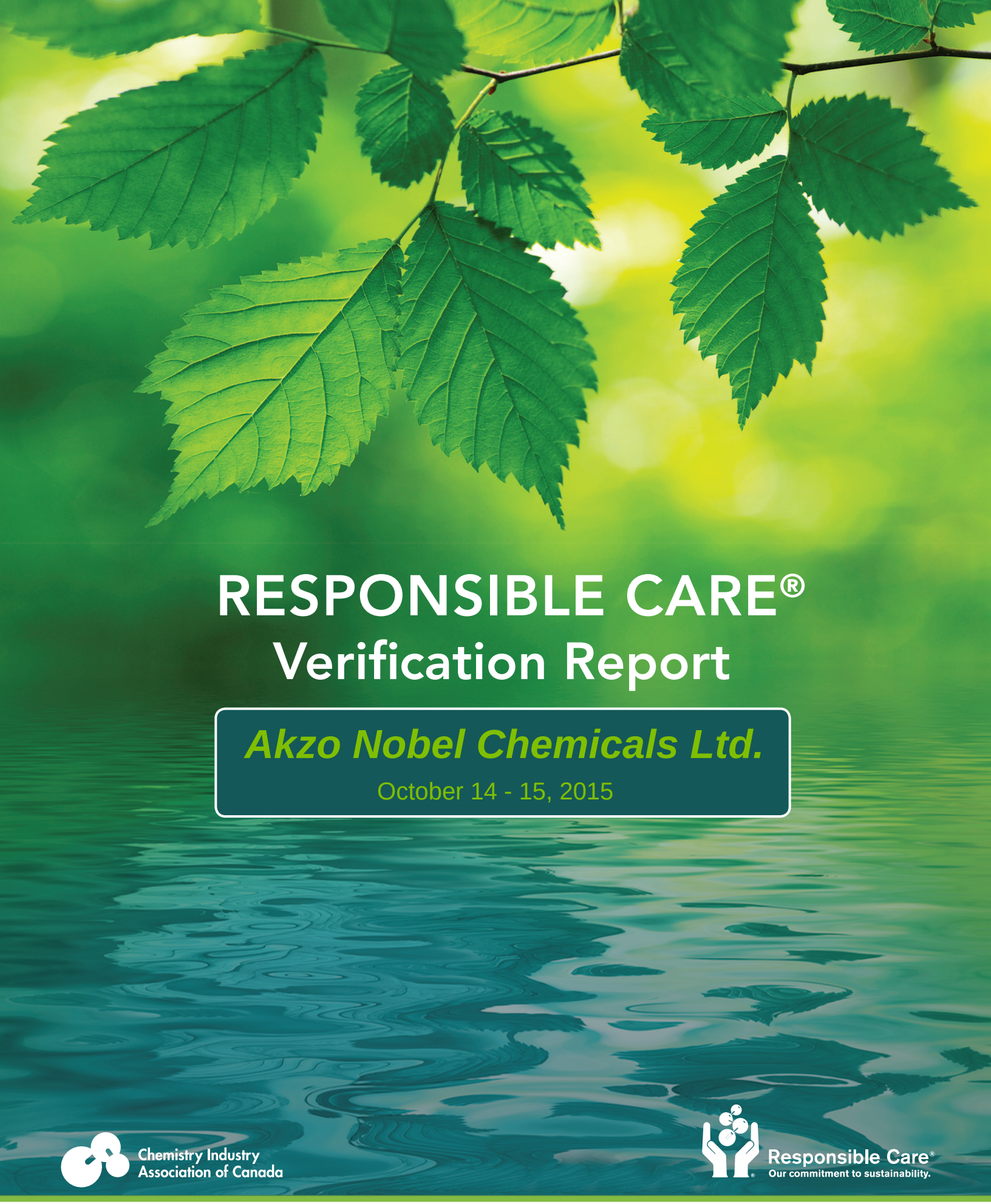

RESPONSIBLE CARE®
Verification Report

Akzo Nobel Chemicals Ltd.

October 14 - 15, 2015

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.

EXECUTIVE SUMMARY

This report documents the observations and conclusions of the independent verification team tasked with conducting a Responsible Care® Verification of Akzo Nobel Chemicals Limited. The verification was undertaken on October 14th and 15th, 2015 and included team visits to the Saskatoon facility. The verification team conducted interviews with company personnel and external stakeholders in Saskatoon. This was the fifth Responsible Care verification completed for Akzo Nobel Chemicals Limited. The last verification was completed on October 2nd and 3rd, 2012.

There were no specific areas of focus identified for the verification by the company. However, with there having been three multifaceted findings requiring action related the Operations and Stewardship codes during the 2012 verification, an area of focus for the verification team was to verify these had been effectively addressed.

