



Chemistry Industry Association of Canada National Advisory Panel

April 29 – 30, 2019

Hilton Lac-Leamy, Ottawa-Gatineau

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Chemistry Industry Association of Canada

National Advisory Panel

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National Advisory Panel:

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Gilles Laurin
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Beverly Osazuwa (observer)
Alina Pringle (observer)
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Agenda Item 1: Update on Industry Initiatives in Sarnia

Meaghan Lawrence, Communications Consultant at NOVA Chemicals in Sarnia, presented a report on Nova's activities in Chemical Valley and industry initiatives to address concerns raised by the National Advisory Panel in May 2018 regarding communications and community dialogue in that city (Appendix 1).

Meaghan noted that Nova was one of the founders of Responsible Care and talked about a continuous improvement journey by the company. She reviewed the primary goals of Nova in Sarnia in community dialogue and the company's progress to date.

She remarked that Panel feedback has been extremely valuable, both to Nova in their own benchmarking activities and to the broader industry as they work to make their various local systems adapt more effectively both to their missions and to the satisfaction of public stakeholders.

Luc Robitaille remarked that as a whole the CIAC Board took the Panel's comments at the May 2018 meeting very seriously. So "the Responsible Care process worked," he said.

Panel Comment

It was suggested that industry's approach seemed to be more industry-driven than publicly driven. A Panel member expressed disappointment with a "lack of information" for the public and apparently insufficient public engagement around issue definition and resolution.

A member remarked that providing economic opportunities can be a motivational factor in community involvement, especially with Aboriginal communities. Meaghan agreed, noting that Nova has engaged directly with three First Nations in the Sarnia area and is having continuing conversations with them on

how to create employment and business development opportunities. A Panelist emphasized the importance of ensuring that opportunities fit with the company's sustainability goals.

There was a discussion about the challenge of ensuring that other companies, in particular non-Responsible Care companies, are wholeheartedly involved in community engagement. Meaghan agreed, saying that Nova needs to communicate to other companies that “we succeed or fail together.” There was a call for the industry in Chemical Valley to track “who's walking the talk.” It was noted that, in Alberta's Industrial Heartland, Responsible Care companies have had significant success in bringing other companies up to the same standard, though it requires hard work to do so and can be greatly enhanced by a clear signal from the provincial government that Responsible Care is the standard to be met by all industrial players.

Community Panel in Sarnia

NAP Facilitator John Vincett, who has been involved in facilitating a reorganization of the Bluewater Community Advisory Panel (BCAP), reported on that process. He talked about the challenges that had been facing BCAP and the processes through which they are being addressed.

John uses the model of the three-legged stool to consider the balance and effectiveness of an advisory Panel.

1. Is the group of people involved in the Panel sufficiently representative of the community?
2. Is the process of operating the Panel as effective as it needs to be in meeting stakeholder needs?
3. Are the companies involved sufficiently responsive to matters raised at the CAP?

It was agreed that there were weaknesses to be addressed in all three areas, resulting in a number of actions:

1. Prepare a set of comments on the existing terms of reference.
2. Suggest that the CAP move from an industry-led model to a facilitator-led model.
3. Clearer alignment between BCAP activities and the industry-led groups (SLEA, CAER, IEC, CVECO).
4. Adjust the balance of the agenda to move from industry presentations to a CAP-led dialogue.
5. Conduct a brainstorming activity to define the “excellent industrial neighbour”.
6. Using that model, voting on areas where greatest improvement is required.
7. Selection of a Template for reporting on industry incidents as the most important topic.
8. Agreement that there is a need to expand the range of stakeholders around the table at BCAP.
9. A clear need to have an improved interaction with First Nations, either at the table or away from it.
10. Move to a local facilitator who would manage the fairly complicated process of a series of full meetings and smaller meetings that give an in-depth look at specific companies.

There has been considerable progress on most of these issues and BCAP has produced a community-driven template for sharing information that has been debated, and had some retroactive examples used to tweak and improve the system. More recently, an actual incident was reported on, using the template – and was felt to be an effective communications approach.

Item 3 involves a number of organizations, and that is a slower process that does seem to be evolving and those companies that previously had not been as supportive have come onside. Collectively, they have hired a third-party consultant to gather information about concerns from a number of stakeholders (including BCAP members). This has been a valuable exercise and the conclusions will be brought to BCAP in June for further discussion.

In addition, BCAP has collectively developed an outreach presentation to community groups that will be delivered by an industry and a community member as a means both of explaining the role of BCAP and seeking new members from a broader group of stakeholders.

