and neighboring industries. There is also not a provision, or management system, within the OIMS management system to ensure on a regular basis that industrial and residential residents are aware of what action to take in the event of a site emergency that could have off-site ramifications. Nor is there a requirement to inform operations employees in the

Products and Chemicals area what potential hazards are associated with neighboring industries. The verification team has listed a Finding Requiring Action relating to these management system gaps.

There had been an effort, since the previous verification, to discuss the site emergency alarms and the concept of shelter-in-place with new private commercial businesses located near the site.

Findings Requiring Action:

It is a finding requiring action (#2) to review OIMS element 10 and ensure that the application of subsection 10.2 supports the expectations and requirements of the Responsible Care Commitments Operations Code elements OP32,33, 35,36,39 and Accountability Code element AC129. The focus of these various Responsible Care elements is on effective internal and external risk communications and coordinating emergency planning information with the community and neighboring industry.

2.1.3 Safety and Security

There is are corporate level management systems in place to comply with the expectations of this subsection of the Operations Code. Pertaining to safety management the OIMS has been certified as meeting the criteria of the ISO OHSAS18001-2007 standard for occupational health and safety. Security management requirements that meet Responsible Care requirements are embedded in various subsections of the OIMS. Internal corporate security audits are conducted on the following frequency.

Annually:

Security Program Review. IOL and ExxonMobile Corp. OIMS Internal Assessment. Assessors assembled from other ExxonMobile Corp. sites.

Tri-annually:

Quality Assurance Security Review. IOL and ExxonMobile Corp. OIMS External Assessment. ExxonMobile Corp. Global Assessment Team.

Every seven years:

Security Risk Assessment. ExxonMobile Corp. Global Risk Assessment Team. During the verification process the verification team reviewed the third-party tank truck loading process in relation to the safety and security oversite of third-party tank truck drivers. The verification team has listed a Finding Requiring Action to review the management system(s) related to oversite of employees and contractors working alone in isolated areas.

Findings Requiring Action:

It Is a Finding Requiring Action (#7) to develop a management system to ensure employees and contractors working alone in isolated locations have effective safety and security oversite. (reference OIMS 5.5)

Successful Practices:

The team notes as a Successful Practice (#1) the implementation of "Safe Work Practice" teams. The teams are given a budget and work as a group to make small changes in their work place to improve the safety aspects of their job functions. All changes are subject to all the normal OIMS new project and management of change criteria.

The team notes as a Successful Practice (#2) utilizing specific colored hard hats to identify new short service employees on site.

2.1.4 Environmental Protection

OIMS Element 6.7 addresses and controls the environmental aspects of operations relating to policy, regulatory compliance and continual improvement. Continual improvement is accomplished through Environmental Business Planning process. OMIS 6.8 addresses environmental performance where emissions, and wastes are tracked as a methodology to meet regulatory and continual improvement goals. As noted earlier these and other OMIS elements have been certified as meeting ISO14000:2004 criteria.

Successful Practices:

The team notes as a Successful Practice (#4) the comprehensive approach to sample collection frequency and sampling locations in relation to the Combined Modeling and Monitoring Program (CAMM). CAMM is a methodology to refine or confirm benzene emission levels across the Imperial Oil Sarnia Site.

2.1.5 Resource Conservation

Resource conservation is achieved through the Environmental Business Planning process with supplemental focus areas on energy efficiency, reduction of fugitive emissions and flaring (wasted raw material and energy). Reduction of process inputs including energy and water use is a corporate goal of Imperial Oil. There is a stated corporate goal of reducing energy usage by at least one percent a year.

In 2013 a Products and Chemicals process improvement team won an ExxonMobile Chemicals Responsible Care award for a process improvement change that reduced flaring during the fluidized Catalytic Cracking start-up process by an estimated 220,000 pounds.

2.1.6 Promotion of Responsible Care by Name

The 2013 verification report noted a Finding Requiring Action to develop a management system to promote Responsible Care by name. It is the expectation of the CIAC. that each member company would have such a management system. There has been some improvement in areas such as including a Responsible Care reference in the Neighbor News, a site related community newsletter and in documentation related to the Products and Chemicals Division. However, there is not a visible management system to address and promote Responsible Care visibility and name recognition within the production unit or to provide Responsible Care related training for employees of the Products and Chemicals production unit. The verification team has listed two findings related to these Responsible Care expectations.