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

Signed:  Date: November 30, 2015

Alec Robertson
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

1. **It is a repeated finding requiring action that the Akzo Nobel decision making is not sufficiently guided by the commitment to engage with business partners to ensure the stewardship and security of products, services and raw materials throughout their life cycle. Specifically the team observed that the execution of the following related activities are not consistent with Responsible Care® Code expectations:**
    a) **Selection and ongoing assessment of transportation service providers. (OP12-16 and ST116)**
    b) **Selection and ongoing assessment of distributors and warehouses (OP15, ST115 through ST120)**
    c) **Selection and ongoing assessment of waste service providers and selection and ongoing assessment of other service providers. (OP69 & OP75)**

    CIAC Memberlink has guidance in all these areas which can assist in the development of company procedures.
2. **It is a repeated finding requiring action that the CIAC Responsible Care® Commitments are not fully and formally embedded in the company's "Plan" step of the management cycle.**
3. **While a cross reference document has recently been updated, the output of that activity has not resulted in the code expectations being formally and fully considered as Akzo Nobel Canada Ltd. Requirements, equivalent to regulatory requirements and expectations of other formal management system processes (i.e.: ISO 14001), such that the gaps identified above in the finding requiring action will not arise in the future.**

Works in Progress

1. Complete updating the site's HAZOP's s so that all sections are in compliance with the 5 year review cycle by the end of Q1, 2016 as currently planned.
2. Complete the installation of a water curtain protection system in the site's ammonia storage/handling area to reduce the risk potential from the facility prior to the new river crossing being placed in service.
3. Akzo Nobel is encouraged to continue with the various improvement initiatives currently in progress towards the objective or eliminating neighbour odor complaints from Saskatoon site venting system emissions.
4. Fully implement the site spill containment system improvement projects currently underway.

Improvement Opportunities

1. To develop and implement a post project review process for contractors with the objective of continuously improving the safety performance and overall effectiveness of contractor services provided to the site.
2. To have an ongoing process in place to test the response capabilities of local responders in the event of reasonable site scenarios. An example is high angle rescue for which the site itself has no response capability.
3. Akzo Nobel is encouraged to work with the CAP to find a means of achieving the objective of community representatives on the CAP of having an effective means of communicating with residents of the local Silverwood Community.
4. To review and update the CAP mandate /terms of reference document and establish a process to review the document at prescribed intervals.

Successful Practices

1. The Saskatoon site's equipment critically assessment and management process.
2. The commitment towards, and successfulness in, reducing workplace hazards at the Saskatoon site.

3. The significant reduction in transportation and site risks by eliminating the usage of acrylonitrile, a toxic and highly flammable raw material, previously used in the diamine production process at the Saskatoon site.
4. The extensiveness and effectiveness of the Saskatoon site's overall community support and stakeholder engagement processes as evidenced by the wide variety of stakeholders involved in their CAP and a mutually acceptable conclusion having been achieved regarding the construction of a commuter river crossing bridge adjacent to the Saskatoon plant site.

1. INTRODUCTION

1.1 About Responsible Care Verification

As a member of the Chemistry Industry Association of Canada (CIAC), the most senior executive responsible for Akzo Nobel Chemicals Limited 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, Akzo Nobel Chemicals Limited 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 (www.canadianchemistry.ca). Akzo Nobel Chemicals Limited is also is expected to share the report with interested persons in its communities and other stakeholders as part of its ongoing dialogue processes.

Additional information on Responsible Care and / or the verification process can be found at the CIAC website www.canadianchemistry.ca, or by CIAC at glaurin@canadianchemistry.ca or (613) 237-6215 extension 233.

1.2 About Akzo Nobel Chemicals Limited

Akzo Nobel's corporate offices are located in Amsterdam the Netherlands and support for the Saskatoon operation is provided by business groups in Toronto Ontario, Brewster New York and Chicago Illinois.
This description covers the Canadian operations of Akzo Nobel Chemicals Ltd., operating out of the company's facility in Saskatoon, Saskatchewan. This is the only Akzo Nobel manufacturing facility in Canada that supports the "Surface Chemistry" segment of the Akzo Nobel Specialty Chemicals division. There are other Akzo Nobel operations in Canada supporting the Pulp and Paper Chemicals business and several facilities that are part of the Industrial Paints and Coatings divisions and these groups are organized as separate entities and are not part of this verification.

The Saskatoon Plant occupies 10 acres (4.0 hectares) and is located in the north part of the City of Saskatoon on the west bank of the South Saskatchewan River. The plant employs an average of 32 people, 28 of whom are Akzo Nobel personnel. Plant operators are members of Unifor. Maintenance work is performed by a third party contractor, Jacobs, primarily by a core group of 4 personnel with others being added as required to maintain a reasonable work backlog. Additional information can be obtained at: (www.akzonobel.com)

1.3 About This Verification

The verification of Akzo Nobel Chemicals Limited was conducted on October 14th and 15th 2015 and included team visits to Saskatoon Saskatchewan location which is the sole company manufacturing site in Canada. During the course of the verification, the team had the opportunity to interact with a variety of company and Jacobs personnel, as well as stakeholders external to the company. Attachment 2 contains a list of those individuals interviewed and their affiliations.

