



ACAA

May 30, 1997

Ash At Work

American Coal Ash Association

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USGS Puts CCPs in the Book and on the Map - ACAA Survey Reaches Milestone

ACAA's survey of coal combustion product (CCP) production & use for calendar-year 1996 has reached milestones as follows--

In early March 1997, Executive Director Sam Tyson signed a Memorandum of Understanding between the United States Geological Survey (USGS) and ACAA for a cooperative effort that will result in publication of CCP data in the federal 1996 Minerals Yearbook;

■ CCP survey forms were mailed in mid-March 1997 by ACAA to coal-burning electric utilities throughout the USA;

■ Approximately 35% of the data was in hand by mid-May 1997--however, all data is needed by mid-June 1997 instead of October as in prior years in order for ACAA to meet its commitment to USGS;

■ ACAA has launched an intensive campaign of facsimile and telephone contacts to obtain CCP data from the utilities that have not yet responded to the survey.

ACAA will provide CCP survey data to the Industrial Minerals Division of USGS. The Minerals Yearbook is published annually and

includes information on many other mineral commodities such as cement, lime, sand and gravel, slag and crushed stone. The publication of the chapter on CCPs represents the recognition of CCPs as a product and commodity by yet another segment of the federal government.

CCBs Become CCPs

See Page 4

Data on CCP production and use for 1996, as well as selected historical data, will be provided to USGS by ACAA. Following ACAA's practice, USGS will maintain the confidentiality of individual companies in its report. USGS will perform additional analysis of the CCP data that has not been done in the past. One powerful tool utilized by USGS is its geographic information system (GIS). The GIS could be used to review data from the CCP industry with data from other industries to establish geographical relationships. (See USGS, Page 5.)

Road To Basel Paved With Good Intentions

The Basel Convention is a global environmental treaty that strictly regulates the transboundary movement of hazardous wastes. It was adopted on March 22, 1989 and came into force on May 5, 1992. Its purpose is to protect human health and the environment from the dangers posed by hazardous wastes, and its well-intentioned goals are stated as follows:

- Hazardous waste generation should be reduced and minimized at the source;
- Hazardous wastes should undergo treatment or disposal near their source; and
- Transboundary movements of hazardous wastes should be minimized.

Coal ash in the USA always has been excluded from hazardous waste regulations, and a final regulatory determination by the U.S. Environmental Protection Agency (EPA) [58 Federal Register 42, 466 - August 9, 1993] stated that regulation of coal ash generated by coal-fired electric utilities and independent power producers as hazardous waste is unwarranted.

A similar decision was reached by the Organization for Economic Co-operation and Development (OECD), of which the USA is a member, thereby echoing an international recognition that coal ash is non-hazardous. The OECD is a unique forum, based in Paris, France, for international co-operation on domestic policies where these policies interact with those of other countries, in particular through trade and investment. The OECD decision of March 30, 1992, concerns the control of movement across borders of "waste" intended for further utilization. The OECD decision produced three lists, designated as "green, orange and red", grouping wastes having progressively stricter regulatory constraints. The green list includes fly ash from coal-fired stations along with other materials regarded as "secondary raw materials" and subject only to conventional commercial regulations, according to the OECD decision. (See Road to Basel, Page 3.)

Road To Basel (Tyson's Corner, Continued from page 2.)

In September 1995, the Basel Convention adopted an amendment to ban, by January 1, 1998, the movement of hazardous recyclables from developed to developing countries. For the past two years, the Technical Working Group (TWG) has been developing lists of wastes which will be either subject to, or exempted from the ban. List A contains recyclables considered hazardous waste and subject to the ban amendment. List B recyclables will not be considered hazardous and are not subject to the ban amendment unless they contain Annex I material to an extent causing them to exhibit one or more Annex III hazard characteristics. At this point, coal ash is on both List A and List B.

Policies and regulations that previously had little or no international impact now may have consequences for trade and investment that go far beyond their original intent. The Basel Convention, and its treatment of coal ash, is one such example. The shipment of coal ash from the USA, or from any other OECD country, to non-OECD countries is potentially restricted by a policy that--contrary to regulations of the USA, the OECD and the European Community as well as to the apparent intentions of those who framed the goals of the Basel Convention--improperly associates coal ash with hazardous materials.

