



NEWS

Winter 2004

The Newsletter of the Association of the Chemical Profession of Alberta

From the President

As we pass the halfway point of the winter season, it is time to look ahead to the events of the spring. One of the major events for the ACPA this year is the Chemical Health and Safety Workshop and Symposium in Canmore, April 5 and 6. This event is in two parts.

Day one is a "Laboratory Health and Safety Management Workshop" which deal with Alberta health and safety programs and initiatives and the Chemical Institute of Canada's recently published *Laboratory Health and Safety Guidelines*. Participants will receive copies of the Alberta Partnerships and the CIC publications.

Day two is the symposium portion of the event and will have David Wismer, Assistant Deputy Minister, Alberta Human Resources and Employment, as the Keynote Speaker. He will be speaking about his department's Work Safe Alberta Initiative. You may have seen some of their commercials on TV regarding work place choices with audio feed say "this or that." Other areas covered will be "Wellness and Risk Reduction," Alberta's new Chemical Health and Safety Legislation, Toxicology and Chronic Exposures, and Process Safety Management - A Risk Management Framework for Chemical Processes and Field Operations.

Recognizing that many of us have more demands on our time than we would sometimes like, the organizing committee has set the two days up so that they can be attended as single day functions or as a two event. I would encourage you to register for one or both of these sessions as there is practical information to be gained, which will benefit chemists, technologists and managers. The statistics

for Alberta are alarming when you realize how many people are injured in work related accidents every year. Whatever we can do as an Association and individuals to reduce this carnage is to everyone's benefit.

One of the reasons for setting up this seminar was a Memorandum of Understanding entered into by the Board on behalf of ACPA with Alberta Human Resources and Employment to actively support the "Work Safe Alberta" program. We will be promoting safety through educational endeavors such as the workshop and symposium and setting up links on the pchem.ca Website to health and safety related sites so that it will be easier for you to find information.

The ACPA was represented at the U of A and U of C Chemistry Society functions by Ken Schmidt and Neil Warrender respectively. Ken and Neil reported positive response from the students. Every year we try to support Student functions at the universities financially and by providing a representative to inform the students about the benefits of belonging to the ACPA.

The Board has finally finished reviewing the Association's Bylaws. We will be sending out the revised bylaws and notice of a Special Meeting to approve the Bylaws. There will be a different format for this meeting as we are going to try and make it a little easier for you to attend. We will have two meeting sites, one in Calgary and one in Edmonton, linked by a teleconference set-up. We are scheduling an 8:00 pm start for the meeting on Tuesday March 16. There will be two items of business, the first being approval of the revised Bylaws and the second the appointment of auditor(s) for the ACPA books.

More information will be sent out by mail including the addresses of the meeting locations.

I have noticed in my review of the membership list that some of you have not converted your "P" provisional membership to the full member class. Some have taken exception to the request for a copy of your university transcript or a copy of your degree signed by a professional chemist or other professional who has seen the original. This request has nothing to do with the ACPA questioning your veracity but is a requirement under the Professional and Occupational Associations Registration Act (POARA). It is a requirement much the same as those of the ASPB (Biologists) and APEGGA for registration. The government requires us to have some proof of the qualifications of those people that we are certifying as professionals. Only those members who have complied with all the requirements of the Professional Chemists Regulation can use the title P.Chem. Other requirements are membership fees paid up and the

Professional Developments Credit form completed and returned to the ACPA office.

Finally the Annual General Meeting for the Association of the Chemical Profession of Alberta will be held May 15 in Edmonton. The Nominating Committee has been approaching members to allow their names to stand for election. The list of nominees is included in the attachments to the newsletter. As always, you have the ability under the Bylaws to nominate someone that you believe would make a good Board member. The requirements for this are that the nominee consents in writing to the nomination, the nominee is a member in good standing and the nomination is signed by at least three other voting members in good standing. The Secretary must receive nominations at least 45 days before the date set for the Annual General Meeting.

Work Safe and I hope to see you at the Special Meeting, in Canmore, or at the AGM.

