



 **NOVA Chemicals**
A Plastics and Chemical Company

2007 Responsible Care® Report

DID YOU KNOW?

Responsible Care helps the industry to operate safely, profitably and with care for future generations. Through sharing information and a rigorous system of checklists, performance indicators and verification procedures, Responsible Care enables the industry to demonstrate how its health, safety and environmental performance has improved over the years, and to develop policies for further improvement.

The effectiveness of all of NOVA Chemicals' Responsible Care programs are regularly tracked and evaluated to drive additional improvements as part of our Responsible Care Management System®. This process includes regular internal and external audits.

Since 2005, NOVA Chemicals has been listed on the Jantzi Social Index™, a socially screened, market capitalization-weighted common stock index that consists of 60 Canadian companies that pass a set of broadly based environmental, social and governance rating criteria. For more information, please visit www.jantzisocialindex.com.

NOVA Chemicals is a member company of the FTSE4Good™ Index, a responsible investment index that recognizes companies that have policies and management systems in place to help address environmental, social and ethical risks. For more information, please visit www.ftse.com.



NOVA Chemicals develops and manufactures chemicals, plastic resins and end-products that make everyday life safer, healthier and easier. Our employees work to ensure health, safety, security and environmental stewardship through our commitment to Responsible Care.

Responsible Care® is the chemical industry's global voluntary initiative under which companies, through their national associations, work together to continuously improve their health, safety and environmental performance, and to communicate with stakeholders about their products and processes in the manufacture and supply of safe and affordable goods that bring real benefits to society.

**NOVA Chemicals
senior executives
support Responsible
Care initiatives
both within the
company and across
our industry.**

Jeff Lipton, Chief Executive Officer
American Chemistry Council Executive Committee

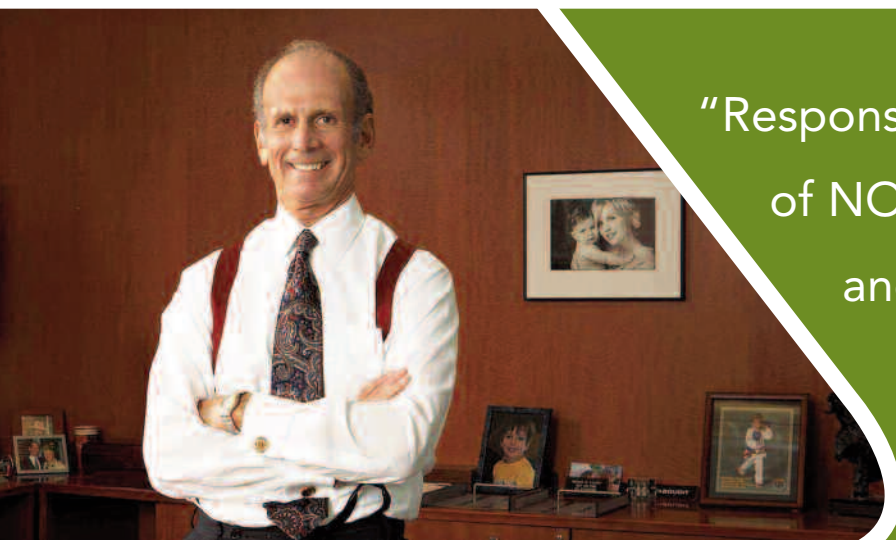
Chris Pappas, President and Chief Operating Officer
Chairman of the American Chemistry Council Communications Board Committee

Larry MacDonald, Senior Vice President and Chief Financial Officer
Canadian Chemical Producers' Association Board

Greg Wilkinson, Vice President, Public and Government Affairs
Chairman of the American Chemistry Council Communications Committee

Mark Lesky, Director, Responsible Care
Chairman of the Canadian Chemical Producers' Climate Change Task Force

To Our Stakeholders,



“Responsible Care is the foundation of NOVA Chemicals’ culture, and we are committed to its principles and standards.”

NOVA Chemicals’ approach to managing health, safety, security, environmental protection, sustainability and corporate social responsibility is implemented primarily through Responsible Care®, a global chemical industry performance initiative that helps member companies to continuously improve in these critical areas. NOVA Chemicals was a charter member of Responsible Care when it was introduced more than 20 years ago, and our commitment has never been stronger.

In 2007, we had the best safety performance in our history and the best overall Responsible Care performance I’ve seen in my 42 years in the industry. We reduced our “Total Recordable Case Rate” for the fifth straight year, and we reduced process fires to their lowest level since we started collecting this data. I believe our Responsible Care achievements are a clear indication of the strength of our corporate culture and the quality of our employees.

Responsible Care, however, is about more than our individual performance; it also includes sharing information and best practices within the chemical industry so that we can all work safely. That’s why we are communicating what we have learned about process fire prevention and are encouraging others to openly track and communicate process safety performance – to ensure that we better protect our employees and communities.

Collaborating and building relationships with stakeholders and interested parties is another key component of Responsible Care. These relationships allow us to effectively address public policy issues that are important to the chemical and plastics industries. We also pride ourselves on encouraging other companies to adopt Responsible Care principles and values, and strive to work with partners that have embraced them.

At NOVA Chemicals, we truly believe that Responsible Care is the best way to ensure that we operate a socially responsible, sustainable and continuously improving company.

Jeffrey M. Lipton
Chief Executive Officer, NOVA Chemicals Corporation

Sustainability

“We remain committed to continuous economic, social and environmental performance improvement. These elements are the foundation of our business and help us deliver on our commitments to our shareholders, customers and the communities where we live and work.”

Chris Pappas

President and Chief Operating Officer, NOVA Chemicals

DID YOU KNOW?

The Responsible Care ethic helps our industry to operate safely, profitably and with due care for future generations, and was commended by the United Nations Environment Programme as making a significant contribution to sustainable development at the World Summit on Sustainable Development in 2002. For additional information, please visit www.responsiblecare.org.

American Chemistry Council member companies use natural energy resources to make the products that allow our customers to save energy. The products of chemistry go into energy-saving materials used throughout the economy, such as insulation, weatherization equipment, lightweight vehicle parts, lubricants, coatings, energy-efficient appliances, solar parts and windmill blades. For example, the use of just one product, insulation in buildings, results in a net benefit to society of 40 BTUs of energy saved for every BTU used to produce the product.

NOVA Chemicals' contributions to sustainability and social responsibility are implemented largely through our commitment to Responsible Care. This document briefly outlines some of our approaches to greenhouse gas reduction, product stewardship, employee and community health and safety, and other issues that are central to sustainability and social responsibility.