ACAA convened a task force in January 1997 to review and make recommendations concerning the Basel Convention. The task force members are: John Flynn of Ontario Hydro, chair; Fred Gustin of National Minerals/Lafarge; and Andy Stewart of Cooperative Power. I met with the task force in Austin, Texas on April 15, 1997 and I subsequently attended a conference in Marseilles, France on April 18, 1997 where the Basel Convention, and its potential negative worldwide influence on coal ash markets, was debated by participants from 14 countries. The opinion of ACAA's task force, as well as a consensus from the European conference, is that the Convention's treatment of coal ash is both inappropriate, based on scientific facts, and potentially damaging to the positive image that has been achieved by coal ash in worldwide markets based on its technically sound, commercially competitive and environmentally safe performance.

ACAA will coordinate with other groups--such as the National Mining Association and the Business Recycling Coalition, an industry group that has been representing U.S. business interests on other topics to the TWG--to seek relief for members of the coal ash industry worldwide from the potentially damaging effects of the Basel Convention.

Until next time,



CCBs Become CCPs

ASTM Subcommittee E50.03 is proposing the use of new terminology pertaining to coal ash in some new standards. The term, "coal combustion product (CCP)", will be used; and the definition of CCPs will state that they are materials "produced/resulting primarily from the combustion of coal". ACAA's Strategic Planning/Steering task force already had recommended during 1996 that ACAA use the CCP terminology; however, the term "primarily" in the definition of CCPs may need to be qualified prior to general usage.

ACAA Chairman Presents Revised Meeting Format

ACAA's Chairman of the Board, Andy Stewart of Cooperative Power, welcomed members to the April 14, 1997 committee meetings in Austin, Texas and briefly described the revised format for the first meeting of ACAA's "Program Committee", a combined meeting of the three standing committees which function to guide the major program areas described by ACAA's bylaws. He suggested that the new format would improve meeting efficiency by: reducing the total time to convene and adjourn meetings; eliminating the need for repeated self-introductions and readings of the antitrust statement; and minimizing the

time for discussions of programs and activities, such as the international symposium, for which each standing committee can have certain responsibilities. The improved efficiency of the new format was demonstrated immediately as the minutes from the January 29, 1997 meetings of the three standing committees--Technical; Communications and Marketing; and Government Relations--were approved, in a combined action, as presented. Following the Program Committee meeting, each of the committee chairs agreed that the new meeting was format was helpful.

ACAA Task Force to Focus on Concrete Durability Issues

The ACAA task force on concrete pavement durability, chaired by Lon Zimmerman of Midwest Fly Ash and Materials, participated in a joint meeting, on March 17, 1997 in Chicago, Illinois, with the durability committees of the American Concrete Pavement Association (ACPA) and Portland Cement Association (PCA). The three groups will work cooperatively to find common ground regarding concrete durability issues whenever possible.

The ACAA task force also participated in a formative meeting, with oversight from the Federal Highway

Administration (FHWA Region #5 in Chicago and Region #7 in Kansas City), in Olympia Fields, Illinois, on April 9-10, 1997, to discuss the need for a "Midwest Concrete User-Producer Group", initially encompassing the ten-state areas of IA, IL, IN, KS, MI, MN, MO, NE, OH and WI. The participants, including ACAA's Lon Zimmerman and Executive Director Sam Tyson, developed a draft resolution for establishment of the user-producer group under the auspices of the Mississippi Valley Conference of State Highway and Transportation Officials. Also developed were draft mission and vision statements along with goals and objectives to advance the use and performance of concrete in highway structures. In addition to Lon Zimmerman, members of the task force include: Fred Gustir of National Minerals/Lafarge; Bob Styron of Mineral resource Technologies; and Phil Zacharias of Lafarge Corporation.

Self-Cementing Fly Ash for Soil and Bases

Progress is being made on the development of a new ACAA document, Manual on Soil and Base Stabilization with Self-Cementing Fly Ash. The work is being performed by Glen Ferguson, a geotechnical consulting engineer, from Lenexa, Kansas. An initial draft of the manual will be reviewed during July 1997.