An agreement has been struck to hold meetings of the full group at the Aamjiwnaang Community center and there is now representation on BCAP from the Band Councilor responsible for the Health and Safety portfolio at Aamjiwnaang.

A local facilitator has been selected and will be taking over BCAP this summer, and she will continue to work through addressing these challenges.

During the reorganization process, one of the companies involved signed on to Responsible Care.

John said that BCAP now feels it has a much clearer purpose. He feels that some real progress has been made and notes that although there is still some way to go, BCAP appears to be on a productive track.

Next Step

Asked what the next step at Nova is, Meaghan said that the company is now going out into the community and asking what their issues are. She said she would like to come back to the National Panel at some point to demonstrate how the company is moving forward on its plans for community involvement.

Meaghan said that she would share the Panel's comments internally with Nova and with the community.

The Panel emphasized the need for Nova to carry through the good work it is doing now. A member called on the company to ensure it is doing best practices and maintaining continuous improvement. She added that credibility comes from truth and transparency.

It was noted that, in terms of Community Awareness and Emergency Response (CAER), companies in Sarnia have long been recognized for their strength in Emergency Response, but Community Awareness remains a challenge. A couple of Panel members recommended more mutual assistance among companies in addressing this challenge.

Meaghan remarked that stakeholder engagement is half the battle in achieving credibility.

John suggested that Meaghan be invited back in 18-24 months to talk about Nova's progress in communicating with and engaging the community.

Agenda Item 2: SCOPE

Luc Robitaille, Vice President, Responsible Care, presented a draft revision of a System for Community Outreach Performance Evaluation (SCOPE) (Appendix 2). He noted that an earlier version of the form called on companies to list things they are doing in community engagement, but that we need a measure of whether a given activity is effective. The latest version shows:

- Different levels of interaction
- Types of issues
- Ranking of different types of incident
- How the company interacted with the community regarding a given issue or incident

A Panel member suggested that, in addition to addressing complaints, companies could interact more directly with the community, for example getting involved in the food bank, tree planting, etc. Luc said that such activities could be added to the form.

Asked if companies being verified have to use the form, Luc said no.

A member remarked that it could be valuable for a company to have a record of its interactions with the community, though there is a danger of a checklist mentality. The uniqueness of each company has to be addressed.

It was suggested that, just as companies may or may not adopt successful practices (depending on their own circumstances), they might or might not adopt the community outreach activities listed by other companies.

A member remarked that there is a need for a form, but that this one is “too prescriptive.”

Additional comments:

- The form could be a very powerful tool to get resources for community engagement.
- It could save time for self-assessment or for external verifiers.
- Whom to contact in the community is a challenge; a company should not have to use a form to figure that out.
- The form could be made a lot more user friendly, e.g. by using drop-down menus and providing click-on links to access a list of types of contact in the community. A co-op student with program creating skills could make the form much more user friendly.

Luc asked: What are the key things we need to cover? There were two related suggestions:

- The quality of interactions with the community, something verifiers may want to look at.
- Weigh proactive versus reactive interactions. It looks like companies in Sarnia became reactive. (It was remarked that reactive responses end up “taking way more time.”)

It was suggested that the form could be used for peer evaluations. A more general comment was that Executive Leadership Group (ELG) meetings could be an excellent source of peer feedback, if executive-

level representatives actually attended them. It was remarked that companies are now sending only low-level representatives to these meetings and are just expecting checklists.

Overall, there was a sense that although the current version of SCOPE was directionally useful, its complicated design made it seem intimidating and time consuming to use. Panel members hoped that verifiers would be looking for the quality of the interactions, perhaps more than the quantity and the tool does offer some thoughts as to how sites might collect useful information in categories.

Luc suggested that, once members have the option of RC14001 audits, SCOPE could be a very valuable tool for measuring community outreach performance.

Agenda Item 3: CIAC Update

Luc Robitaille presented a CIAC update on: topics discussed in previous Panel letters; the CIAC Strategic Plan; Association documents on emissions reductions and other issues; and Accountability Code elements related to Indigenous communities.

Review of Topics Discussed in Previous Panel Letters

Luc presented a matrix developed by PDA capturing Panel challenges to the industry from three letters (2009, 2012, 2018) and delineated the actions taken by CIAC in response (Luc's comments are highlighted in red, see Appendix 3). Panel members were encouraged by the Association's progress in addressing the challenges.