This was the fifth verification exercise completed for Akzo Nobel Chemicals Limited. The last verification was completed on October 2nd and 3rd 2012. The verification team was comprised of the following individuals.

The verification team was comprised of the following individuals.

Name	Affiliation	*Representing*
Alec Robertson	C.I.A.C.	*Team Leader*
Keith Purves	C.I.A.C.	*Public-At-Large Verifier*
Om Kochar	Saskatoon resident	*Saskatoon Community Representative*

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

During the verification of Akzo Nobel Chemicals Limited 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). While considering all aspects of the Responsible Care Commitments during the verification, and no specific areas of focus having been identified for the verification by the company, the team placed an emphasis on verifying that the three multifaceted findings requiring action related to the Operations and Stewardship codes during the 2012 verification had been effectively addressed.

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

1. **Findings Requiring Action;** document instances where the verification team observes specific company actions (or the absence of company actions) which are inconsistent with the detailed codes and benchmark and collective expectations contained in the Responsible Care Commitments. Where possible, the team will communicate, based on their experience and judgment, why it is inconsistent and how the observation relates back to a possible gap in the expected management system and / or the ethic and principles underpinning company actions. The team may also provide advice on how the situation might be responded to.

2. **Works in Progress;** document instances where the team has observed the company self-initiating actions in response to identified gaps and deficiency arising from other internal or external audit and review activities, or where the company has self-initiated important improvement opportunities.

3. **Successful Practices;** document instances where the team believes the company has taken actions that strongly support sustained excellence in performance, and which should be communicated throughout the CIAC membership.

4. **Improvement opportunities;** identify instances where the team has observed company actions and decision making as being largely consistent with the expectations detailed in the Responsible Care Commitments, but for which the team is of the opinion that the company could support further improvement by considering alternate or additional benchmarks when undertaking its planning and decision making.

The verification team's observations of how the company has addressed the Responsible Care Commitments are as follows:

2.1 Team Observations Concerning Operations Code

2.1.1 Design and Construction of Facilities and Equipment

The Saskatoon facility has a limited engineering capacity so any major projects are handled by third party engineering and construction firms or Akzo Noble corporate resources. Corporate engineering standards and oversight is in place to comply with code requirements and appropriate decision gate processes are in place to ensure application of these standards when appropriate. The team's review of projects implemented since the previous verification indicated that the processes and management systems in place are effective in ensuring that code expectations in this area are being met.

2.1.2 Operations Activities

Management systems are generally in place to comply with the requirements of this commitment area. A significant undertaking completed since the previous verification was the operations system criticality assessment process. As an outcome, critical equipment is now sorted into three risk categories with "check" processes established for each and work orders being system generated to perform system checks when due. Overdue reports are also system generated to Akzo Nobel corporate management as further "check" to ensure ongoing compliance with the program's requirements.

Notwithstanding the above, there were findings requiring action and improvement opportunities listed in both the 2009 and 2012 verification reports related to code elements OP12, 13, 15, 69 & 75 regarding having established criteria in place for the selection and management of carriers and distributors. At the time of this verification, some progress had been made towards engaging a CIAC approved third party to perform evaluations of motor carriers and distributors handling Akzo Nobel's Saskatoon site products. However, lacking were appropriately documented standards, work processes, procedures and programs to address these code elements (ref "Do" and "Check" sections of CIAC's Management System Expectations). A "Finding Requiring Action" for this area is again recorded in the Management System section of this report to document a process for the selection of carriers with respect to Responsible Care code related requirements, including how on-going performance will be monitored regarding these requirements.

Regarding the monitoring the performance of railroads, Akzo Nobel are encouraged to be supportive of CIAC's ongoing initiative to have improved railway management systems with the objective of reducing derailment frequencies and consequences.

Successful Practice:

- The Saskatoon site's equipment critically assessment and management process.

2.1.3 Safety and Security

Providing overall oversight and guidance to The Saskatoon site's Occupational Health and Safety Program is the location's Management led Central Safety/Health Committee, supported by a 6 member Occupational Health and Safety Committee which includes two worker, one contractor and three management/supervisory personnel. A Behavioral Based Safety (BBS) observation process is in place with the objective of identifying risk exposure and worker behavior improvement opportunities. A BBS Steering Committee is in place to identify barrier removal opportunities from the BBS observation results. The site has a formal Industrial Hygiene Monitoring program in place which includes both area monitoring and personal monitoring for operating and laboratory personnel. No over exposures have been identified in the several years that the program has been in place.