Earth Day News

ACAA participated in Alexandria, Virginia's 4th Annual Earth Day celebration on May 17, 1997. ACAA's Gregg Deinhart and Barry Stewart joined area business and government leaders to help raise awareness to the environmental issues effecting our community. ACAA's booth received a lot of attention from curious on-lookers, most of whom had never heard of coal combustion products. Many of the people that visited ACAA's exhibit took information and were excited to find that a National organization like ACAA was based in their home town. ACAA also had the opportunity to be stationed next to environmental representatives from Pepco. The proximity to Pepco's booth helped many people make the connection between the electric utility industry, ACAA and how together, we impact the environment. This event was again successful both as a community relations opportunity and a chance to send a positive message about CCP utilization.

Toxic Release Inventory (TRI)

The Emergency Planning and Community Right to Know Act (EPCRA, also known as SARA Title III) provides the public with information about toxic chemical releases in local communities. Industry is required to report "toxic chemical" releases which the EPA then places in a Toxic Release Inventory (TRI) database which is accessible, for example, in local libraries by modem and on the Internet. EPA's intention is to create pressure on industry which would then improve pollution prevention and recycling practices. EPA's TRI reporting program will require

into question the environmental safety of coal ash recycling practices. Coal ash contains trace elements and other TRI listed chemicals that are reportable, but again, only if disposed in a landfill.

ACAA is also concerned about the inconsistency demonstrated by U.S. EPA with respect to the regulation of coal ash. Under Subtitle D of RCRA, EPA encourages coal ash use by developing environmentally preferable procurement guidelines for federal agencies. Yet, EPA supports the expansion of TRI

the expansion of TRI reporting and will seek opportunities to play a positive role in stating the position that coal ash should not be included in TRI reporting.

TRI internet reports are available at:
http://www.rtk.net/www/data/tri_gen.html

coal-fired electric power plants to report "land releases" of constituents that are bound within coal ash. The reporting of chemical releases in land disposed coal ash may, in fact, affect coal ash marketing programs. Coal ash marketing efforts may be susceptible to "green" marketing claims by competing products and call

reporting which would include the electric utility industry and coal ash.

The negative perception that could be created by the TRI reporting program may very well impact the efforts of ACAA and others to continue the beneficial marketing of coal ash. ACAA will continue to follow activities related to

CCPs in Book

(Continued from page 1.)

For example, the location of CCP sources within a given radius from potential users could be plotted. With assistance from USGS, CCPs will not only be "in the book" but also "on the map".

The chapter on CCPs should be completed by September 1, 1997 and posted on the USGS web site:

[<http://minerals.er.usgs.gov/minerals/pubs/commodity/myb/>]. Later in 1997, the Minerals Yearbook will be released by USGS on CD ROM; and the printed version of the book will subsequently be available in early 1998.

If you have not submitted your 1996 data, please set aside some time to fill out the CCP survey form and send it to ACAA for use in this important cooperative effort with USGS.

Environmentally Preferable Purchasing

EPA CONFERENCE ON EPP

An EPA conference on environmentally preferable purchasing (EPP) will be held in Baltimore, Maryland on July 16-17, 1997. That conference will feature 18 sessions and the registration fee is a bargain at \$50. Registrants will include: federal facility managers; acquisition and procurement policy managers; operations and maintenance managers; and environmental managers. From industry there will be product manufacturers, suppliers and designers.

The conference is cosponsored by EPA's EPP Program and the Office of the Federal Environmental Executive and coordinated by the U.S. Conference of Mayors. This conference in Baltimore takes place one day after ACAA's committee meetings and workshop which will be held on July 14-15, 1997 in Minneapolis, Minnesota.

ACAA staff will attend the EPP conference and distribute copies of the video, *America's Highways* [ABC News feature with Peter Jennings, February 1997], to registrants.

NEW GUIDELINES BOLSTER EPP

ACAA has been contacted several times in recent weeks by an EPA contractor for additional technical information supporting the three CCP applications (structural fill, flowable fill and base stabilization) proposed by ACAA in March 1996 for inclusion in the Federal Comprehensive Procurement Guideline (CPG).

OFPP REPORT ON EPP

A recent report from the Office of Federal Procurement Policy (OFPP) summarizes the actions taken by federal agencies during fiscal years 1994 and 1995 to implement EPP programs for the purchase of specific recycled products identified in EPA's CPG. The published document, Report to Congress, Resource Conservation and Recovery Act: A Report on Agencies' Implementation for Fiscal Years 1994 and 1995 [March 1997, Executive Office of the President, Office of Management and Budget, OFPP, 50 pages] is available from OFPP or from ACAA for a handling and mailing fee.