Luc said that the Association has gone in a new direction over the last three years, becoming a lot more visible. The most recent survey of member companies yielded one of the highest success results in the survey's history in terms of CIAC providing value to companies.

CIAC's Strategic Plan

The Association's Triennial process is now known as the Strategic Plan. The current Plan is focusing on:

- Transportation
- Climate change
- Competitiveness
- Chemicals management
- Responsible Care

Many of CIAC's recommendations are now appearing in government documents, almost word for word. This is the result of years of effort in Association advocacy.

In 2017–18, CIAC signed a very successful MOU with Quebec's Ministry of Economy, Science and Innovation to jointly develop and grow the chemistry industry in the province. This initiative has given the Association a stronger voice in all departments of the Quebec government.

Ontario is streamlining regulations, not to compromise on environmental goals but to avoid duplication. Protections have been rolled into existing regulations. This efficiency fits with positions that the Association has taken for some time. As well, CIAC has been able to demonstrate that Responsible Care tools meet environmental goals better than some regulations.

CIAC has worked with two non-governmental organizations in developing its approach to chemicals management, an approach that has received positive recognition from Environment Canada.

CIAC was very gratified to see two key amendments proposed by the Association included in Bill C-49, the Transportation Modernization Act. These amendments:

- Empower the Canadian Transportation Agency to proactively investigate whether a railway company is fulfilling its service obligations
- Provide greater transparency for shippers who seek final offer arbitration to challenge excess rail freight rates

CIAC is working very actively on the climate change file.

Following CIAC advice, the Federal Government has postponed the Clean Fuel Standard (CFS), which would have included standards for industry and buildings as well as transportation, making the standard the first of its kind in the world. It would have doubled the industry's fuel prices. Environment and Climate Change Canada is working with interested parties to ensure the CFS achieves its goals while maintaining Canadian competitiveness.

Luc observed that, in Europe and the U.S., too much land is devoted to raising corn for ethanol. Life cycle analysis, he said, shows that net greenhouse gas emissions actually go up. CIAC and other interested parties are therefore trying to get the Canadian Government to slow down on calling for an increase in the proportion of ethanol in gasoline.

Panel Comment

It was remarked that pressure from using corn for ethanol has caused the price of the crop to increase, making it difficult for people who depend on corn for much of their diet. It was noted that the agricultural lobby is very strong and is promoting the use of corn for ethanol, because industrial use of corn is a lot more profitable for them. There was a suggestion that use of waste biomass for ethanol production is a better approach.

Regarding recycling, Luc stated that life cycle analysis supports the use of plastic bags. He quoted a research finding that only 18 percent of blue box plastics are recycled. A Panel member said that, across Canada, only nine percent of blue box plastics are recycled. "We have to create value for all plastics," he said, "so they are not going to landfill. We need consistency (in the types of plastic collected) across the country to create a market." There was a call for industry to lobby for such consistency. It was remarked that industry, rather than municipalities, has the expertise to create a viable system of plastics recycling. A Panel member added that there is also a need to get the issue of a sensible path forward on recycling into public debate.

Luc noted that industry is working on making plastics more recyclable, in particular the recycling of polystyrene. Canada could be a leader in this area, he said.

CIAC Documents

Panel members found both *Delivering on Our Commitments* and the *2018 Year in Review* attractive documents. There was some disappointment, however, that there is no means of drilling down on the graphs on-line to obtain more specific information.

There was a call to communicate to government the real impacts of the chemical and plastics industries. It was suggested that industry and other stakeholders would need to find the correct coalition to bring data to government, so that it is seen as informational rather than political.

Regarding the reference to Responsible Care on page 13 of the 2018 Year in Review, it was remarked that there is an opportunity to sell Responsible Care to companies who are not yet CIAC members. Elaborate on what the program can do for you as a member, using active verbs.

Guidance Documents

In 2009, CIAC announced the new Responsible Care Ethic and Principles for Sustainability. In subsequent years, the practices of Responsible Care were organized into three codes: Operations, Stewardship and Accountability.

Luc noted that the Association has now developed guidance documents for member companies to help them implement Responsible Care. He emphasized that companies are not obliged to follow the guidance documents; if a company's approach to a given aspect of implementation does the same job as called for in the guidance document, they just have to cross-reference what they do with the guidance document.

A Panel member familiar with the verification process remarked that verifiers should not be going through the guidance documents in a line-by-line "got'cha" exercise. Verifiers should focus on vulnerable areas.

