



SUCSESSES FOR CANADIAN COAL COMBUSTION PRODUCTS (CCPs)

Industry collaboration works to state the case internationally for wider recognition of CCP applications.

CIRCA and affiliated CCP-related associations conferred on an expanded definition of Coal Ash for submission to the World Customs Organization's Harmonized Standards Code; *WCO's Harmonized Standards Code* forms the basis for customs tariffs worldwide.

The Coal Association of Canada, the American Coal Ash Association and the European Coal Combustion Products Association collaborated with CIRCA to present a more accurate and detailed description of coal ash and ash products to customs administrators. WCO's Harmonized Standards Committee unanimously accepted the proposed amendment in June, 2004.

Reciprocal affiliations with other CCP-related associations keep CIRCA current on issues.

CIRCA affiliations with the following national and international associations keep CIRCA Members current on CCP-related issues in the US, Europe and around the globe:

- ❖ American Coal Ash Association
- ❖ Canadian Ready Mixed Concrete Association
- ❖ Cement Association of Canada
- ❖ Coal Association of Canada
- ❖ European Coal Combustion Products Association
- ❖ United Kingdom Quality Ash Association
- ❖ World Wide Coal Combustion Products Network

Government agencies recognize the national identity of the Association of Canadian Industries Recycling Coal Ash (CIRCA).

CIRCA Member interests and objectives are presented to government agencies regularly via:

- ❖ Active correspondence with Environment Canada regarding changes to the Environmental Protection Act (CEPA), the Basel Convention and Export Import of Hazardous Wastes and Recyclable Materials Regulations.
- ❖ Proposed new EIHWRM Regulations will qualify most coal ash to be transported as a *product* and therefore not subject to CEPA regulations for waste.
- ❖ In 2003 and 2004 CIRCA provided input to Environment Canada and Transport Canada on the definition of vanadium pentoxide content in Clear Language TDGR and EIHWRM regulations, averting a regulatory threat to ash utilization in Canada.
- ❖ Participation on the Supplementary Cementing Materials and Enhanced Recycling Advisory Committees has contributed to Canada's National Action Plan on Climate Change and the production of educational materials on the benefits of CCP recycling and utilization.

.../2

Recognized for improving the responsible use of CCPs in Canada.

CIRCA Successes Continue...

.../2

Revised National Master Specification specifies Fly Ash for federal government projects; companion Best Practices Guide provides technical guidance.

CIRCA members and their representatives work with standards development bodies and regularly brief CIRCA on developments. In 2001, CIRCA was influential in the amendment of Public Works & Government Services Canada's *National Master Specification (NMS)* to include fly ash in concrete. This collaboration continues in 2004 to include more specifics in the *NMS* regarding recommended replacement levels for various concrete applications.

In 2003-2004 CIRCA and its industry colleagues worked with Natural Resources Canada's International Centre for Sustainable Development of Cement & Concrete (ICON/CANMET) to develop the "*Best Practice Guide on the Use of SCMs in Concrete*".

Educational initiatives expose new audiences to the many performance and sustainability benefits of CCP use.

CIRCA has developed resources to educate a range of audiences on the advantages of CCP use, including technical, performance, environmental and aesthetic benefits. Materials are free, available via CIRCA's and the Government of Canada's Supplementary Cementing Materials websites: www.circainfo.ca/resources.htm and <http://irc.nrc-cnrc.gc.ca/uir/scm/docs.html>

- ❖ The CCP Video Series introduces architects, engineers, owners, industry, students and the general public to the technical and environmental benefits of CCP utilization. The videos have been incorporated into regional Canadian and international programs among CIRCA collaborators.
- ❖ Seven Technical Fact Sheets on CCPs in specific applications are available in English & French
- ❖ CIRCA's *Award for the Most Effective Use of Fly Ash in Concrete* attracts the attention of the academic engineering community to the performance benefits of Fly Ash in concrete via the annual Great Northern Concrete Toboggan Race.

In 2005, CIRCA will follow through with new interactive deliverables:

- ❖ The Collaborative Seminar Series on "Responsible Use of SCMs in Performance-Based Specifications" will address the technical and performance benefits of SCMs in concrete, new industry guidelines (*Best Practices*), standards (*NMS*), specifications and their significance to regional practices; across Canada in Spring 2005.
- ❖ The *Learning Module on Traditional and Non-traditional Uses of CCPs* is a web-based, independent study tool, developed with the University of New Brunswick's Department of Civil Engineering, for universities and technical colleges; it will be widely available in Summer 2005.

Active participation in the development of North American standards facilitates the increased use of supplementary cementing materials.

CIRCA Members stay abreast of proposed changes to CSA & ASTM standards and specifications and contribute coordinated input as industry representatives.

- ❖ CIRCA Member participation in CSA Committees on the *A3000 Compendium* has addressed changes in the definition of coal ash to include beneficiated ash from coal co-fired with pet coke; these activities are presently being monitored by ASTM Committee C9.
- ❖ CIRCA also works to change the sampling requirements in the *A3000 Compendium* to ensure they are practical.