DOE VIDEO CONFERENCE ON EPP

ACAA's Director of Technical Services Barry Stewart participated in a video conference on April 9, 1997 with DOE regional offices throughout the USA. He talked about CCP production and use and how ACAA manages its annual survey and report. Also discussed were ACAA's efforts to create ASTM standards for CCP applications as well as efforts with EPA to develop additional procurement guidelines for CCPs as environmentally preferable products (EPPs). Following the video conference, ACAA received several requests for additional information from DOE offices.

"Hands-on" Products for Display Needed

Recently, ACAA has added new photographs to our display. The new photographs are part of the new Coal Combustion Product Book and offer staff a wide selection of CCP applications to display at events. The area that is next to be developed is the "hands on" materials that are carried with the exhibit. If you have any product samples that you think would help ACAA's exhibit, please contact Gregg Deinhardt, ACAA's Communications Coordinator.

Coal Combustion Product Book on Schedule

The task force on ACAA's pictorial Coal Ash Book is chaired by Howard Fitzgerald of ReUse Technology and includes: Larry Harper, Duke Power; Cyrus Roher, PEPCO; Mike Schroeder, Cinergy and Tracy Wandell, Sphere Services.

The books will be in hand by October 1997. A final draft of the text is about ready for task force review, more than 90% of all photographic materials have been processed by the graphic artist, and sample layouts will be available for task force review within several weeks. (See order form on page 15)

Life Cycle Assessment and CCPs

ACAA's project using life cycle assessment (LCA) is being overseen by a task force including Mike Schroeder, John Flynn and Bob Gerbus. This is a two-part study: Part 1. Structural fill for highway embankments using fly ash versus soil; and Part 2. Fly ash sources that had been acceptable for use in concrete but subsequently used for structural fill due to changes resulting from low-NOx burner installation. LCA is used to examine the environmental impact of a product along all stages of its life; and ACAA

will use the results of this study to urge EPA to consider the use of LCA to evaluate the impact on CCPs of the recent NOx regulations as well as future rule-making. The LCA project is being performed by Ecobalance, a consulting firm located in Maryland, and is cosponsored by ACAA with members, Cinergy and Ontario Hydro.

A draft report was received in March 1997 and is now in the final stage of peer review by experts from DOE, EPA, EPRI, FHWA and consultants, Roy F. Weston. Publication will take place later in 1997.

NEXTEA Brewing Cautiously in Congress

The Intermodal Surface Transportation Act of 1991 (ISTEA), and proposed new legislation known variously as ISTEA-II, NEXTEA, etc., is now being debated in Congress (House Transportation and Infrastructure Committee; House Commerce Committee; Senate Environment and Public Works Committee; and Senate Commerce, Science and Transportation Committee) and Congress is moving cautiously toward enactment of a new bill by September 30, 1997, when ISTEA expires.

ACAA provided comments to U.S. DOT [August 30, 1996, 8 pages, submission to the

ISTEA Public Docket OST-96-1447] emphasizing that "ISTEA's successor should preserve the central elements of ISTEA while maximizing the use of proven recovered materials." As a member of the Transportation Construction Coalition (TCC), ACAA is a co-founder of the video, *Fight for your Future, How You Can Influence Transportation Funding* [TCC Video, December 1996]. The TCC video was sent to ACAA members and to selected mailing lists with a sample letter (available from ACAA) for contacting members of Congress.

In a continuing effort to have ISTEA's successor spell out the need to maximize the use of proven recovered materials, ACAA has sent the ABC video, *America's Highways* [ABC News feature with Peter Jennings, February 1997], along with copies of the Federal Highway Administration (FHWA) booklet, *Fly Ash Facts for Highway Engineers*, to staff members of the Congressional committees where the new legislation is being developed. In this way, these key individuals will have an opportunity to become aware of the use of coal ash and its relationship to: economical and durable construction; environmentally preferable procurement practices; and, therefore, to any new legislation that will replace ISTEA.