It was suggested that a guidance document should be a helpful, diagnostic tool. Luc said that that is what the documents were designed for. The documents also provide guidance on how to react to various types of incident. For example, a couple of weeks ago there was a bomb threat at a member company facility and, because of a guidance document, "everybody knew what to do."

Regarding the Stewardship Code, a Panel member asked how intensively upstream suppliers were monitored. Another member, who is familiar with verification, noted that verifiers do spot checks of contracts to assess a company's due diligence in this area.

Luc responded to Panel questions:

- *In terms of RC14001 and Responsible Care verification, particularly in the areas of community outreach and dialogue, we have wanted to ensure that the advantages of Responsible Care are not lost.*
 - I think we are doing that.
- *Is member companies' reduction of greenhouse gas emissions being monitored?*
 - Yes, that data is captured in the Reducing Emissions document.
- *Are these reductions in emissions being bench-marked with what companies in the rest of the*

world are doing?

➤ Yes.

- *To address the problem of non-member companies free riding on Responsible Care (who derive reputational benefits without meeting the same standards), you need to ensure that government regulations demand the same standard as Responsible Care.*
 - Yes, that is what CIAC has been advocating for with significant success.
- *Have you done much work to get insurance benefits for Responsible Care companies?*
 - The American Chemistry Council has done work in this area. Responsible Care companies' rate of health and safety incidents is only one fifth of that of the general industry.
- *There is a concern that companies don't want to share worst case scenario information with communities for security reasons. In particular, they don't want to share information on the radius of potential scenarios.*
 - Yes, there has to be collaboration between companies and municipalities on radius and buffer zone issues.

It was remarked that, if Worst Case Scenario information is not properly recognized in Planning Acts, across the country, the issue doesn't get addressed. The result is the building of new houses in vulnerable areas. This is the air equivalent of a flood plain, and perhaps with the current concern about people building in flood plains and getting flooded out, CIAC can make the point about the airshed equivalent that Worst Case Scenarios can represent. In the Panel's view, smart governments do not allow housing to be built in vulnerable locations, where human health and safety can be compromise and additional cost burdens are placed on the public purse.

Indigenous Code Elements

Luc presented an update on CIAC's development of Accountability Code elements for relations with Indigenous communities. He indicated that a copy of these elements would be forwarded to PDA for distribution to the Panel.

The Association formed an industry advisory group to change the language to better meet the goals of accountability to Indigenous people, not only in Canada but across the world.

There was a general sense that the Indigenous elements of the Code were much improved. A Panel member referenced the oil and gas sector in Colombia, which speaks to Indigenous development in concert with companies. It was remarked that such an approach addresses the Indigenous capacity issue. It was emphasized that how companies interact with Indigenous groups is the key issue; it's not just a question of ticking the box.

Asked if CIAC was looking at how the industry interacts with Indigenous peoples at the national level, Luc said that the Association was focusing on local communities at this time. There was a suggestion that language about the federal level be incorporated for action down the road. Another view was that speaking to the federal level was admirable, but that it was much more complex. The focus on local communities was perhaps a more practical approach at this time.

It was remarked that the phrase “seeks to” in some of the code elements might allow for a less than rigorous effort. Luc said the phrase paralleled its use in other code elements; it is not a “weasel word.” There were calls for stronger language; e.g. “develop and maintain working relationships with these communities” or “work to proactively engage these communities.”

There was a suggestion that CIAC consider looking at mining industry language on consultation with Indigenous communities.

It was suggested that, after CIAC member companies consult with neighbours, the Panel should hear back on the results in a webinar. Mid-September was seen as a good time for a webinar.

Agenda Item 4: Panel Comments on Local and Regional Issues

Panel members talked about industry relevant issues from their own regional perspectives and areas of expertise:

- How the concerns about industry's public engagement in Sarnia work out remains to be seen.
- Nova Scotia's moratorium on fracking is still in place. There is still misunderstanding about fracking. Regarding plastics, there is a need to look for practical solutions as opposed to just banning plastic bags or other plastic products.
- Large consumer companies have a huge chemical footprint, but also play a role in “regulating” chemicals. There is a need to get recognition of Responsible Care by these companies. (Luc noted that CIAC's approach is that consumer companies should take a risk-based rather than a hazard-based approach to materials management.)
- Cyber security is becoming more and more of a risk, a potentially catastrophic issue that Responsible Care needs to address.
- There are opportunities for CIAC to influence other industry sectors on circular economy and plastics issues. For example, there is an opportunity for CIAC to participate in the World Circular Economy Forum to be held in Canada next year.
- In Alberta's industrial heartland the air monitoring organization is consulting with the community to ensure they are getting the right information on air quality issues. This organization is also reviewing air quality results over the past 15 years.
- I am heartened by the work done on the Accountability Code in relation to Indigenous peoples.
- Community groups in the Elmira, Ontario area continue to raise plant site buffer issues. There is another hearing about locating a sub-division in an area that should be maintained as a buffer zone. Noise from trains at night is also an issue, and indeed this has been the surrogate issue upon which the fight against the sub-division has been waged – as there is no provision to assess the value of a buffer zone to protect residents from potential problems that could be caused by industrial incidents. The Sulco plant is considering a number of options in trying to become self-sufficient in electricity.
- The Township of Woolwich, Ontario (Region of Waterloo) is raising concerns about provincial decisions regarding land use and transportation. Cyber security is also an issue in the Region – which has become well-known as a hub of Information Technology initiatives.
- Pollution Probe and the Clean Water Foundation have just released the best study to date on pharmaceutical pollution in the Great Lakes. Pollution Probe is also keeping an eye on the

incidence of single-use plastics as well as chemical recycling opportunities in Ontario.

- Graduate programs in various disciplines at the University of Montreal are carrying out studies in sustainability technologies. Other developments: the Federal Government recently announced an investment in an AI-powered (artificial intelligence) supply chain supercluster for Canada. AI tools make it much easier for consumers to do a life cycle analysis of supply chains; e.g. a supply chain's implications for climate change.

Agenda Item 5: Preliminary Identification of Issues for Strategic Planning Process

CIAC's Triennial Process is now known as the Strategic Planning Process.

Panel members identified issues that the chemistry industry will be facing over the next three to 10 years. The Panel will be taking this brainstorming exercise further as an input into the Strategic Planning Process. The following is a first attempt at identifying the issues:

Technology

- Cyber security
- Plant operators being replaced by AI (potential for Max 8 airplane crash type of scenario)
- “Printing” plastic and now metal products
- Nano technology, environmental/regulatory implications
- Big data a driver of transparency demand
- Use of big data to forecast risks
- Crypto currency
- Non-changeable chain of currency
- Powerful central banks displaced
- Crypto currency to track energy use
- Challenge is regulating crypto currency
- Unsustainable computer use
- Clean energy, innovative approaches
- Small nuclear reactors

Retailers and Consumers / General Public

- Retailers using their buying power to influence suppliers to meet sustainability standards determined by the retailers
- Growing public demand for radical transparency—tagging, tracing; this demand essentially an opportunity for chemistry industry; Responsible Care in concert with NGO's could foster a rational approach
- Need for environmental scan of all social media on a regular basis, a means of monitoring public opinion
- Industry readiness to meet public opinion challenge
- Local product movement = world-scale plants problematic
- Changing demographics, market implications
- Everything going through Amazon; platform for digital capitalism

Politics

- Potential political instability
- Much more short-term thinking
- Populism
- Growing distrust of science due to concentrations of social media communities around non-scientific, even anti-scientific narratives; “my truth”; impacts on public policy development

Economic Policy

- Higher tax environment; delays for approvals—implications for investment climate

Waste Management / Zero Emission Goal / Climate Change

- Industry role in circular economy
- Green chemistry, innovating alternative approaches
- Decarbonization and zero emission economies or, more broadly, carbon productivity (carbon as a resource)
- How might the chemistry industry develop solutions for carbon capture? Biomimicry has potential here; e.g. the company Blue Planet mimicked the coral reef recipe to make concrete out of CO₂ and brine
- Impact of deteriorating ecology on economy
- Exposure of industry to extreme weather events; are worst case scenarios addressing such events?
- Nano plastics interfering in food chain; circular economy as a solution; capturing at source, e.g. filter in washing machines
- Greater use of public transit, right of way implications for plant locations
- Use of chemicals in fracking
- Developing products with less footprint

Risk and Worst-Case Scenario Planning

- Possibility of Bhopal-type of catastrophic incident
- Normalization of risk problem
- Health risks; interactions of chemical processes (inside us and in the environment)
- Insurance policy cost risk

Trade and Globalization

- China advantage
- Foreign ownership
- Corporate concentration and oligopoly getting more powerful vs. smaller, more local companies more responsive to their communities
- Shifting global demands
- Production shifting to developing countries
- Rise of transnational regulation
- Developing countries importing goods = waste challenges for them

Industry-Indigenous Relations

- Positive changes in Accountability Code elements a challenge to implement

Employee Training

- Skilled worker availability
- Transferring immigrant skills to Canada

Agenda Item 6: Role of Plastics in Circular Economy

Luc Robitaille described the current situation of plastics management in our society and steps being taken by the chemistry and plastics industry to create a sustainable plastics approach (Appendix 4). He noted that 80 percent of all post-consumer plastics in Canada now end up in landfills. At the same time, plastics enable our modern and sustainable way of life, particularly through their use in food packaging and medical equipment.