At NOVA Chemicals, we believe that a sustainable business is a profitable and socially responsible business. We endorse the definition of sustainability developed by the United Nations: *Sustainable Development meets the needs of the present without compromising the ability of future generations to meet their own needs.*

We are committed to continual improvement in all three components of sustainability:

Environment – We believe that sound environmental stewardship and careful management of our natural resources are fundamental to a sustainable business.

Social – We develop and manufacture products that deliver value to our customers and make everyday life safer, healthier and easier.

Economic – We create economic value for our stakeholders. We provide jobs, purchase goods and services, and pay taxes in our communities.

Sustainable Products

Our products are a key component of our approach to sustainability. We are committed to helping our customers achieve their sustainability goals by developing innovative polymers and products that create less waste through raw material source reduction and end-use energy efficiency.



The ACCEL-E™ Steel Thermal Efficient Panel (STEP) wall system combines the strength of cold-formed steel framing with the insulation properties of NOVA Chemicals expandable polystyrene resin. The result is a thermally resistant, high-performance building system that is strong, lightweight and offers many advantages over conventional building techniques, including faster installation time and labor savings. The ACCEL-E STEP wall system is energy efficient, provides low air infiltration, is non-toxic, will not rust, rot or decompose, and is recyclable. To learn more, please visit www.accbt.com.

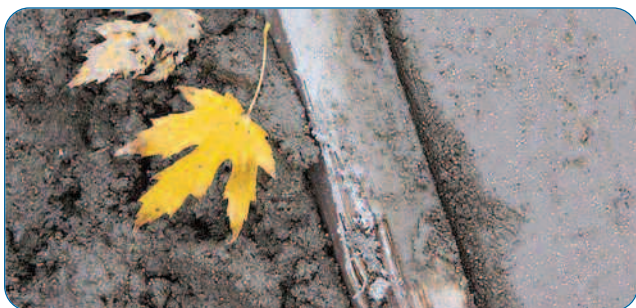


Packaging molded with NOVA Chemicals ARCEL® Advanced Foam Resin reduces the amount of foam cushioning needed to protect a product by up to 50% – ultimately reducing package size and related waste. This increases the shipping capacity of every container, truckload and pallet, translating into significant cost savings and the calculated environmental benefits of lowering diesel fuel consumption by more than four million gallons per year and reducing carbon dioxide emissions by 44,000 tons. For additional information on how ARCEL resin is helping our customers to meet their sustainability requirements, please visit www.arcelresins.com.

Photo courtesy of Concrete Block Insulating Systems



In 2007, ABC Television's *Extreme Makeover®: Home Edition* series featured their first "green home" construction project. The home was built using Insulated Concrete Forms (ICFs) supplied by BuildBlock® Building Systems and manufactured by Concrete Block Insulating Systems, Inc. using NOVA Chemicals expandable polystyrene resin. These state-of-the-art ICFs provide a range of environmental benefits. Their excellent insulation properties result in energy efficiency for both heating and cooling, which means that less carbon dioxide is released into the atmosphere on an ongoing basis. They provide better sound insulation for a quieter environment and reduce air infiltration by 75% – preventing outside pollutants and irritants from lowering inside air quality. ICFs also save natural resources by replacing other construction materials and reducing construction waste. For additional information, please visit www.buildblock.com/EMHE.



ELEMIX™ concrete additive is specially formulated for use in structural and non-structural concrete applications. ELEMIX concrete additive reduces the unit weight of concrete by up to 25%, providing structural strength through mix optimization and increasing the life and durability of a concrete structure. In addition to these construction benefits, using this additive enables more concrete to be transported in each shipment – resulting in reduced fuel consumption and lower emissions. To learn more, please visit www.elemix.com.

DID YOU KNOW?

Chemicals account for 10% of the cost of a house, including the cost of important insulation products to increase energy efficiency and reduce the emissions of greenhouse gases.

The chemical industry creates materials to insulate homes, which have saved more than 5 billion gallons of fuel and cut carbon emissions by 6 million tons since the 1970s.

The use of plastic exterior foam insulation in residential housing dramatically reduces greenhouse gas (GHG) emissions. In Canada alone, plastic exterior foam insulation reduces GHG emissions by three million tonnes per year (the equivalent of removing 700,000 standard vehicles – or 826,725 hybrid vehicles – from the road).

NOVA Chemicals is a member of the Expandable Polystyrene Molders Association, an organization dedicated to promoting the use of expandable polystyrene resin as an innovative building material and a component of green design. Learn more at www.epsmolders.org.

For additional information regarding NOVA Chemicals' approach to sustainability, please look under "Environment" in the Social Responsibility section of www.novachemicals.com.

Product Stewardship

DID YOU KNOW?

The chemistry industry makes the products that make modern life possible, while working to protect the environment and public and security. From medicines, fabrics, plastics and clean drinking water to cell phones, computers, automobiles and aircraft, chemicals and the business of chemistry are at the heart of safer, more convenient and healthier living. To learn more about the many ways that the products of chemistry make modern life possible, please visit:

- www.americanchemistry.com
- www.plasticsinfo.org
- www.ccpa.ca
- www.chemistryandyou.org
- www.elements-of-life.org

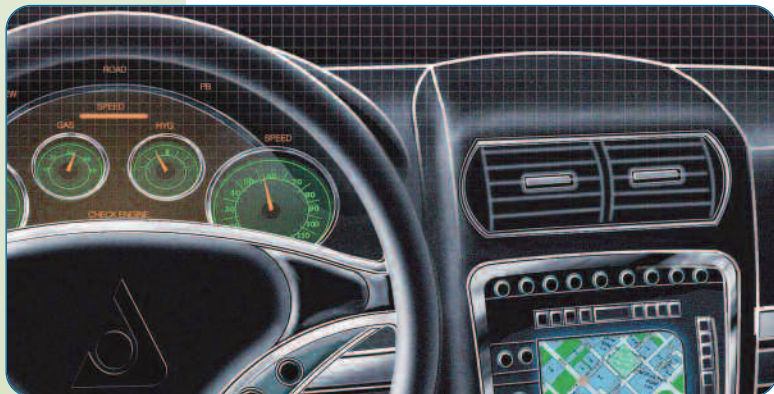
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If you have questions about plastics issues that you may have heard about in the media, www.factsonplastic.com and www.plasticsmythbuster.org are good sources of additional information.