Findings Requiring Action:

It is a Finding Requiring Action (#5) that there is not a formal management system in place, within the Chemicals and Products Division, to promote Responsible Care by name. (reference the Responsible Care Commitments number eight)

It is a Finding Requiring Action (#6) to develop a management system to ensure all IOL Products and Chemicals employees receive the CIAC. (or equivalent) on-line Responsible Care training.

2.2 TEAM OBSERVATIONS CONCERNING STEWARDSHIP CODE

As previously stated in this report the Canadian entity that is Imperial Oil and the Chemicals and Products Division are majority owned subsidiaries of ExxonMobil Corp. All expectations of the technical aspects to bring products to market be it research & development, compliance with regulations, dissemination of product health and hazard information, environmental concerns and technical interface with suppliers and customers are in place and administered at the corporate level under the Global Business OIMS. (GBOIMS) A Canada specific management system entitled "Intermediates Canada Administration Procedures" (ICAP) has components that cover the Stewardship Code expectations for the section of the Responsible Care codes entitled "Expectations of member companies with respect to other parties." The concept of "employees as ambassadors" is a key component of the ICAP for engaging customers including the promotion of the principles of Responsible Care in supplier and customer selection, audits and expectations of continual improvement.

2.1.1 Expectations Beyond R&D

2.1.2 Expectations of Companies with Respect to Other Parties

As related in the previous section there are policies and procedures related to the GBOIMS and more specifically to the ICAP that generally support the expectations of section 2.1.2. However, based on verification interviews, procedures may not be comprehensive enough to focus on specific or unique customer Responsible Care expectations. As an example, the maintenance and inspection policies and procedures of a by-product pipeline partially owned by a customer and partially located on third party property, are not part of the customer Responsible Care performance evaluation process.

Findings Requiring Action:

It is a Finding Requiring Action (#8) to revise current customer evaluation management systems to ensure that a review of customer pipeline maintenance and inspection policies and procedures are part of the customer Responsible Care performance evaluation process. (ST118-119)

2.1.3 Communication Through the Value Chain

The various policies and procedures of both the GBOMIS and the ICAP management systems (see Stewardship Code observations above) have components that satisfy the requirements of sub-sections 2.1.1, 2.1.2 and 2.1.3 of the Stewardship Code.

2.3 TEAM OBSERVATIONS CONCERNING ACCOUNTABILITY CODE

The guiding management system for the Responsible Care Accountability Code elements is OIMS element 10 which addresses community expectations and emergency preparedness and is supported by a corporate management system entitled "ExxonMobil Best Practices for External Affairs". (BPEA)

2.3.1 Operating Site Communities

Imperial Oil-Chemicals Sarnia location has a management system to engage the community through various avenues that include active membership on the Blue Water Community Advisory Panel, annual meetings with the city of Sarnia mayor, a community newsletter, a community opinion survey, (five- year frequency) participation of site employees in various community events and charities and the publication of the parent company's "Corporate Citizen Summary Report". The Sarnia site has a management system to receive and respond to questions or concerns that might be generated by near neighbours of the site or residents of the greater Sarnia area. Since the 2013 verification an effort has been made to contact new residential and commercial neighbors to discuss site risks and emergency preparedness. While both management systems listed above (BPEA and the site- specific management system) contain elements that support the requirements of Section 2.3.1, the specific requirements of Accountability Code element AC129, AC133 and Operations Code element OP-39 are not addressed. These code elements focus on risk communication, tracking of residential and industrial neighbors and ensuring on a regular frequency these neighbors are aware of actions required by them in the event of a site emergency.

The verification team has listed two Findings Requiring Action pertaining to community dialogue and risk communication where the OIMS, as applied, is not sufficiently comprehensive to address all Responsible Care expectations in this area.

Findings Requiring Action:

It is a finding requiring action (#2) to review OIMS element 10 and ensure that the application of subsection 10.2 supports the expectations and requirements of the Responsible Care Commitments Operations Code elements OP32,33, 35,36,39 and Accountability Code element AC129. The focus of these various Responsible Care elements is on effective internal and external risk communications and coordinating emergency planning information with the community and neighboring industry. It is a Finding Requiring Action (#4) to develop a management system that would ensure Products and Chemicals personnel and contractors are informed of the potential hazards associated with a site emergency at neighboring chemical facilities. (AC-133)

2.3.2 Other Stakeholders

The management systems described in section 2.3 with an additional management system entitled "The Issue Management Process" contain the elements that support the requirements of section 2.3.2., with the exception, of a Responsible Care requirement to proactively identify and communicate with "public interest groups, advocacy groups (NGOs), or other such groupings of people with a common interest in issues related to the company's operations or products". (AC 147-150) Stakeholder lists and recent updates reviewed during the verification were not always current in relation to listed stakeholders. The team has listed one Finding Requiring Action in this area.