The team's interviews with committee representatives, continuous improvements that have been implemented to reduce site risks and continuously improving results versus various relative performance metrics in recent years validated the ongoing effectiveness of the site's Occupational Health and Safety Program. However, while the site has a contractor selection tool which is used to evaluate contractors retained for project work, the contractor management process does not include a post project review process to evaluate the contractor's project performance with the objective of identifying areas for continuous improvement.

A systematic approach is in place to evaluate the location's process hazards with the site being divided into five segments made up of a total of 13 sections. Each segment to be assessed using the HAZOP process every 5 years as well as when facility or process system changes occur. However, the site is currently behind schedule on the five year review process with 6 of the 13 section reviews being overdue. While all higher risk and more

complex sections are up to date, an action plan is in place to bring all sections up to date by the end of Q1, 2016.

The site emergency response plan is up to date, regularly reviewed with emergency responders and is integrated with the local community and overall Saskatoon community plan as the result of ten+ years of continuous efforts by Akzo Nobel and their neighboring C.I.A.C. member site. However, the last on site emergency drill with the local Fire Department occurred in 2009.

An external vulnerability assessment of the site was last completed in 2010, annual internal reviews and training updates are performed annually and a site intrusion test was performed during the current year.

Works in Progress:

- Complete updating of the site's HAZOP's so that all sections are in compliance with the 5 year review cycle by the end of Q1, 2016 as currently planned.
- Complete the installation of a water curtain protection system in the site's ammonia storage/handling area to reduce the risk potential from the facility prior to the new river crossing being placed in service.

Improvement Opportunities:

- Develop and implement a post project review process for contractors with the objective of continuously improving the safety performance and overall effectiveness of contractor services provided to the site.
- To have an ongoing process in place to test the response capabilities of local responders in the event of reasonable site scenarios. An example is high angle rescue for which the site itself has no response capability.

Successful Practice:

- The commitment towards, and successfulness in, reducing workplace hazards at the Saskatoon site. Examples include:
  - The catalyst chamber design project which reduced the frequency of dumping catalyst from 3 months to 2 years, reducing the risk exposures involved in performing this work.
  - The hose manifold improvement project which significantly reduced the ergonomic risks and tripping /handling hazards in this area of the plant.
  - The "FUNDA" project which involved the installation of automated, self-cleaning and coating nickel catalyst removal equipment which significantly reduced the exposure and ergonomic risks previously involved in performing this work.

2.1.4 Environmental Protection

Environmental protection is addressed with a Corporate Philosophy based emphasis on sustainability with a focused objective of environmental protection. Reference: www.akzonobel.com/sustainability. Corporate initiatives include energy and water use reduction, operational efficiency, air and water quality and climate change initiatives to reduce the Company's carbon foot print.

The Saskatoon site maintains an ISO 14001 certification with appropriate objectives to support Corporate, C.I.A.C. and local area targets and initiatives. Site projects frequently include an environment improvement component.

The Saskatoon site's Laboratory and Environmental Supervisor is Vice Chair of the Provincial Government's sponsored Western Yellowhead Air Management Zone (WYAMZ) Board which includes representation from Industry, NGO's, Agriculture, Academia, Health and Municipalities. He also represents the Chemistry Industry provincially in the security and emergency response focused Canadian Infrastructure Awareness Network (CIAN).

While the site generally meets or exceeds code expectations in this area OP 58 through OP 75, as noted in the Summary of Team Observations on page 3 of this report, there again a finding requiring action to implement the requirements of code element OP69 through 75 to have defined criteria for the selection, use and assessment of waste contractors and facilities.

Works in Progress:

- Akzo Nobel is encouraged to continue with the various improvement initiatives currently in progress towards the objective or eliminating neighbour odor complaints from Saskatoon site venting system emissions.
- Fully implement the site spill containment system improvement projects currently underway.

2.1.5 Resource Conservation

Resource conservation is an integral part of Akzo Nobel's corporate focus on sustainability described in section 2.1.4 above. The Saskatoon site's Annual Environmental Plan includes resource conservation objectives, primarily related to reducing energy usage at the site. It is also a value added aspect in the evaluation of potential new projects, increasing the probability of their implementation. The projects listed in section 2.1.3 of this report are examples.

2.1.6 Promotion of Responsible Care by Name

As part of Product Stewardship outreach to customers, regular safe product handling presentations are made at customer sites with a portion of the presentations being dedicated to the Responsible Care Ethic and Guiding Principles. The site also takes advantage of opportunities to promote Responsible Care® in conversations with members of organizations that they belong such as WYAMZ and CIAN (ref section 2.14 above).

Responsible Care® focused presentations are also made to industrial neighbours, primarily through their Community Advisory Panel (CAP) participation, University of Saskatchewan engineering, business and medical-industrial hygiene students, community college students and various emergency management groups.