At NOVA Chemicals, product stewardship is the practice of making health, safety and environmental protection an integral part of the development, manufacturing, handling, use and disposal of chemical and polymer products.

We make the “building blocks” – plastic resins and basic chemicals – used in products that make people’s lives safer, healthier and easier. Customers use our products to make food packaging, life-saving medical devices and supplies, protective packaging for electronics, injury-reducing sports gear, construction products and systems, insulated drinking cups and a host of other familiar items. Our approach is to maximize the benefits of these products while minimizing risks throughout the product lifecycle.

NOVA Chemicals DYLARK® resins are preferred by plastics designers, engineers and processors for automotive applications, such as soft instrument panels, structural consoles, roof-mounted LCD video supports, interior trim and audio components. The industry-leading structural and thermal properties of DYLARK resins allow designers to use thinner walls in these applications, reducing the overall weight of the assembly without sacrificing part performance. Every pound of plastics and composites used to “lightweight” an automobile produces two to three pounds of weight savings in that vehicle.



NOVA Chemicals NOVAPOL® polyethylene resins are used in a wide variety of consumer and industrial products.

As part of our product stewardship process we:

- Lead and participate in research to understand the potential health impacts of products before they are introduced to the marketplace.
- Characterize, manage and communicate product hazard and risk information.
- Work with suppliers and carriers to ensure they safely handle, package and transport the raw materials required to manufacture our products.
- Engage our customers, carriers and distributors to work cooperatively in order to safely handle, use and dispose of our products.

We actively support the Global Product Strategy (GPS) of the International Council of Chemical Associations’ (ICCA). GPS is designed to meet the United Nation’s Strategic Approach to International Chemicals Management, and is an innovative program to improve product stewardship within the chemical industry and with suppliers and customers throughout the supply chain. Companies engaged in GPS, including NOVA Chemicals, are committed to make relevant product information publicly available.

To learn more, please visit the Social Responsibility section of www.novachemicals.com under Product Stewardship and Products and Services.

Reuse and Recycling Programs

The plastics industry supports recycling that is sustainable, economical and environmentally responsible. Since 1990, the plastics industry has invested more than \$2 billion to support increased recycling and to educate communities in North America.

As part of both our Product Stewardship program and sustainability efforts, NOVA Chemicals encourages environmentally and economically sustainable plastics recovery and recycling programs. We participate in the Alliance of Foam Packaging Recyclers (www.epspackaging.org), and we are a primary funding member of the Environment and Plastics Industry Council (www.plastics.ca/epic), which sponsors plastics recycling research and integrated waste reduction strategies for Canadian municipalities.

NOVA Chemicals is a partner in Operation Cleansweep (www.opcleansweep.org), an initiative that seeks to prevent the release of resin pellets into the environment. Operation Cleansweep combines fundamental product stewardship and environmental principles in helping every plastic resin handling operation implement good housekeeping and pellet containment practices to work toward achieving zero pellet loss.

The Progressive Bag Affiliates (PBA) of the American Chemistry Council (ACC) promotes the increased recycling of plastic bags as well as their proper use, reuse and disposal. PBA recognizes that more can always be done to address environmental concerns, and works to create solutions to reduce the number of plastic bags that end up in landfills and as litter.

To learn more about this issue, please visit:

- www.americanchemistry.com
- www.plasticbagrecycling.org
- www.cpia.ca/epic
- www.myplasticbags.ca



NOVA Chemicals' United States Operating Center is a member and sponsor of the Southwestern Pennsylvania Household Hazardous Waste Task Force. The mission of the organization is to facilitate the proper collection and disposal of household hazardous waste (e.g., automotive products, lawn and garden chemicals, oil-based paint, etc.) and minimize its generation through education. The HHW Task Force holds collection events each year throughout the Southwestern Pennsylvania region to help residents safely and properly dispose of their unwanted and outdated household chemical products.

High-Density Polyethylene (HDPE) and polyethylene terephthalate (PET) represent 95% of the plastic bottle stream. To improve the recovery rates of post-consumer plastic bottles, ACC's Plastics Division developed the "All Plastic Bottles" program, which simplifies the sorting process for consumers. Today the program is practiced in 1,800 communities nationwide. To learn more, please visit www.allplasticbottles.org.

The Canadian Energy-From-Waste Coalition (CEFWC) is a broad-based organization representing industry, associations, municipalities and other stakeholders committed to sustainable environmental policies. CEFWC supports the promotion, adoption and implementation of energy recovery/energy from waste technology such as the thermal treatment of waste to recover energy. For additional information, please visit www.cpia.ca/epic.

For additional information on plastics reuse, recycling and recovery – such as a program designed to help reduce litter and marine debris and encourage plastics recycling in California's coastal communities and beyond – visit the American Chemistry Council's "Learning Center" at www.americanchemistry.com.

DID YOU KNOW?

As part of their commitment to product stewardship, Responsible Care companies communicate with suppliers, users and other stakeholders regarding product safety and management.

Under this product communication requirement, American Chemistry Council member companies are required to have a communication system to facilitate public knowledge of their products, including relevant safety and management information. NOVA Chemicals has posted product, hazard and risk information in the Products & Services and Social Responsibility sections of www.novachemicals.com.

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The American Chemistry Council has operated CHEMTREC® Support Services, a round-the-clock emergency communications center, since 1971. To learn more, please visit www.chemtrec.com.

Environmental Protection

DID YOU KNOW?

The American chemistry industry invested \$14 billion in environmental, health and safety programs in 2007.

The chemical industry continues to produce more with less impact on the environment. Since 1988, the U.S. chemical industry has reduced emissions of core chemicals by 75% while increasing production by 47% during the same time period.

The American chemistry industry has reduced fuel and power energy consumed per unit of output by nearly half since 1974.

NOVA Chemicals believes that sound and sustainable environmental stewardship and the careful management of our natural resources – including air, land and water – simply make good business sense.

Ensuring Compliance, Tracking Performance

We have established companywide systems and procedures to continuously improve our environmental performance and protect the well-being of our communities.

A critical element of our approach is tracking key environmental performance indicators that help us understand our progress in managing the use of our valuable natural resources and in reducing environmental releases, emissions and hazardous waste.