Don White, ACPA President

Ethics Corner

This article is the fifth in a series that we are reprinting with permission from EM magazine published by the Air & Waste Management Association. This article is from the September 2002 issue. One of the issues of importance to professionals regardless of our discipline is that of ethics. We hope that this series will help to clarify ethical issues that we may face in our careers through the discussion of practical examples.

When Ethical Values Conflict

This month's dilemma looks at the ethical responsibility of an environmental consultant performing a regulatory compliance audit at the plant of an important client.

DILEMMA

You are an environmental consultant, whose job is to perform a regulatory compliance audit at the plant of a national corporation, an important client to your firm. After talking to plant personnel and reviewing production records, you determine that the plant operates substantially beyond its permit limits, which could cause as much as 50–75% more

pollutant emissions to be released than is allowed in its permit. However, official reports submitted to the regulatory agency show that plant emissions fall within the allowable limits. You inquire further and are told that the corporation was about to close the plant until the plant manager installed some "efficiency improvements" to increase production. This saved the plant from closure. It also saved the jobs of 300 people in the small town in which the plant is located and is the major employer. Because the plant is downwind of a large city, the area is in non-attainment. It would likely cost more than one million dollars to purchase offsets to cover the resultant increased emissions. To install new emission controls would cost even more. The plant manager prevails on you to keep his secret and save the jobs of his loyal employees. "Look," he says, "my plant does not create a health hazard in the community. If this plant did not exist, the air quality would be the same. The pollution comes in from the big city." He tells you that only three of his staff know of this discrepancy. He also tells you that he is a personal friend of the chief of the local air pollution agency, who is not aware of this issue. What should you do?

DISCUSSION

You do not disagree with the issues noted by the plant manager. You understand that the plant is not a true danger to public health even in this noncompliant operating mode. Had you yourself not been so diligent, you might not have discovered the discrepancy. Nevertheless, the plant is violating the law. The closing of the plant would affect 300 employees and thousands more in the local community. If the corporation is bottom-line oriented, it will most likely close the plant, rather than pay large sums for emissions offsets or control devices. So, do you help the plant manager and keep his secret? What do you think?

The answer is yes and no: you try to help the plant manager, but you do not keep his secret. First and foremost, you have a responsibility to inform your superiors of the situation. In a situation like this one, you need all of the clear thinking that can be brought to bear on the situation. Do not try to go it alone! The values that I have discussed in previous columns should be considered: trustworthiness, respect, responsibility, justice and fairness, civic virtue and citizenship, and caring. Trustworthiness mandates that you do not keep the plant manager's secret, but tell the truth. Respect requires that you respect the plant manager's concerns for his employees and try to help him keep his plant running in the face of what he views as an unfair obstacle. Responsibility necessitates that you obey the law and convince the manager to comply with it. Justice and fairness calls for an understanding that, in this situation, the law may be unfair to the community. Civic virtue and citizenship mandates that when you recognize an injustice in the law you do not ignore it. It is your civic duty to help correct it. Finally, caring requires that you care about the effect this issue will have on the workers and other citizens who are stakeholders in this case. You should do what is ethical to help them, but without breaking the law.

First, the person in your firm with the closest professional relationship with the client's management should accompany you when you explain the situation to the client. Second, support the client's efforts to obtain relief from new source requirements. If you know of a means to control the

plant's emissions economically, put forth a design study. If not, offer to support the client in an effort to change the law by demonstrating to the agencies, legislatures, or even Congress that the current law is unfair. Encourage the company to rally the local community to write letters to high officials, explaining the issue and suggesting actions to resolve it. This is clearly an unusual approach and should be approached cautiously. Third, suggest that the client's attorney contact the local regulatory agency to request a variance until the matter is resolved. Do not hesitate to make use of the plant manager's personal relationship with the chief of the local agency.

The plant is apparently old, and may be outdated compared to other plants. If the company does not want to take such heroic measures to keep the plant open, then all you can do is hope that it will "do the right thing" to either update the plant or transfer the plant personnel to another location. The latter scenario will not help the ancillary businesses in the town, but that is not a matter that you are in a position to deal with.