2.2 Team Observations Concerning Stewardship Code

A comprehensive product stewardship management system is in place at the corporate level under the umbrella of "Innovation". The general philosophy is to have the research and development resources located within the Business Groups for ease of customer interface and to maintain five corporate "Expert Capability Groups" and three Communities of Practice (CoP) networks of people interacting and working together across the entire Akzo Nobel organization to ensure the best possible use of knowledge and technology. This philosophy, combined with appropriate practices identified corporately, govern the product stewardship focus in Canada. Reference: www.akzonobel.com/innovation.

2.2.1 Expectations of Companies

This section of the Responsible Care® Commitments is for the most part a corporate level function as it pertains to operations in Canada and fully complies with the expectations of the Responsible Care® Commitments. The site provides customer and transportation training sessions in support of products produced at the site or raw materials transported to the site.

Successful Practice:

- The significant reduction in transportation and site risks by eliminating the usage of acrylonitrile, a toxic and highly flammable raw material, previously used in the diamine production process at the Saskatoon site. While diamine is still required in the site's production process, it is now a purchased raw material.

2.2.2 Expectations with Respect to Other Parties

As described above there are corporate driven Product Stewardship management systems that govern the actions of the Saskatoon site. However, the team once again concluded that while various site activities are directed towards addressing the expectations in this area, several product stewardship code elements have not been implemented, or the site management system revised, to accommodate these requirements. A finding requiring action is noted in the Summary of Team Observations on page 3 of this report to fully implement the requirements of Stewardship Code elements ST115 through ST120. Specific expectations are to:

- Have documented processes for the selection of carriers, warehouses and distributors with respect to Responsible Care code related requirements, including how on-going performance will be monitored regarding these requirements.
- Document a process for customer selection and review which includes, as a minimum, initial review of new customers regarding their capability to safely handle company products; training in product handling and use; and ongoing monitoring of all customers as to their performance in these areas.

2.3 Team Observations Concerning Accountability Code

2.3.1 Operating Site Communities

The small site and the relatively local environment enable an informal process for feedback on the effectiveness of community dialogue. (e.g., personal acquaintances, people met on community projects, etc.). The site also holds open houses periodically to provide a forum for informal dialogue. Akzo Nobel and a nearby CIAC member company jointly sponsor a Community Advisory Panel (CAP) which has been successfully revitalized since the 2012 verification. With both company sites being located in a largely industrialized area, the CAP involves a wide variety of community stakeholders, including representation from various nearby businesses and small manufacturers. Attendance at CAP meetings has increased from a previous average of 6-8 to the current 25-30. The CAP now has an enthusiastic, committed facilitator who realizes the CAP's value to both the companies and community. Site risks and responses are routinely discussed at CAP meetings and the team's discussions with them validated their commitment to keeping their community informed regarding the CAP, site risks and emergency response. The CAP reported that they have discussed the possibility of utilizing the local Community Association web site to advise local Silverwood community residents as to how they can contact the companies directly (e.g., phone numbers, E-mail, company web addresses) to obtain company information while having other information relative to local residents, including how to Shelter in Place in the event of an emergency, on the web site as well.

The most significant and challenging issue in relation to this code area in recent years involved establishing a viable community alert system. Largely through the efforts of the site as a participant on the local Community Advisory Panel and the Saskatoon Industrial Mutual Assistance group, such a system is now in place. A second item that has involved considerable discussion at CAP meetings since the previous verification was the construction of a commuter bridge from across the river connecting with the highway in front of the Akzo Nobel plant site as discussed in report section 2.3.2 below.

Opportunity for Improvement:

- Akzo Nobel is encouraged to work with the CAP to find a means of achieving the objective of community representatives on the CAP of having an effective means of communicating with residents of the local Silverwood Community.
- To review and update the CAP mandate /terms of reference document and establish a process to review the document at prescribed intervals.

2.3.2 Other Stakeholders

The Saskatoon site is very active in the community and thus interfaces on a regular basis with local government officials, local businesses, and potentially Saskatoon based NGOs. Through these contacts the company complies with this code requirement. The company had recently refocused and improved their TransCAER commitment at the time of the 2012 verification with the previous team encouraging them to continue with this process. This team re-emphasizes the need to have documented expectations, periodically reviewed, to ensure that the expectations of code elements AC138 and AC139 are being achieved on an ongoing basis as recorded in the previous verification report.

Successful Practice:

- The extensiveness and effectiveness of the Saskatoon sites overall community support and stakeholder engagement processes as evidenced by the wide variety of stakeholders involved in the CAP and a mutually acceptable conclusion having been achieved regarding the construction of a commuter river crossing bridge adjacent to the Saskatoon plant site.