Luc talked about a policy to create a circular economy for plastics, which would include:

- Plastic production
- Fabrication
- Consumer use and re-use
- Post-Use collection:
 - recycling for plastic fabrication
 - chemical recycling
 - energy recovery

Luc also talked about Dow Chemical innovation that entails curbside recovery of hard-to-recycle plastics, which are converted to low sulphur diesel and waxes and kept out of landfill. He also talked about other sustainable plastics innovations by Dow, Nova and several plastics industry companies.

Panel Comment

There were calls for municipal policies that encourage more sustainable uses of plastics. It was noted that, in Taiwan for example, consumers are encouraged to “keep your own garbage,” there being no public waste bins. Luc noted that, in some jurisdictions, plastic bottles are washed and re-used many times over.

It was remarked that energy from waste has positive aspects, but quantity is an issue. A Panel member described EFW as “a little better than the worst” (a little better than landfill).

It was agreed that CIAC's view of a circular economy for plastics was the right one. It was remarked, however, that it is important to get right the relative proportions for the fate of the post-use collection. And there was a call for the chemistry industry to design plastic products that lend themselves to a circular economy and reconsider how to manage composite materials effectively.

A Panel member, noting that many areas in the U.S. have no recycling programs, asked what the situation in Canada is. It was suggested that large urban areas are probably pretty good in terms of collection

programs. It was noted that any municipality with a population over 5,000 has to have a recycling program, though what happens to the plastics collected is another issue. The importance of creating value for post-consumer plastics was emphasized. It was acknowledged that there is a public perception that we (in Canada) do a good job of recycling although the numbers do not tell that story. There is a problem both of the confidence in the data that we have and in the need for considerable public education.

The problem of consumers not knowing what does or does not go in the blue box was noted. There was a call to make it much clearer for consumers.

It was suggested that there might be a role for the chemistry industry to negotiate with retailers and to pull the sectors—industry, governments and consumers—together. Public education would be part of industry's role here.

There was a call for the right levels of government to ensure effective recycling programs are put in place, rather than leaving it to municipalities, who are not equipped to develop such programs. This is especially true of smaller municipalities, for whom landfills are important revenue streams.

Agenda Item 7: Managing the National Advisory Panel into the Future

There was a discussion of frequency of meetings, types of expertise that should be recruited, and leadership of the Panel.

Frequency

It was agreed that an annual face-to-face meeting has worked well, but there was a call for more frequent conference calls/webinars between the annual meetings. It was suggested that a video element to the e-meetings would make it easier for Panel members to engage in the discussion. Teleconferences would work well for single items. Electronic meetings should be no longer than one hour.

New Members

John noted that Hind Al-Abadleh, a professor at Wilfred Laurier University involved in chemistry and environmental issues including those related to nanomaterials, will be joining the Panel. She is currently in California, wrapping up some research work as a Fulbright Scholar. Membership offers are out to a first responder from Alberta and an international NGO. Other gaps to be filled:

- Another member from Quebec
- Younger people; e.g., one or two graduate students
- Expertise in child health (a professor in this area at McMaster University was mentioned)

Panel members suggested a product recall expert, downstream industry – especially in packaging, as well as someone from the North directly affected by climate change.

Leadership of the Panel

John indicated that it is time for PDA to consider succession planning for the Panel Leadership and phase in a younger person. There is a whole world of electronic communication expertise and different life experience that a younger person can bring to the table.

A Panel member mentioned that there is a need for synergy between experienced facilitators and knowledgeable younger people.

Gord Lambert, founder of the Academy of Sustainable Innovation, was mentioned, as was current Panel member Nadine Gudz. Also mentioned was Shawna Bruce, who has a deep understanding of the chemistry sector, through her work on stakeholder relations and communications for Dow.

It was suggested that those running other advisory panels be considered. Member companies may have some contacts here.