CONCLUSION

I would like to hear from you on how you would deal with this situation. This is an issue of real concern to me because I have client that is located in a small California town downwind of Los Angeles. This town is in serious non-attainment due to transport from Los Angeles and is facing a growth issue. The company asked me, "How can EPA limit my emissions? If the whole town disappeared, the air quality would not change in this area."

About the Author

Hal Taback, P.E., DEE, QEP, is chairman of the Air & Waste Management Association's Ethics Committee and an A&WMA Fellow. He is the president of Hal Taback Co. Environmental Consultants. He can be contacted via e-mail at taback@ix.netcom.com. The author acknowledges the expert assistance of Carol Lyons, co-chair of the Ethics Committee and principal of consulting firm Bridges Unlimited, Denver, CO. in preparing this column.

Professional Legislation in Alberta

Comments expressed in this article are those of the author and do not necessarily reflect those of the ACPA or its Board of Directors.

For the past two years, I have been reporting to you about the activities of a group known as the Professional Association Task Force. This is a group of associations who believe that it is time that professional legislation in Alberta be changed to reflect the realities of the new millennium. The ACPA, the Alberta Society of Engineering Technologists (ASET) and the Registered Interior Designers Institute of Alberta (RIDIA) believe that the Government of Alberta should follow the precedent set under the Health Professions Act and establish umbrella legislation for other groups of professions. Each profession would regulate its members with its own scopes of practice, bylaws, and discipline, registration and practice review committees under an over-arching legislative framework. This legislation would allow for overlapping scopes of practice where members could demonstrate competencies in various fields. The Task Force believes that offers the public and the professional the most advantages. Those who know the profession best—other professionals in the field—govern the professional. This also provides the public the most protection as long as the legislation is written so that the regulatory body does indeed have the ability to restrict the activities of those who do not meet the professional standards.

There is an interesting development underway. APEGGA is evaluating the possibility of creating a new category of membership, Registered Engineer, Geologist or Geophysicist. The impetus for this is to protect their traditions scopes of practice from infringement by non-engineers. What APEGGA is proposing is new category of membership, R.Eng., for those who are qualified to practice engineering, geology or geophysics within a specific area but who do not meet the current requirements for unrestricted professional licensure, primarily because their academic background does not meet current requirements.

Possible groups suggested are:

- Internationally trained practitioners; i.e., those graduates of international engineering,

geology, or geophysics programs wishing to practice in Canada.

- Emerging disciplines and others; i.e., university science or engineering graduates whose practice is dominantly engineering, geology, or geophysics. This situation often arises with specialized practitioners whose academic background does not match APEGGA's established syllabi.
- Related science professions; i.e., professional scientists (such as chemists, biologists, and physicists), environmental scientists, medical doctors, including internationally educated scientists, whose practice is deemed to be at least partially engineering, geology or geophysics.

More information on this initiative can be found on the APEGGA web-site, www.apegga.ca in the "The PEGG" under the "The President's Notebook" or other items from the Executive Director.

To help you understand what may be involved let me quote from the Engineering, Geological and Geophysical Professions Act:

- (m) "practice of engineering" means
 - (i) reporting on, advising on, evaluating, designing, preparing plans and specifications for or directing the construction, technical inspection, maintenance or operation of any structure, work or process,
 - (A) that is aimed at the discovery, development or utilization of matter, materials or energy or in any other way designed for the use and convenience of man, and
 - (B) that requires in the reporting, advising, evaluating, designing, preparation, or direction the professional application of the principles of mathematics, chemistry, physics or any related applied subject, or
 - (ii) teaching engineering at a university;

For me the question in this exercise is who determines what is “engineering?” Is a chemist working at Syncrude’s research facility on oil sands processes practicing engineering? Is a chemist or other professional working in land reclamation or remediation practicing engineering? Is a research scientist working in medical physics and developing new technology for prosthetic devices practicing engineering?