Muscatine Power Helps Museum Opening

ACAA teamed up with member Don Paukin of Muscatine Power and Water to participate in a recycling presentation in Bettendorf, Iowa. The city of Bettendorf recently opened their "Museum of Arts and Sciences", a building made of recycled products that houses recycled products. Inside, carpets are made out of soda bottles and play mats are made out of recycled tires. Outside the museum, the parking lot contains concrete using over 100 tons of fly ash. Paukin, Muscatine's Manager of Environmental Affairs, added his expertise to the exhibition at the museum on May 17, 1997. Paukin passed out ACAA materials and used part of ACAA's display to help tell the story of coal combustion products. The exhibit was part of the opening ceremony of the Museum and was attended by several hundred people. Michelle Javornik, the City of Bettendorf's Recycling Coordinator, is hopeful that there will be a permanent display of coal combustion products at the museum in the future.

USDA-ACAA Co-sponsor Conference

ACAA served as a co-sponsor of the Beneficial Co-Utilization of Agricultural, Municipal and Industrial By-Products symposium, held May 4-8, 1997, in Beltsville, Maryland. The symposium, organized by the U.S. Department of Agriculture, featured some thirty presentations attended by over 200 registrants. A folder was distributed to all registrants on behalf of co-sponsors and it contained a special two-page flyer prepared by ACAA for the occasion.

ASCE Takes Action on CCPs

ACAA recently mailed information to all members encouraging them to participate in ACAA's task force on the CCP Subcommittee of the American Society of Civil Engineers (ASCE). Tom Blackstock of ReUse

Technology, an ACAA member, is the chair of ACAA's task force, and after becoming a member of the ASCE CCP Subcommittee more than two years ago. Tom is now its chair. The purpose of the ASCE subcommittee is to develop guidance documents for civil engineers on the use of CCPs in construction applications.

ACI Revises Flowable Fill Document

A draft document is now in preparation by Committee 229 of the American Concrete Institute (ACI) on controlled low strength material (CLSM), or flowable fill. ACAA's Executive Director, Sam Tyson attended an April 7, 1997 meeting of the ACI 229 committee along with a number of representatives from ACAA-member organizations. Each of them accepted writing assignments which will become part of a revised document replacing the current version which had been submitted for publication less than three years ago (ACI

229R-94 became effective October 1, 1994). Clearly, this application for CCPs is still growing and changing as reflected by the need to update and expand the ACI guidance document. Bruce Ramme of Wisconsin Electric Power Company chairs this ACI committee.

ACAA Planning Next Ash Manager Program

On March 25, 1997, Sam Tyson received a letter from West Virginia University acknowledging his request and confirming the availability of classroom space for ACAA's next Educational Program for Managers of Coal Combustion Products (CCPs). The program dates are June 8-12, 1998 and it will once again be held in Morgantown, West Virginia. Jim Burnell of Allegheny Power chairs the task force for this educational program, and task force members include Tom Blackstock of ReUse Technology and Howard Humphrey of American Electric Power.

Concrete Today Features ACAA

For the second consecutive year, ACAA is a co-sponsor of Concrete Today, a special advertising section in the Engineering News Record (ENR). ACAA was one of seven concrete related industry co-sponsors whose logos are featured on the cover of the May 5, 1997 publication. ACAA also had a one-third page advertisement and a special association overview, complete with contact information.

ACAA's contribution to this widely read Concrete Today publication provides an important link to the several articles throughout the issue that mention fly ash. In all, eight articles in the 78-page publication (plus the cover, ACAA's ad, and overview) included fly ash references. The names of the article titles are as follows:

New Paving Takes the Gamble out of Concrete in Las Vegas Highway
"Flat as a Pancake" Pavement Meets Tough Specs in Kansas
Concrete Cures Hospital Building (fly ash on page C-17)
Concrete Delivered at 350 Cubic Yards Per Hour in History-Making Mat Pour (fly ash proposed by concrete supplier but revised by designers)
Deep Tunnel Project Gets Innovative Roller Compacted Concrete Pavement
Big Haynes Creek Dam to Weather: Now Top This One
Tough Paving Material Lives Up to the Job
Cement Plays Role in Rebuilding Marine Habitat

The final article, *Cement Plays Role in Rebuilding Marine Habitat*, is about an innovative CCP project involving ACAA member, Virginia Power. The article is located in the New Technology section of the Concrete Today publication and reports Virginia Power's work with fly ash pellets for placement in marine projects. This project was sponsored by Virginia Power with additional funding from the U.S. Environmental Protection Agency - Aquatic Reef Habitat Program; the Virginia Center for Innovative Technology; and the Virginia Marine Resources Commission. The project represents one part of a major effort to revitalize marine habitats in the Chesapeake Bay. In this example, the pellets, composed of 85% to 90% fly ash and 10% to 15% cement, can host new oyster growth without threatening environmental quality or human health.