Findings Requiring Action:

It is a finding requiring action (#3) to align the Best practices for External Affairs Principles, (BPEA) as quoted in the Detailed Responsible Care Mapping Document, with the requirements and expectations of the following Responsible Care Commitments.

- AC126 requiring stakeholder lists be reviewed and updated annually;
- AC147-150 requiring an updated listing and proactive contact with non-governmental organizations (NGOs); and
- Quantify the effectiveness of the Community Dialogue management system as described in the Purpose and Scope preamble to the Accountability Code and Benchmark and Collective Expectation #19.

APPENDICES TO CODES: SOCIAL RESPONSIBILITY

Imperial Oil Products and Chemicals does have a Social Responsibility statement on their website and an explanation of the four management systems relating to how Social Responsibility is administered. The four management systems are: Best Practices for External Affairs (BPEA), The Issue Management Process (IMP), Investor Relations, Community Investment and OIMS 10.1 Community Awareness. There is also a published suite of business ethics policies pertaining to company operations. Imperial Oil and their employees contribute greatly both monetarily and through personal involvement to the greater Sarnia community. For additional information visit: www.imperialoilchemicals

Successful Practices:

The team notes as a Successful Practice (#3) the variety of employee benefit programs beyond current accepted norms such as Higher Education Awards Program (for dependents), Physical Fitness Refund Program and personal fuel purchase discounts.

APPENDICES TO CODES: INVOLVEMENT IN PUBLIC POLICY PROCESS

Two of the management systems listed above BPEA and IMP also pertain to how this Responsible Care expectation is managed by Imperial Oil and thus the Products and Chemicals Division. From the CIAC. perspective senior company management is very involved the public policy process as it pertains to the expectations of the Association. Company managers and professional resources have historically served on the CIAC. Board of Directors and supported various Association sub-committees.

TEAM OBSERVATIONS ON THE COMPANY MANAGEMENT SYSTEM

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

The Imperial Oil OIMS, which also applies to the Products and Chemicals Division, is similar in design to the CIAC. "Plan, Do, Check and Act" model required for robust Responsible Care[®] management. The OIMS components are designed around Scope & Objectives, Process & Procedures, Responsible & Accountable Resources, Verification & Measurement and Feedback & Improvement Mechanisms.

As previously described the corporate OIMS is comprised of eleven elements and various subsections to support the annual goals and objectives of both Imperial Oil and ExxonMobil. These management systems are applicable world-wide and apply to all areas of the Global Corporation. The system supports not only the objectives of the company but of the various industry associations that are supported by both the Oil and chemical related portions of the business including the CIAC. The OIMS is flexible enough to accommodate large comprehensive corporate goals and objectives and those of relatively small divisions or operational sites. The system is rigorously audited both internally and through external third parties. There is a Canadian OIMS Steering Committee that oversees the administration of the OIMS as it pertains to the petrochemical operations in Canada. The Products and Chemicals Division manages the Responsible Care commitment and the interface with the OIMS.

Improvement Opportunities:

There is an Opportunity for Improvement (#1) to review all Responsible Care related documents and change any CCPA references to CIAC.

TEAM OBSERVATIONS ON THE RESPONSIBLE CARE ETHIC AND PRINCIPLES FOR SUSTAINABILITY

Imperial Oil and the Products and Chemicals Division has in-place various goals, objectives and management systems that demonstrate a commitment to these Principles for Sustainability. All references to these goals, objectives and management systems and reports can be viewed at: www.imperialoil.ca/canada-english/products-chemicals-sr.aspx

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

Imperial Oil and thus the Products and Chemicals Division, have published goals, objectives quantitative performance that relate to this Principle. For additional information see the 2014 Corporate Citizenship Summary Report.

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

The Sarnia site does have corporate management systems in place (Best Practice for External Affairs and the Issue Management Process) to support this Principle. However, from the perspective of risk communication to the community the team has listed a Finding Requiring Action to improve the community dialogue risk communication management system and the sharing of site emergency response management systems with both the residential and industrial community.