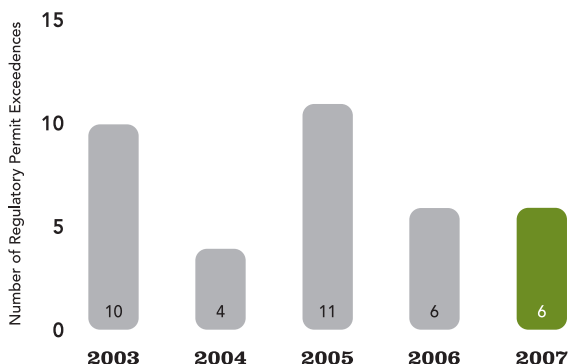
Since 2000, we have been setting short- and long-term performance targets for a wide range of environmental indicators, including regulatory permit exceedences, hazardous waste, atmospheric

emissions, spills and releases, and community complaints. Our companywide Responsible Care Council reviews our performance and establishes targets that help to drive continuous improvement throughout our operations.

Through these efforts, NOVA Chemicals has steadily improved our overall compliance and reduced the number of regulatory non-compliance and permit exceedences by 40% since 2003.

We are committed to systematically reducing hazardous and non-hazardous waste generation from our manufacturing sites. Our routine and non-routine hazardous waste generation trended upwards in 2005 and 2006 as a result of extended plant maintenance, plant modernization and

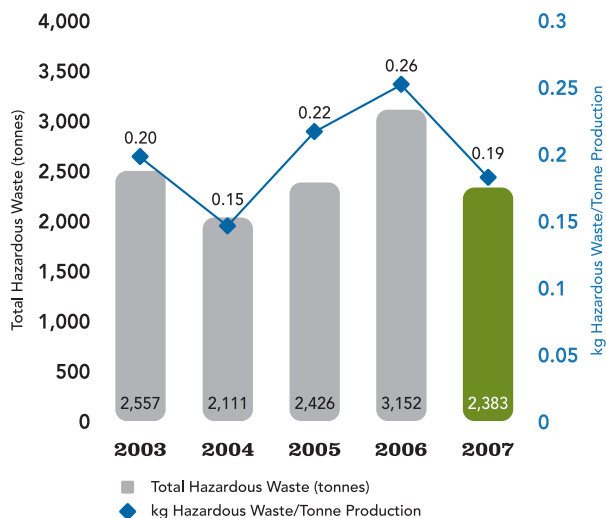
Regulatory Permit Exceedences



All NOVA Chemicals manufacturing sites are issued environmental permits by government agencies that oversee specific operations and enforce regulatory requirements. When a site is not fully compliant with a legal requirement, this is described as a regulatory permit exceedence (RPE).

The Ontario Ministry of the Environment conducted an intensive inspection program of all large industrial facilities in the Sarnia-Lambton area of Ontario, Canada, in 2005. Our total number of RPEs rose as an outcome of this activity, but these RPEs were primarily due to administrative and records management issues. No significant regulatory or permit infractions were identified at any of NOVA Chemicals' Ontario manufacturing facilities.

Hazardous Waste





All NOVA Chemicals manufacturing sites routinely conduct air quality monitoring.

a new regulation that eliminated the reuse of a specific process co-product as fuel. With the completion of most of the maintenance and construction activities and new approaches to managing the process co-product, our waste generation in 2007 returned to levels consistent with our historic performance.

Working with Others to Manage Greenhouse Gas Emissions

Greenhouse gas (GHG) emissions and air quality are important public policy issues and require the involvement of all stakeholders. NOVA Chemicals works co-operatively with others in our industry, multi-stakeholder groups, communities and governments to develop and implement effective solutions.

We continue to work with North American federal, provincial and state governments to encourage regulations that are economically sustainable and support the development

of transformational technology that can be shared globally.

We play a leadership role in both the Canadian Chemical Producers' Association and the American Chemistry Council. Both organizations and its members are committed to continuous improvement in addressing climate change. Members have significantly reduced both GHG emissions and intensity, and dramatically improved energy efficiency – while at the same time increasing production.

NOVA Chemicals has always placed a priority on research and technology development. We work with research partners at universities, customers and suppliers to further the development of technology that drives step-change improvements in energy efficiency and delivers energy-saving products. This approach will help to reduce GHG emissions from industrial activities and lessen the environmental footprint of consumers.

DID YOU KNOW?

Canadian Chemical Producers' Association (CCPA) members now produce a unit of chemical product with 86% less emissions than in 1992.

CCPA members have decreased emissions across the board, including emissions to water, which are down by 99.5%. Emissions of known and probable carcinogens have declined by 95%, and ozone-depleting emissions have declined by 66% from 1992 volumes.

Total GHG emissions have decreased by 21% since 1992 for CCPA members, and their GHG emissions intensity is projected to decline by 63% in the 1992-2011 timeframe.

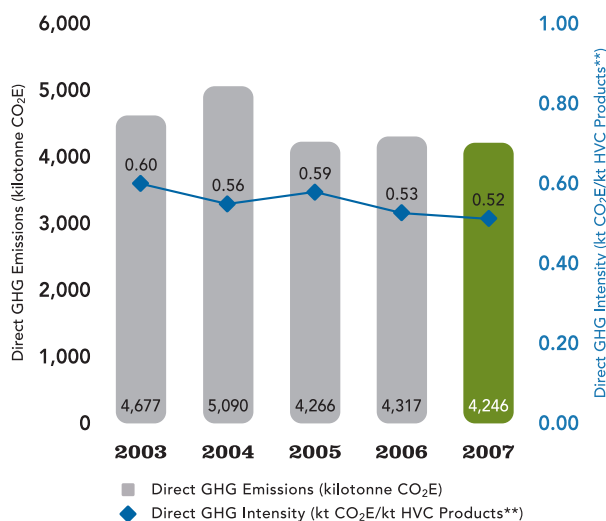
For more information on emissions reductions in Canada, please read the CCPA's "Reducing Emissions Report" available at www.ccpa.ca.

Environmental Protection (continued)

DID YOU KNOW?

The chemical industry provides regular progress reports on greenhouse gas emissions reduction to government agencies, the media and the general public.

Direct Greenhouse Gas Emissions CO₂E: Chemical Manufacturing Facilities*



* Direct GHG emissions from the cogeneration facility in Joffre, Alberta, are excluded.

**Production data includes the range of materials considered to be high value chemical (HVC) products. This includes the primary products and co-products for which chemical plant operation is generally optimized to produce, and these may be consumed in further processing or sold to third parties.

The ethylene cracking furnaces at our facilities in Joffre, Alberta, are designed to reduce both the consumption of fuel and emissions of oxides of nitrogen (NO_x). These systems are regularly maintained to ensure optimal performance.