Some of the problem is because the definition of engineering is so broad. The proposed new definition for engineering in BC is even broader than the current Alberta definition. **If** the broad definitions were strictly applied professionally, many prospective science students may opt to take engineering instead of chemistry, physics or environmental science because they believe that they will have to register with APEGGA to be able to work in their field. I concede that there may be chemists who, in their professional work, do indeed infringe upon the engineers’ definition of practice of engineering, but it seems to me that it would be a very small number and that this definition is itself the core of the problem.

How will all this play out? The courts appear to be taking a narrower view of the definition of engineering. APEGGA has taken two people to court in recent years. One regarding practicing engineering without being a member of APEGGA and one regarding the use of the term “system engineer.” In both cases the courts ruled against APEGGA.

APEGGA hopes to have the Registered Engineer category set-up in time to bring it to their Annual General Meeting in April. As I understand the situation at this time, if category is approved at that meeting, the Act and/or Regulation will have to be amended before they can implement the title.

But maybe there is another question to be asked, should chemical engineers have to become members of the ACPA because they are practicing chemistry? Unfortunately the answer to this question is **NO!** The difference is in the regulatory regime. The Engineering, Geological and Geophysical Professions Act gives APEGGA the exclusive right to practice their professions. The Professional Chemists Act gives ACPA the right to title. But that takes us back to the first paragraph regarding the aims of the Professional Task Force.

Don White

Announcements

The ACPA needs YOU!

CALL FOR NOMINATIONS

Consider an exciting opportunity to help your Association and serve as a member of the ACPA Board of Directors. Nominations are now open and will close March 30, 2004. Ballots will be mailed in April. The new Board will be installed at the Annual General Meeting (AGM) on May 15, 2004. As outlined in the proposed Bylaws, 12 directors will be elected. The four directors receiving the most ballots will be elected for a 3 year term, the four directors who receive the next highest number of ballots will be elected for 2 year term and the remaining four directors will be elected for a 1 year term. In subsequent years we will be electing 4 directors per year.

Nominations from the membership must be received at the ACPA office by March 30, 2004 with the written consent of the nominee, who must be a member in good standing, and signed by at least three (3) members in good standing. The 3 sponsoring members could each fax a copy of the sheet consenting to the nomination by the nominee to the ACPA office.

Duties

- Attend Board of Directors meetings - 5 per year including one the day of the AGM. Meetings may be group meetings Saturday mornings at Red Deer College or teleconference meetings weekday evenings. Typical dates are late September, mid-November, late January, March and May.
- Inform Secretary or President if unable to attend Board meetings.
- Promote the principles of the ACPA to the public.
- Encourage qualified individuals to join the ACPA.
- Participate in meetings and on executive committees carrying out designated tasks. Executive committees include:
 - a) Nominations and elections

- b) Professional development
- c) Promotions
- d) Membership and recruitment
- e) Special events
- f) CIC liaison

The officers will be selected from the Board of Directors by its members as per the new Bylaws.

Forward nominations to:

ACPA Nominating Committee
 Fax:(780) 413-0076

Or mail to:

ACPA, P.O. Box 21017
 Edmonton, AB T6R 2V4

NOMINEES FOR THE ACPA BOARD

The ACPA members listed below have consented to run for the 2004–2005 Board of Directors:

- | | |
|----------------|------------------|
| Stan Backs | John Banks |
| Tim Blackmore | Roger Cowles |
| Doug Crighton | Patrick Kalita |
| Mark Rice | George Ruddock |
| Ken Schmidt | Chris Swyngedouw |
| Robert Taylor | Elena Vaisman |
| Neil Warrender | |

GENERAL INFORMATION

The ACPA web address is: www.pchem.ca. Newsletters will be archived at this location in PDF format for easy retrieval. The ACPA office can be reached at

P.O. Box 21017, Edmonton, AB T6R 2V4
 Phone: (780) 413-0004
 Fax: (780) 413-0076.

FROM THE EDITORS

Please note this is the first issue in the new internet “friendly format”. Please let us know if you like this version better than the previous “newspaper” format.