TAKE PREVENTATIVE ACTION TO PROTECT HEALTH AND THE ENVIRONMENT:

There are management systems in place to support this principle. Corporate safety, health and environmental performance improvement objectives are developed annually based on published corporate goals in this area. (reference the web site shown at the beginning of this section) The Environmental Business Planning management system is utilized to integrate environmental performance improvements into business plans and strategies.

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

There are processes and business review management systems in place that support this principle. Examples would be the corporate Product Safety Policy and the Environmental Business Planning management system. An example of the application of this principle is the construction of a more energy efficient gas cracker furnace slated for start-up in 2016.

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

The two management systems described in section 2.2 above (Stewardship Code) contain the required components to support this Responsible Care Principle.

UNDERSTAND AND MEET EXPECTATIONS FOR SOCIAL RESPONSIBILITY:

There is a corporate level Social Responsibility statement and listed initiatives in such areas as relationships with First Nations and a policy guideline entitled "Best Practice for External Affairs". There are also corporate level policies pertain to social responsibility grouped under the Standards of Business Conduct.

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:

Imperial Oil and the Products and Chemicals Division has in-place various management systems to address the expectations of this Principle. One example would be the Best Practice for External Affairs management system. An additional example, demonstrating the Responsible Care Ethic, is the comprehensiveness of the site benzene emissions sampling related to CAMM. The team has listed as a Successful Practice this sampling protocol relating to CAMM. (see page ten)

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

There are functional components of management systems such as contractor safety training, environmental management and customer and supply chain management which are described in the body of the report and which support this principle. However, the team has listed a Finding Requiring Action concerning Responsible Care name recognition and Responsible Care code element training within the Product and Chemicals process areas.

VERIFICATION TEAM CONCLUSION

The Imperial Oil Products and Chemicals Operational Integrity Management System (OIMS) is a corporate management system based on the Plan, Do Check and Act self-healing model that is fundamental to

Responsible Care. There is concern, however, that this management system as applied to certain CIAC. Responsible Care Commitments, described in this report, is not comprehensive enough to support Responsible Care expectations, specifically, in areas such as sharing and coordinating emergency management plans and risk communication. As an example, the sub-sections of OIMS element 10.2 are not aligned with the expectations of the CIAC. in areas such as regular, proactive and measurable risk communication with the community and sharing emergency planning with neighboring industries. Based on this assessment, the verification team advises the Company to invite the verification team to return within one year of the date of the initial draft report (November 25th. 2016) to assess progress on addressing the report Findings Requiring action and conclude the verification process.

INTERVIEW LISTS

NAME	POSITION	LOCATION
Dave Luecke	Chemical Manufacturing Manager	Sarnia
	Executive Contact	
Chan Lau	IOC Responsible Care Coordinator	Calgary
David Jewell	Site SSH&E Manager	Sarnia
Jim Belrose	Site Fire Marshall	Sarnia
Jon Harding	Community and Aboriginal Affairs Advisor	Sarnia
Rich Kelly	Manager Basic Chemicals	Calgary
	Western Canada RC Leadership Group	
Jim Sollen		
Chris Jolliffe	PNA Process Mechanical Coordinator	Sarnia
Mark Veysey	Engineering Services Manager	Sarnia
Adrian Michielsen	Senior Emergency Response Advisor	Sarnia
Jean Xu	Security and OIMS Leader	Sarnia
Al Bourque	Process Control	Sarnia
Lisa McTaggart	Business Controls Manager	Sarnia
Kathy Rausch	Environmental Leader	Sarnia
Dave Shimoda	Chemical Fleet Manager	Toronto
Jeff Eakins	Supply Supervisor	Sarnia
Ryan Lowther	PNA Process Leader	Sarnia
Rob Janzen	Senior Account Executive	Calgary
Kevin Jamieson	Chemical Support Manager	Calgary
Steve White	Process Operator (Joint Health & Safety	Sarnia
	Committee Member)	
Scott Ovens	Process Facilitator	Sarnia
Doug Shane	Day Process FLS	Sarnia

A: Company Personnel Contacted During Verification Process

B: External Stakeholders Contacted During Verification Process

NAME	POSITION	LOCATION
Cal Gardner	City of Sarnia Emergency Planner	Sarnia ON
Mike Bradley	City of Sarnia Mayor	Sarnia ON

CHEMISTRY INDUSTRY ASSOCIATION OF CANADA Suite 805, 350 Sparks Street Ottawa (ON) K1R 7S8 T: 613 237-6215 F: 613 237-4061 www.canadianchemistry.ca

R

1020