NOVA Chemicals' Commitment

- We have been actively working to reduce GHG emissions intensity since 1990, and have publicly reported our performance since 1994.
- Through our recent actions, we have reduced our direct GHG emissions intensity by more than 13% from 2003 to 2007.
- We estimate our direct GHG emissions intensity will be reduced by approximately 20% in the 1999 to 2010 timeframe.
- Our approach is proactive. Our strategies support aggressive investment in technology and projects that drive step-change improvements in energy efficiency.
- We will continue to utilize cogeneration as a key component of our greenhouse gas emissions reduction strategy. All of our Canadian manufacturing facilities utilize cogeneration to meet their power needs.

Additional details regarding our GHG reduction strategy, projects and performance are outlined in the "Managing Greenhouse Gas Emissions" report available in the Social Responsibility section of www.novachemicals.com under Environment.

For *Where We Stand on Climate Change*, please refer to the Social Responsibility section of www.novachemicals.com under Environment.

Since 1992, the North American chemical industry has reduced GHG emissions intensity by more than 30%, and GHG emissions have fallen in absolute terms by more than 12%.

Reclamation and Dismantling

The safe dismantling of obsolete or legacy facilities, mitigation of environmental concerns associated with these facilities, and the divestitures of these properties are important facets of our environmental program. We strive to manage all site dismantling and remediation in a sustainable manner, exemplified by our commitment to salvage and recycle assets and the application of state-of-the-art remediation technologies.

Since 2000, work has been performed at 13 inactive sites in the U.S. and Canada. Seven of the 13 sites have been dismantled, remediated and divested for continued industrial, commercial or recreational use. Four leased sites were cleaned and returned to the property owners, and the

remaining sites in Copley, Ohio, and Chattanooga, Tennessee, have ongoing remediation in progress. All sites that required significant remediation were certified clean by state or provincial environmental regulatory agencies prior to resale. We are proud to report that all legacy properties were cleaned and divested safely, with no recordable employee or contractor injuries.

In addition to our work at inactive sites, NOVA Chemicals has also supported environmental and dismantling activities at our active manufacturing sites. Activities included asbestos removal, subsurface remediation, and partial site dismantling at facilities in the U.S., Europe, Canada and Chile.

DID YOU KNOW?

Measuring and managing the energy efficiency of manufacturing facilities is an important step in conserving the world's resources. Chemical product makers have achieved significant energy efficiency gains the first oil price shocks of the 1970s, when the industry began a series of improvements that continue today. Since then, chemical manufacturing has increased its energy efficiency by 51%, with many of the improvements coming from more energy-efficient products and processes.



NOVA Chemicals helped to transform 6,000 acres of legacy coal mining properties in central Pennsylvania by installing state-of-the-art treatment systems designed to prevent acidic mine water from impacting local trout streams.

After the remediation was completed, a cooperative agreement was reached with state agencies and the local community for them to assume responsibility for the property and to operate and maintain these systems. The site has since been developed into the Rock Run Recreation Area, the largest all-terrain vehicle park in Pennsylvania. The park promotes responsible trail riding and environmental stewardship to visitors.

Health and Safety

DID YOU KNOW?

NOVA Chemicals' Joffre, Alberta, manufacturing site and Canadian Operating Center in Calgary, Alberta, were both recognized by Alberta Employment, Immigration and Industry with a Work Safe Alberta 2006 Safety Performer Award. The award recognizes exceptional performance in workplace health and safety. NOVA Chemicals was one of approximately 300 of Alberta's 140,000 employers to earn this honor.

NOVA Chemicals' Painesville, Ohio, facility was one of 21 companies honored as Ohio's Best Employers in the Small/Medium Companies Category. Companies were evaluated on workplace policies, practices, philosophy, systems, demographics and the results of an independent employee survey. "The companies that made the Best Employers in Ohio list serve as role models for other Ohio companies," said Ohio Chamber of Commerce President and CEO Andrew E. Doehrel. For more information, please visit www.bestemployersoh.com.

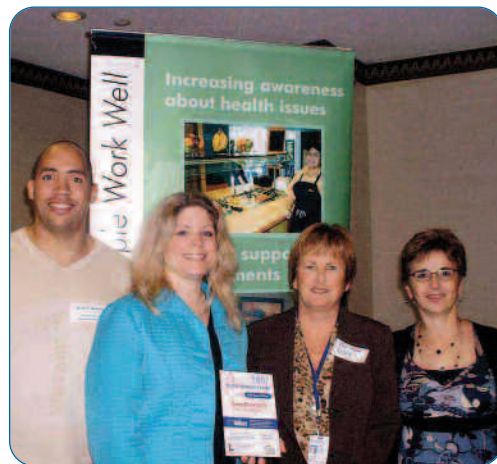
The Sarnia Lambton Industrial Educational Cooperative presented our Moore Township, Ontario, site with their Contractor Safety Perception Award for 2007, naming the site 'the safest place to work in Chemical Valley.' The award is derived from the results of a 'Basic Safety Orientation Survey,' designed to reveal how safe contractors feel working at a given facility and completed by approximately 5,000 contractors.

NOVA Chemicals' health and industrial hygiene programs are a reflection of our core Responsible Care principle – that people are our most valuable asset.

Health

We implement occupational health and industrial hygiene programs that help protect the health of employees and their families, our communities and our customers. On-site health programs verify that employees are fit to work, and monitoring programs help to ensure that we minimize any exposures. Examples of recent efforts include the implementation of occupational health and safety software for managing employee medical records, a risk-based medical monitoring matrix and a workplace exposure assessment procedure. These systems help us to effectively track, trend and promote the health and wellness of our employees.

We also employ broader approaches to health and wellness, such as our companywide "Balance" initiative. This initiative educates employees about maintaining and improving overall health and wellness at work and at home, and it encourages them to share this information with their families.



The County of Lambton, Community Health Services Department presented NOVA Chemicals' Ontario manufacturing sites with a Gold Award at its 2007 Healthy Workplace Awards ceremony. This is the third consecutive year that these sites have received this award for their commitment to a healthy lifestyle for employees at work and at home.



Our employee health and wellness programs include the "Know Your Numbers" campaign, which encourages employees to identify potential health risks through awareness of four critical health numbers: blood pressure, cholesterol, glucose and body mass index.



Responsible Care Week at our Joffre, Alberta, site included a Wellness Fair. During this event, 45 agencies shared information through displays and activities on a wide range of health and wellness topics. Pictured is a display showing how advances in plastics technology and engineering provide lightweight and sturdy sports and safety gear for children.