3. Team Observations on the Company Management System

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

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

The Akzo Nobel site has a five page document that describes their Responsible Care® management system. The document is designed as an ISO document with a two year review requirement. Objectives and goals are published annually, including specific Responsible Care related initiatives. Progress toward these objectives is assessed by defining measurable goals that are subject to management review at defined intervals. The site goals are tied into the corporate goals and then in turn are used for determination of personal and group goals. There is an incentive compensation program in place related to achievement of these goals.
Documented procedures are in place which define responsibilities, ensure document control, and schedule internal audits with follow up actions. Standard operating procedures set out parameters for plant operation and are designed to ensure compliance with standards and to minimize adverse impact on people, property and the environment.

3.1 Observations on the PLAN Step

During the PLAN Step of the management system, the company decides what the goals of the company are and how they will be met. In determining those goals, it is expected the company will look inward, across its operations, but will also look outward, considering the expectations of: stakeholders; regulatory requirements; relevant CIAC Responsible Care Commitments and supporting tools; and other industry benchmarks. In considering the PLAN Step of the Akzo Nobel management system, the verification team observed the following:

During the planning phase the plant goals are developed, based on the 'balanced scorecard' principle. The plant goals are based on the Business Unit Priorities and Performance Dashboard as well as plant specific issues, for example issues detected during the 'Check' phase. Key projects are determined and dashboard variables are developed. Status of the plant goals, key projects, and the dashboard is updated monthly. An annual environmental plan is created for the control and reduction of environmental impacts. Depending on their importance, the goals of this plan can become part of the plant goals or remain separate goals, responsibility of the Lab and Environmental Supervisor.

The Performance and Development Dialogue (PD&D) process is used for generating personal key performance areas and are mainly based upon plant goals, but can also take special interests, related to plant operations, into account. PD&D discussions are held at the beginning of the year (between February and April), during the mid-term (between June and August), and at the end of the year (actually January – February of the next year). For hourly personnel, group goals are developed together with the union. The balanced scorecard principle is again used for personal goals and group goals. A list for capital projects is maintained by Plant Engineering. Capital projects are prioritized based on a formula (the formula provides a point value for each project), and then implemented based on point value, capital availability, regulatory requirements, and alignment with corporate / plant goals. The capital project list is reviewed two or three times a year.

The team concluded that the following finding requiring action related to this step in the process from the previous verification continues to exist.

Finding Requiring Action:
It is a repeat finding requiring action that the C.I.A.C. Responsible Care® Commitments are not fully and formally embedded in the company's "Plan" step of the management cycle.

While the site's cross reference document had been updated shortly before this verification, the cross references for some codes only describe activities that have occurred, are currently being carried out or are planned related to the code area. The output of activities must result in the code expectations being formally and fully considered as Akzo Nobel Canada Ltd. requirements and as equivalent to regulatory requirements and expectations of other formal management system processes (i.e.: ISO 14001), such that the gaps identified above in the finding requiring action will not arise in the future.

3.2 Observations on the DO Step

During the Do Step in the management system, the company converts the decisions of the PLAN Step into action and ensures awareness and understanding by all involved. It is expected that the company will implement an organizational structure, assign responsibilities to appropriate personnel, supply sufficient training and resources to execute planned actions and develop and document standards, procedures and programs, as applicable.

In considering the DO Step of Akzo Nobel's management system, the verification team observed that plant goals, as well as the follow-up from 'check' actions (see below) guide the daily work of plant staff. Routine tasks and improvement activities are done on an 'as required' basis. The daily safety talk (conducted around 8:00 am) keeps operators and maintenance personnel informed about activities in the plant and the production meeting (twice a week) is used to coordinate staff activities. The monthly report is used to track progress and is also widely distributed, which enables other external corporate management groups to take action if they think that planning goals are at risk. Site operating procedures are now current as the review and updating process, a work in progress at the time of the previous verification, was completed.

3.3 Observations on the CHECK Step

During the CHECK Step in the management system, actions carried out in the DO Step are assessed to determine if they are actually being carried out according to plan, and whether they are achieving the desired outcomes and delivering continual improvement. Here, the overall management system and components will be reviewed along with employee competences for assigned responsibilities, internal and external audits will be undertaken, incidents will be assessed to identify root causes, and performance measurement will be conducted and reviewed.

In considering the Check Step of the Akzo Nobel management system, the verification team observed the following:

- The "Checking" process at Akzo Nobel is accomplished through various audit processes that can be local internal, corporate internal or external third party for such management systems as ISO 9001/14001. ISO 9001/14001 is checked through internal audits (all elements to be checked within a two year cycle) and third party audits.
- ISO 9001/14001 is checked through internal audits (all elements to be checked within a two year cycle) and third party audits.
- Responsible Care is checked every year for the re-commitment (no formal procedure, but signed recommitment stating compliance with all standards) and verified by a third party every three years).
- The corporate HSE&S standard is checked internally for compliance every year. All elements are audited by auditors sent from Corporate on a schedule based on plant risk and performance (currently every three years).