All contributions from members to the newsletter will be welcome. Please send them to

Robert Swingle
 Maxxam Analytics
 2021 - 41 Avenue N. E.
 Calgary, Alberta T2E 6P2

or fax them to 403-2919468.

If you prefer electronic mail, address them to bswingle@cal.maxxam.ca.

It would be nice if you could send any lengthy material on disk in PC format using Microsoft Word.



**Association of the
Chemical Profession
of Alberta**

HISTORICAL

The necessity and desirability of establishing a legal status for chemical professionals has become apparent to many Alberta Chemists over the past few years. A recent survey of those practicing chemistry in Alberta demonstrated overwhelming support for the formation of a Professional Association. Both Ontario and Quebec have Professional Associations for chemists in their provinces. Recently biologists in Alberta have been accorded legal status as professionals.

While the nature of federal legislation precludes a national organization operating under a Dominion Charter from possessing legal recognition in provincial matters, the Province can endow upon an organization such attributes. For this reason, the ACPA was established as an Incorporated Society under the Societies Act in the Province of Alberta. This was the first step toward Professional registration. On December 19, 2001 the ACPA was registered by Order-In-Council under the Professional and Occupational Associations Registrations Act (POARA).

WHY JOIN THE ACPA?

The ACPA, as it is currently structured, is the genesis for the true Professional Association for chemistry practitioners in the Province of Alberta. Members will receive a membership card, certificate and stamp.

As a member of the ACPA, you will be helping to formalize the professionalism of chemists in Alberta. The support of Alberta chemists is necessary to demonstrate to the Province that the Association speaks for chemists and chemistry in the province. As a group, we can inform the public about chemistry, contribute to legislative and other governmental regulatory activities that affect scientific development in a way that would be difficult through individual effort.

This brochure is intended to provide information about the goals and activities of the ACPA and to invite you to join the Association.

THE PROFESSIONAL ASSOCIATION

Professional Registration under the Professional and Occupational Associations Registrations Act provides a legal definition of chemistry and those practicing chemistry in Alberta. The main objectives of the Association, currently and for the future, are to promote and increase the knowledge, skills and proficiency of the members in all things relating to chemistry.

The ACPA is a legal instrument to help protect the public from malpractice in chemistry and to protect the profession from encroachment on its rights and purposes by unqualified personnel. It is endowed with the power to act to coordinate its aims and purposes, and to act in provincial matters on behalf of those it represents. The Association members may use the designation P. Chem. (Professional Chemist), or its equivalent, to identify their affiliation and professionalism.

WHO CAN JOIN?

Under the Order-In-Council establishing the Association of the Chemical Profession of Alberta, any person acceptable to the membership can join the Association. The requirements would normally be expected to be the minimum of a Bachelors degree in Chemistry with related work experience. Student memberships also exist.

INFORMATION AND APPLICATION FORMS

Please contact the ACPA office at P.O. Box 21017, Edmonton, AB T6R 2V4
Phone: (780) 413-0004 • Fax: (780) 413-0076 • Website: www.pchem.ca



Association of the
Chemical Profession
of Alberta

Chemical Health and Safety Workshop and Symposium

April 5 and 6, 2004
Radisson Hotel and Conference Centre
Canmore, Alberta, Canada

If you are responsible for laboratory health and safety
If you develop programs to manage chemical exposures
If you manage a laboratory, a research facility or a chemical plant
If you conduct inspections or audits of chemical and laboratory facilities

...then you should attend!

Monday, April 5

- ***Laboratory Health and Safety Management Workshop***

Tuesday, April 6

- ***Keynote Address: Work Safe Alberta Initiative***
- ***A Proactive Program for Wellness and Risk Reduction***
- ***New Chemical Health and Safety Legislation – Alberta’s New Occupational Health and Safety (OHS) Code***
- ***Toxicology and Chronic Exposures***
- ***Process Safety Management - A Risk Management Framework for Chemical Processes and Field Operations***

Download the program and registration form at www.pchem.ca