Safety

NOVA Chemicals operates on the premise that all work-related illnesses and injuries can be prevented, and our goal is to foster a culture that focuses on the critical importance of safe behaviors, both on- and off-the-job. Our companywide initiatives and programs raise awareness and educate our employees in order to help them work safely. We focus on safety fundamentals such as task analysis, ergonomics and behavior-based safety programs, and employ critical safety procedures in areas such as confined space entry, lockout/tagout and fall protection.

We drive improvements in our safety practices and performance across the company through hazard recognition, co-worker safety observations and promotion of best practices. When an incident or injury does take place, we investigate the event and record the findings in our data management system. This allows us to share information across the company in order to minimize the risk of recurrence.



Our Beaver Valley site in Monaca, Pennsylvania, implemented the SAFESTART™ safety program, a process designed to reduce the frequency of injuries. The SAFESTART program focuses on the major causes of injuries such as rushing, fatigue, frustration and complacency – as well as the habits or patterns that increase the risk of injury.

NOVA Chemicals also employs an annual Safety Leadership Perception Survey to gauge the effectiveness of our leaders on safety issues. We believe that strong leadership which promotes personal accountability and responsibility drives our safety performance and helps to keep our employees safe.

As a result of these efforts, NOVA Chemicals achieved our best ever Employee Total Recordable Case Rate (TRCR) of 0.57 in 2007. Our Contractor TRCR also improved by 20% in 2007 as a result of new systems and programs aimed at reducing contractor injury rates.

DID YOU KNOW?

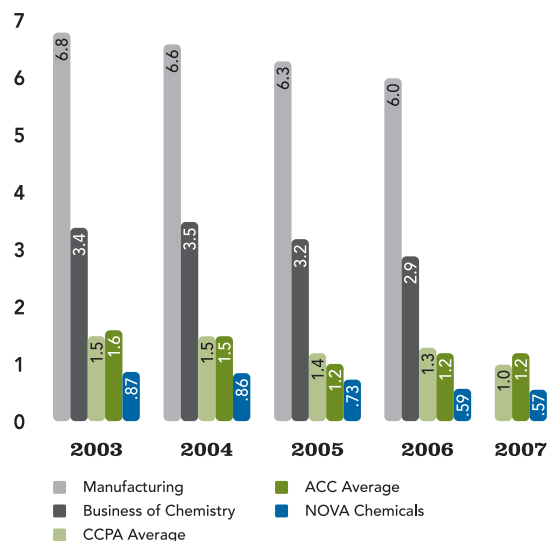
American Chemistry Council member companies have an employee safety record that is more than four times safer than the average of the U.S. manufacturing sector as a whole. Workers are safer in the chemistry business than those in retailing, agriculture, food stores and general merchandising.

Companies in the U.S. chemical industry spend about \$2.2 billion per year on programs to continually improve worker health and safety.



Personal protective equipment helps keep workers safe at all NOVA Chemicals manufacturing sites and research facilities.

Total Recordable Case Rate* Comparison (TRCR)



* Total Recordable Case Rate (TRCR): The number of away from work cases, medical treatment cases or restricted work cases (where the work routine is restricted due to the work-related injury or illness) as a rate per 200,000 hours worked.

Health and Safety (continued)

NOVA Chemicals' process safety programs include routine monitoring of conditions and inspections of protection systems at our manufacturing sites.

DID YOU KNOW?

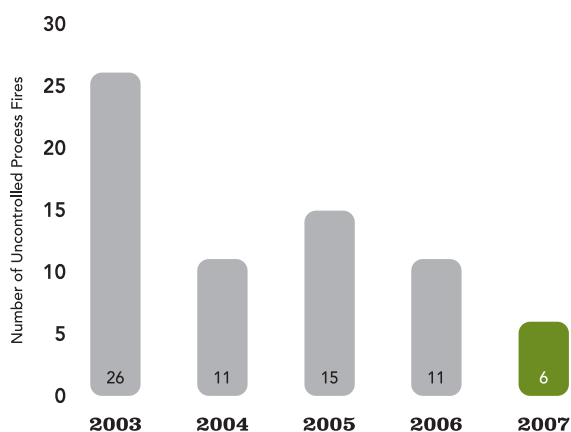
Since 1995, process safety incidents among American Chemistry Council member companies have declined by 49%.

Responsible Care companies are working to make this industry even safer for our employees and communities. Under the Responsible Care initiative, companies are required to investigate significant process safety incidents, mitigate adverse impacts, determine the root causes and complete corrective and preventive actions.

Through professional organizations and industry associations, companies also share important findings from incident investigations, so others can learn from them.



Uncontrolled Process Fires



Process Area - An area where process materials are manufactured, stored, handled or otherwise used, including all utilities, electrical and ancillary equipment associated with these areas. Similar functional areas in pilot plants and laboratories fall under this definition.

Process Fire - An unintended oxidation that occurs in a process area that produces flame or glowing embers, or evidence that this has occurred, such as charred or burned material.

Controlled Process Fire - The fire potential was anticipated and safeguards put in place to control/contain the fire should it occur, and the fire does not exceed the anticipated consequences, and there was no damage to equipment beyond the initiating failure, and there were no injuries to personnel resulting directly from the fire.

Uncontrolled Process Fire - Any process fire that cannot be classified as controlled.

Process Safety Management

Process safety is defined as a program or activity that involves the application of management, engineering and analytical techniques to focus on the prevention of fires, explosions and accidental chemical releases at chemical process facilities. This is distinct from classic worker health and safety issues such as slips, trips and falls, ladders and scaffolding, use of personal protective equipment, etc.

The effective management of our manufacturing processes is crucial to the safe and efficient operation of our manufacturing facilities. Through stringent process safety programs and procedures, we reduce the risk of uncontrolled manufacturing process events in our facilities.

We construct layers of protection to minimize the occurrence of process related events. Examples of our efforts include maintenance programs to minimize the risk of equipment failure, chemical detectors to identify hazardous conditions and ventilation systems to minimize oxygen depletion.

Process fire prevention is an area of particular focus at NOVA Chemicals, and we believe that our approach is an industry best practice. Any fire or evidence of a flame – even those smaller than a candle flame – in the process area, as well as adjacent spaces such as warehouse and utility areas, is classified as a process fire. In 2007, we reduced process fires to their lowest level since we started collecting data.

We actively share what we learn about process fires and their prevention with peer companies, and encourage the development of industry standard definitions and methodologies to broaden the use of this approach. The core of our advocacy for improving process safety management and the implementation of process safety metrics is active participation on work committees led by the Center for Chemical Process Safety, the American Chemistry Council and the Canadian Chemical Producers' Association.