ENR's Concrete Today provides ACAA with an annual opportunity to create a high level of awareness of CCP applications, not only fly ash in concrete but other engineering and manufacturing uses as well, to a very large and varied readership. ACAA members are invited to comment on the usefulness of this advertising activity. Copies of Concrete Today have been mailed to ACAA members. Additional copies are available through ACAA.

Reach ACAA Members at Meetings

Potential sponsors for Exhibits, Lunches and Breaks during ACAA's committee meetings and workshops are invited to contact ACAA staff at any time prior to these meetings. A fee of \$500 for breaks; \$1,000 for exhibit space; and \$1,500 for lunches will provide an opportunity for sponsors to reach a significant audience of CCP industry members at one time during a very busy meeting schedule to deliver literature and contact information. A list of ACAA's scheduled meetings appears in this newsletter on page 16.

ACAA's Tyson and Stewart Discuss Innovative Concrete with Representatives from NMRCA and Israel

On May 24 Sam Tyson and Barry Stewart (ACAA) met with Jon Mullarky, National Ready-Mixed Concrete Association (NRMCA) and Dr. Mony Ben-Bassat of Technion, Israel Institute of Technology. Dr. Ben-Bassat was completing a research project with the National Institute of Standards and Testing (NIST) Building and Fire Research Laboratory and presented the results of his research. ACAA became involved in the project by supplying fly ash from four of its members locations. Samples of both class F and class C ash were studied.

This meeting followed a meeting at NIST March 18, in which Dr. Ben-Bassat presented his preliminary findings to Sam Tyson, Barry Stewart, Dr. Clarissa Ferraris, Dr. James Clifton, and other employees NIST. Drs. Clifton and Ferraris have worked closely with Dr. Ben-Bassat on his project. After the presentation Sam Tyson and Barry Stewart were given a tour of the Building and Fire Research Laboratory facilities.

Dr. Ben-Bassat is researching the use of coal fly ash as a sand replacement in concrete mixes. In Israel concrete quality sand is in short supply. Fly ash appears to be an excellent substitute. Dr. Ben-Bassat's preliminary findings

show that mixes containing ash substituted for sand had significantly higher strength development than mixes using sand. Dr. Ben-Bassat returned to Israel on May 1 and will continue his research. When completed this research will be published in a report by

NIST and an appropriate journal. The Israel Institute of Technology, Technion, was recently invited to join ACAA as a Class OI member. Researchers from Technion have presented several papers at previous ACAA symposia.

Symposium Site Selection

Disney's New Conference Resort Chosen for 1999 Symposium

ACAA's 13th International Symposium will be held at Disney's Coronado Springs Resort Hotel in Orlando Florida, January 11-14, 1999. The Coronado Springs Resort is still under construction and will open for business this summer. The hotel combines the state-of-the-art meeting facilities needed to hold ACAA's symposium with the quality, comfort and convenience of an official Disney property. More information will follow as it becomes available.

A task force is now developing a comprehensive plan and budget for the 1999 symposium. The target date for a report with recommendations is July 1997. The task force is chaired by Mike Schroeder of Cinergy and includes: Howard Humphrey of American Electric Power; Andy Stewart of Cooperative Power; Tom Blackstock of ReUse Technology; Larry Harper of Duke Power; Tracy Wandell of Sphere Services; Ray Forker of Central Illinois Light Company; and Fred Gustin of National Minerals/Lafarge.

Committee meeting information for the July 14-16, 1997 meeting in Minneapolis, Minnesota and the October 13-15, 1997 meeting in Old Town Alexandria, Virginia is located on page 16.