• Problems with customers (for example product quality, delivery issues) are flagged up through Quality Notes. A process utilized by the Sales and Marketing groups.
• Internal incidents and near misses are currently tracked through the Incident Report (IRS) system. More serious incidents have to be reported to corporate and may trigger a corporate investigation.
• Regulatory and legal developments are monitored by various methods. Examples are through the Canada Gazette and information about regulatory developments from Akzo Nobel's North American Regulatory Affairs department.

3.4 Observations on the ACT Step

During the ACT Step in the management system, the company translates the results of the CHECK Step into corrective actions for improvement. This includes revisiting the PLAN Step to decide whether changes are need to the company's stated goals or action plans, policies and procedures for achieving those goals. Considerations when examining the ACT Step include whether and how: audit and review findings are responded to; performance is communicated internally and externally; employee and contractor performance is rewarded or corrected, etc.

In considering the Act Step of the Akzo Nobel management system, the verification team observed the following:

The follow-up actions generated during the 'check' process, guide the short-term 'act' steps. If the issues detected during 'check' cannot be resolved within a reasonable timeframe (varies depending on the issue, but two months is a good guidance), they are added to the 'Follow-Up' database and (if necessary) to the capital project list. The Follow-Up database and the capital project list are used for prioritization of actions and to keep track of issues that require more time for their resolution. The Follow-Up database is also used as a resource in the planning phase.

4. Team Observations on the Responsible Care Ethic and Principles for Sustainability

Each CIAC member company is formally committed to the ethic of "*Doing the right thing, and being seen to do the right thing*." This ethic, along with the principles for sustainability is expected to guide the company's decision making and practices. In conducting the verification, the team is looking to understand how well the ethic is understood and adopted within the company, and the degree to which the principles inform the manner in which the company does its business.

The verification team carefully observed the Akzo Nobel decision making processes and actions and compared and contrasted the attributes of those with the attributes of a company guided by the Responsible care Ethic and Principles For Sustainability as discussed in the Responsible Care Commitments (Appendix E).

The verification team's related observations on the company's application of the *Responsible Care Ethic and Principles for Sustainability* are as follows:

Akzo Nobel's global focus on sustainability as described on the website referenced in section 2.1.4 of this report must be considered to obtain a holistic view of how the Responsible Care® Ethic and Principles For Sustainability are applied and managed at Akzo Nobel's Saskatoon site. These Corporate Principles are applied at the different organizational levels and are driven by the various Business Teams and Sub-Business Teams which are required to report progress monthly on the various improvement areas they have chosen in support of the corporate initiatives.

The eight Principles For Sustainability that the C.I.A.C. has chosen as a guideline for member companies. At the Akzo Nobel corporate level there are Philosophies, Goals and objectives that recognize and support these principles. The team will comment in this attachment on the level attained by the Saskatoon site in supporting these Philosophies, Goals and Objectives.

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

Products made at the Saskatoon facility, and the technical support provided to their customers, are vital to the potash industry which in turn is an invaluable contributor to agriculture and nutrition. The site has decreased its environmental footprint significantly by greatly reducing site emissions and eliminating site water outflow to the South Saskatchewan River. Additional continuous improvement opportunities continue to be pursued.

- **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.**

This principle is supported by the Saskatoon site. The team has listed an Improvement Opportunity in section 2.3.1 of this report as well as a Successful Practice in section 2.3.2 related to this area.

- **TAKE PREVENTATIVE ACTION TO PROTECT HEALTH AND THE ENVIRONMENT.**

In support of the Corporate Product Stewardship objectives the Saskatoon site frequently provides product safe use and handling training sessions to customers and bulk carrier companies.

- **INNOVATE FOR SAFER PRODUCTS AND PROCESSES THAT CONSERVE RESOURCES AND PROVIDE ENHANCED VALUE.**

This principle is embedded in the Corporate Sustainability goal to have 30% of their product portfolio classified as Eco-Premium by year end 2015. A large portion of Akzo Nobel products are made from renewable feed stocks and there is an objective to maximize this advantage through a process of Eco-Efficient Resource Utilization. The Saskatoon site production processes are part of these initiatives**.**

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

There is a gap in the management system where it is not clear how transportation partners, waste disposal companies and distributors are selected and audited. The team has again listed Findings Requiring Action related to this area and referenced code elements OP12, OP15, OP16, OP69, OP75 and ST112 through ST120.