Transportation Safety

A key measure of safe transportation for a chemical company is the number of Non-Accident Releases (NARs), defined as instances when a release of hazardous material occurs from a railcar during transport that could have been prevented by maintenance or inspection. Releases usually involve small amounts of material, often as little as 250 milliliters (or approximately one cup).

NOVA Chemicals shipped more than 12,000 individual rail tank cars containing over 1.9 billion pounds of hazardous materials in 2007. We are committed to ensuring that these tank cars are safe to operate and properly maintained. Each year, we conduct audits, share best practices and reinforce procedures to seal our railcars properly to prevent non-accident releases (NARs).

In 2007, we recorded four NARs. None of these involved reportable or significant quantities of material and there were no community impacts. The NARs were all related to human error during maintenance or inspection, and we have revised our loading and inspection procedures to prevent recurrence and improve performance.

NOVA Chemicals has been recognized for the safe shipping of hazardous materials by the following railroads in 2007:

- **Burlington Northern Santa Fe Annual Product Stewardship Award**, presented to shippers who transported a minimum of 500 loaded tank cars of hazardous materials during the past year with zero non-accident releases (NARs). NOVA Chemicals has received this award for the last three years and for 10 out of the last 11 years.
- **Canadian Pacific Chemical Shipper Safety Award** for zero non-accident releases for the last five consecutive years.
- **Norfolk Southern Thoroughbred Safety Award** for zero NARs for the second consecutive year.
- **Union Pacific Chemical Transportation Safety Pinnacle Award** to commend our safe loading practices and zero non-accident releases for the third consecutive year.

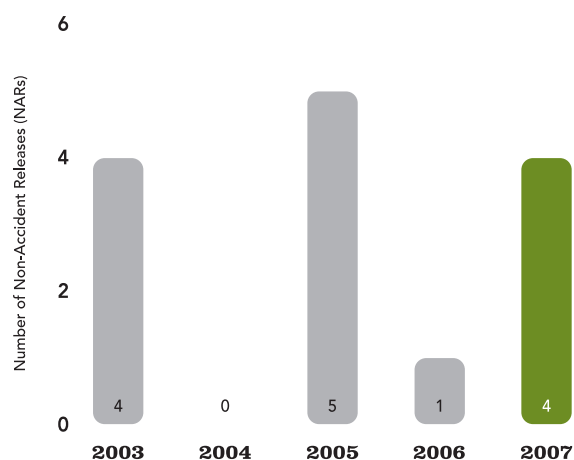
DID YOU KNOW?

Since 1995, the number of distribution incidents among American Chemistry Council member companies declined by 49%, while the volume of chemicals shipped increased 10% for the U.S. chemical industry overall.

Safety does not stop at the plant gate. Essential chemical products are needed across the nation and around the world. As a result, large volumes of chemical products are moved domestically and internationally each year.

The safe distribution and handling of chemicals is an important indicator of performance. Responsible Care companies track hazardous material distribution incidents reported to the U.S. Department of Transportation (DOT) in the U.S. and Transport Canada in Canada.

Non-Accident Releases



NOVA Chemicals employees at the Moore Township and St. Clair, Ontario, manufacturing sites are helping to complete a railcar reflectorization program to increase car visibility and safety.

Emergency Preparedness and Security

DID YOU KNOW?

American Chemistry Council member companies have invested nearly \$6 billion to further enhance security at chemical facilities over the last six years.

The Responsible Care Security Code is widely recognized by the Department of Homeland Security and state and local governments as a model for the chemical industry and other U.S. industries.

In 2007, all American Chemistry Council member companies were required to re-pledge their ongoing commitment to the Security Code by signing a Security Code Reaffirmation statement which states that companies continue to maintain their Responsible Care Security Code implementation for facility, value chain and cyber security interests at all company chemical operations. We are currently in compliance with all aspects of the ACC's security codes.

Emergency preparedness and security are cornerstones of NOVA Chemicals' Responsible Care program.

We are always working to identify and mitigate security risks associated with our operations in order to protect our local communities, employees, the environment and our facilities.

Without waiting for government action, we joined our American Chemistry Council (ACC) and Canadian Chemical Producers' Association peers in implementing a comprehensive security program for all of our facilities worldwide. More than 2,000 ACC member facilities have completed rigorous security vulnerability assessments to strengthen site, information technology and transportation security as part of this program.

Although the products that NOVA Chemicals manufactures have virtually no potential for immediate use as weapons, we continue to take aggressive measures to safeguard our facilities and materials from possible attacks or thefts.

We work to:

- Identify and evaluate gaps in physical security, cyber-security and security procedures on a scheduled basis.
- Close gaps with appropriate countermeasures.
- Verify the effectiveness of countermeasures through the use of independent third parties.

Examples of specific measures that we take at our facilities to enhance security include: visitor identity verification, background checks, employee patrols, digital video recording, increased perimeter lighting, and fence and fence line inspections. We also educate employees regarding security issues; implement strict controls and accountability regarding all aspects of the handling of hazardous chemicals; and further develop our relationships with law enforcement and emergency response personnel.

Each of our facilities is ready to respond to crisis situations in order to protect our workers, the community and the environment. NOVA Chemicals believes that proactive involvement and planning with regional support services plays an important role in protecting our employees, communities and operations, and we continually re-evaluate and test our security through drills with community emergency responders. This includes working closely with law enforcement at local, state and provincial levels, including the U.S. Coast Guard, the FBI and the Canadian Security Intelligence Service.



All NOVA Chemicals manufacturing sites have security personnel on duty round-the-clock.

In March of 2008, NOVA Chemicals participated in Cyber Storm II, a global exercise conducted by the U.S. Department of Homeland Security to measure how governments and the private sector would respond to a massive cyber security threat. Cyber Storm II involved more than 40 companies in the information technology, transportation and chemical industries; 18 federal departments and agencies, including the Department of Defense and the Department of Justice; nine states; Public Safety Canada; and government officials in the United Kingdom, Australia and New Zealand.

“Exercises are important tools for strengthening our ability to deal with incidents, including threats to cyber security. Canada’s participation in this exercise is an example of our government’s ongoing commitment to working with our international partners to protect critical infrastructure.”

Stockwell Day, Minister of Public Safety, Canada, commenting on the Cyber Storm II exercise.