- **UNDERSTAND AND MEET EXPECTATIONS FOR SOCIAL RESPONSIBILITY.**

At the Corporate level Akzo Nobel is a signatory to the Global Responsible Care®, the United Nations Global Compact, the World Business Council For Sustainable Development and is a Foundation Corporate Partner for the Future a United Kingdom sustainability charity. There are various goals and initiatives related to these commitments that are integral to the various Business Unit objectives. There is ample evidence that the Saskatoon site supports these goals. Examples include their commitment to, and interface with, the University, Community College and secondary Schools on Saskatoon. It was also demonstrated by their persistence in the development of a community emergency alert system.

Part of the Corporate sustainability initiative focuses on community issues and are entitled “Serving the Community” and “Community Programs” which focus on improving the community at large and participating in local the community through employees at the site level. The Saskatoon site has numerous examples of a tradition of being involved and promoting the improvement of the local community which led the team to conclude that the processes in place deserved recognition as a “Successful Practice” in this report.

- **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.**

The Saskatoon site management is very active locally in this area with contacts developed in the past and the natural interface opportunities of a small community.
The previous verification teams concern is that this process, while very good, may be individually driven and could be less effective in the future is shared by the current team as well.

- **PROMOTE AWARENESS OF RESPONSIBLE CARE, AND INSPIRE OTHERS TO COMMIT TO THESE PRINCIPLES.**

The company has a very robust process for implementation and support of this Principle. The team encourages the Saskatoon site to continue linking how Responsible Care® relates to employee job functions and the corporate focus on the concept of “sustainability”, which supports the Ethic and Principles of Responsible Care®.

5. VERIFICATION TEAM CONCLUSION

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.

ATTACHMENT 1

COMPANY RESPONSE TO VERIFICATION TEAM REPORT

On behalf of Akzo Nobel Chemicals Ltd. I have reviewed this verification report. The observations and conclusions contained in the report have been discussed with the verification team.

Akzo Nobel greatly appreciates the insight provided by the verification team. We also appreciate and value the participation of local stakeholders and CAP members, both during this process and throughout the year.

Akzo Nobel will work to strengthen management systems such that the "Findings Requiring Action" identified in this report are addressed. It should be noted that production processes (and their inherent risks) will be curtailed at the Saskatoon site in the near future. For that reason, improvement efforts will focus on those activities which will remain on site – Shipping and receiving of bulk and packaged goods, Blending, Packaging and Quality Control.

Akzo Nobel Chemicals Ltd. will communicate the results of the verification exercise with its CIAC peers at their next meeting, and will discuss the verification results with our stakeholders, including those representing communities near our operating sites.

We will give consideration to the Improvement Opportunities identified by verification team and will assist the CIAC in communicating and sharing the identified Successful Practices to other CIAC members. Plans will be developed and implemented to respond to the Findings Requiring Action identified by the verification team. Our progress in implementing those plans will be discussed when preparing our Annual Statement of Re-Commitment to Responsible Care, and communicated to the verification team at the time of our next verification.

Scott Drummond
Site Manager
Akzo Nobel Chemicals Ltd.
January 19, 2016

ATTACHMENT 2

INTERVIEW LISTS

A: Company Personnel

Name	Position	Location
Scott Drummond	Site Manager	Saskatoon & Fort Worth
ILa Klassen	Operations Manager	Saskatoon
Gerry Mooney	Laboratory and Environmental Supervisor/Responsible Care Coordinator	Saskatoon
Larry Campbell	Safety Supervisor	Saskatoon
Glenn Klassen	Production Supervisor	Saskatoon
Louis Knaug	Operations Supervisor	Saskatoon
Cheryl Lariviere	Logistics Supervisor	Saskatoon
Derek Hamm	Project Engineer	Saskatoon
Norman Wong	Engineering Intern	Saskatoon
Curtis Stevens	Process Operator-OH&S Committee Rep	Saskatoon
Russ Banda	Jacobs Industrial Services-OH&S Committee Rep	Saskatoon
Joe Zachwieja	Marketing and Sales Manager-Mining	Chicago

B: External Stakeholders

Name	Company / Organization	Position	Location
Brian Davis	Littlefuse Startco	CAP Member	Industrial/Business Neighbour
Terry Friske	ERCO Worldwide	Co-Sponsor of CAP	Industrial Neighbour
Samantha Dearing	ERCO Worldwide	Co-Sponsor of CAP	Industrial Neighbour
Ryan Henschel	Russel Metals	CAP Member	Industrial/Business Neighbour
Brian Friesen	WBM Office Systems	CAP Member	Business Neighbour
Preston Karoly	WBM Office Systems	CAP Member	Business Neighbour
Jason Caissie	Norseman Structures	CAP Member	Industrial/Business Neighbour
Dean Hulm	Norseman Structures	CAP Member	Industrial/Business Neighbour
Jim Brayshaw	Saskatoon Emergency Services	CAP Facilitator	Saskatoon
Terry Stark	Wanuskewin Heritage Park	CAP Member	Rural Neighbor
Rick Frank	Ministry of Highways	CAP Member	Saskatoon

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