TRANSCAER® Task Group

NOVA Chemicals participates in Transportation Community Awareness and Emergency Response (TRANSCAER) in North America and is a member of the National TRANSCAER Task Group of the American Chemistry Council. TRANSCAER is an outreach effort that assists communities in preparing for and responding to possible hazardous material transportation incidents. This partnership between chemical companies and carriers works to reduce transportation incidents and provide technical assistance in the event of an in-transit product release.

NOVA Chemicals is the regional coordinator for TRANSCAER Region 1 (Comprised of 19 states from the Midwest, Mid-Atlantic and Northeast Regions of the U.S.).

We are also a member of Pennsylvania TRANSCAER (PATC). PATC has received the TRANSCAER Regional Approach Award the past four consecutive years for their leadership and distinguished work in community outreach and training at the county level. In 2007, PATC was instrumental in sponsoring six critical emergency response exercises for county and local emergency responders throughout Pennsylvania. PATC also provided opportunities for emergency response training and enhanced the capabilities of county Emergency Management Agencies and local emergency responders.

In support of Emergency Preparedness Week in London, Ontario, NOVA Chemicals took part in a weeklong event to educate attendees about the TRANSCAER program, dangerous goods transportation and emergency response. There were over 200 participants from surrounding counties, including local and provincial police, professional and volunteer fire departments, and Emergency Measures Services personnel. Representatives from Federal and Provincial Government agencies, industry, NGOs and the city of London Public Works Department were also in attendance.

DID YOU KNOW?

When a chemical spill occurred in 2007 at the Agriculture and Agri-Food Canada-operated Lacombe Research Centre in Lacombe, Alberta, NOVA Chemicals’ HazMat Team was called on for assistance. The incident was minor, no one was injured and there was no risk to the public.

“While it wasn’t an overly large spill we were dealing with, there were a number of chemicals involved. Where we are dealing with such a mix of chemicals, to be able to call on NOVA Chemicals’ team of experts is such a valuable resource.”

Darryl Friesen,
Lacombe Deputy Fire Chief



A Canadian National Railroad Dangerous Goods Officer briefing attendees on operations of the locomotive and its safety features.

Responsible Care in Our Communities

DID YOU KNOW?

Under Responsible Care, American Chemistry Council and Canadian Chemical Producers' Association members must be active in community dialogue with neighbors and other stakeholders in their area. The chemical industry sponsors more than 300 CAPs in the U.S. and Canada in order to solicit input from and improve communications with towns and cities where we live and work.

Our largest manufacturing complexes have community websites to help inform and educate the public about our operations:

Sarnia-Lambton, Ontario:
www.novachem.com/SarniaLambton

Joffre, Alberta:
www.novachem.com/Joffre

We believe that sustainable business success demands positive and open long-term relationships with all of our stakeholders.

As part of this commitment, we work to inform our communities about our facilities, operations and products. We make concerted efforts to understand and respond to the concerns of local communities and residents and seek their input about our plans and operations through Community Advisory Panels (CAPs), open houses, community forums and personal visits.

NOVA Chemicals also invests in the well-being of our communities through organizations, programs and events that support emergency services partnerships, health, science and technology education, and sustainable reuse and recycling initiatives.



Wherever possible, NOVA Chemicals sites participate in reuse and recycling programs that benefit their local communities.

NOVA Chemicals' U.S. Operating Center and Beaver Valley site in Monaca, Pennsylvania, donated over 14,000 lbs. of computer hardware to Goodwill Industries, including PCs, monitors, printers and servers. The hardware is refurbished and used by Goodwill® or sold to consumers at Goodwill stores to support their programs. All obsolete or unrepairable hardware is dismantled and properly recycled.



NOVA Chemicals' Joffre, Alberta, site promotes and supports reuse by providing computers and related equipment to the Community Information and Referral Society's Information Management Information Technology (IMIT) program in Red Deer, Alberta. IMIT refurbishes the equipment for use by non-profits in the Central Alberta community.



Our Ontario, Canada, manufacturing sites donated office supplies and equipment to the Inn of the Good Shepherd in Sarnia, Ontario. The Inn's Executive Director, Myles Vanni, said, "Your donation enabled us to devote our limited financial resources to helping families in need. Some of the supplies you donated will be added to our back-to-school kits to help families with limited incomes."

NOVA Chemicals participates in and sponsors safety, health and emergency response events that benefit our local communities.

The emergency response team from our Ontario, Canada, manufacturing sites participated in Sarnia, Ontario's annual Emergency Preparedness Day. The open-house style event was held at a local arena and included a demonstration of a rescue lift using a "basket" for some of the schoolchildren bused in for the day.



Children of employees from the Painesville, Ohio, site were able to get an up-close look at one of the Painesville Township Fire Department's fire engines during the site's annual Health Fair.

As a company, we believe in the importance of promoting science and technology education to help children and community members learn about careers in the chemical industry. Our manufacturing, technology and office sites participate in local career and technology fairs and sponsor career days, "Take Your Kids to Work Days," internships and mentoring programs.



Our Joffre, Alberta, site's annual career day gave students the opportunity to learn about a polyethylene pellet packaging line.

"NOVA Chemicals employs our students, funds our scholarships and provides leadership on our Board of Governors. Last year, NOVA Chemicals took a leadership position as the first private-sector company to invest in the Red Deer College Building Communities Through Learning Program."

**Ron Woodward, President,
Red Deer College, Red Deer, Alberta**



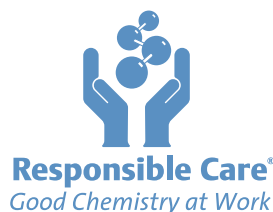
Red Deer College in Red Deer, Alberta, honored NOVA Chemicals with their 2007 Partner of the Year award.

Questions? Comments? We invite you to contact us.

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Additional information about our Responsible Care programs, performance and sustainability efforts is available in the Social Responsibility section of www.novachemicals.com.

To learn more about Responsible Care and sustainability in the chemical industry, please visit the websites of our major trade associations:

American Chemistry Council (ACC):

- www.americanchemistry.com
- ACC's Plastics Division: www.americanchemistry.com/plastics
- TRANSCAER®: www.transcaer.org

Canadian Chemical Producers' Association (CCPA):

- www.ccpa.ca

The ACC and the CCPA are both members of the International Council of Chemical Associations (ICCA):

- www.icca-chem.org
- www.responsiblecare.org

Canadian Plastics Industry Association (CPIA):

- www.cpia.ca
- Canadian Environment and Plastics Industry Council (EPIC): www.cpia.ca/epic
- www.plastics.ca

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