Meeting News - Meeting News - Meeting News Staff Attends Conferences, Presents Papers

FHWA Region 8 Concrete Pavement Workshop

The seventh annual FHWA Region 8 Concrete Pavement workshop was held March 19-21, 1997 at the University of Northern Colorado in Greeley, CO. This meeting brings together transportation officials from Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming. The theme of this year's meeting was 40 years of Interstate Highways. ACAA's Director of Technical Services Barry Stewart, spoke on the use of fly ash in soil/base stabilization and high performance concrete. A preview of ACAA's upcoming Manual on Soil and Pavement Base Stabilization with Self-Cementing Coal Fly Ash generated much interest among the audience. Harry Roof (Western Ash) spoke on the use of flowable fill in Colorado and other western states.

Colorado Workshop Hosted by EERC

The Energy and Environmental Research Center (EERC) held a two day workshop on CCP Utilization in Colorado Springs, CO. Sponsors of the workshop included: ACAA, American Fly Ash, Monex Resources, Phoenix Cement Company, Public Service Company of Colorado, Western Ash

Company, and the USDOE Jointly Sponsored Research Program. ACAA Director of Technical Services Barry Stewart, spoke on CCP Production and Use in the Western States. The workshop had over 30 attendees, many from ACAA member companies.

American Power Conference Held in Chicago

At this year's APC, ACAA Director of Technical Services Barry Stewart, spoke on CCP Use in Mining Applications. Other ACAA members giving talks included Oscar Manz (Manz Associates), Joel Colmar (Western Ash), Tom Blackstock and Dale Hauke (ReUse Technology), Jack

Grosso (CAER, University of Kentucky), and Paul Ziemkiewicz (National Research Center for Coal and Energy). An American Society of Civil Engineers (ASCE) subcommittee on CCPs, headed by Tom Blackstock, also met during this meeting. Please contact Tom or ACAA if you are interested in joining this subcommittee. (For more on ASCE see **ASCE Takes Action on CCPs**, page 8.)

ACAA's Gregg Deinhardt and Barry Stewart also manned ACAA's exhibit at the conference. The conference was attended by many interested students who took application forms for the ACAA Educational Foundation scholarship.

ACAA Publications Available Recent Additions to Library

CCBs as Fillers in Plastics - ACAA Compendium 1973-1997: Twenty-one papers from past ACAA Symposia. (March 1997)

Formation, Characteristics and Use of Flue Gas Desulfurization (FGD) Materials - ACAA Compendium 1973-1997: Thirty-eight papers from past ACAA Symposia. (March 1997)

Proceedings: 12th International Symposium on Production and Use of Coal Combustion Byproducts (January 1997)

A Summary of Leaching Methods - By Susan S. Sorini (April 1997)

For a *free full Publications List or Complete Symposium Table of Contents List*, contact ACAA staff. Information on publications is also available on the internet: <http://www.ACAA-USA.org>

Internet Update - ACAA's "Hit List" Grows

Every day, twenty-four hours a day, people from around the world are stopping by ACAA, via the Internet. Each month, ACAA receives our "hit list", a tabulation of who visited our home page and what pages they visited once they got there. Some statistics change from month to month and some are fairly consistent. March was our busiest month with over 1,500 people visiting ACAA's home page. While it is too early to gauge how those 1,500 hits will impact the association, we do know a little bit about where they came from and what they did when they came to ACAA.

One of the interesting trends we have seen in the last three months is that the number of foreign hits have increased. Since January, hits from the United States have ranked only as high as third on the list of countries that have visited our site. Indonesia, Japan and Korea have topped the list in the past three months with Australia, Poland and Sweden finishing in the second spot.

The Internet has proven to be an effective marketing tool for ACAA, reaching people we could not have reached in any other way. Once a contact is made through the internet, the follow-up correspondence is made typically through e-mail. This enables ACAA to exchange general information,

globally, at high speed and with little cost. Before sending us e-mail, we know that our visitors are spending time at various places on the web page.

The most popular page has been the publications list page, followed by the membership list (the list without contact information) and the "how to contact ACAA" page. As our "links" section has developed, it has also become one of the most popular pages with our visitors.

We know that most of our hits come from the business sector, followed by educational users. Since adding information about the ACAA Educational Foundation scholarship program (general information plus applications are available on-line) we have seen a rise in the number of hits from educational users.

Who is our typical user? Our typical visitor is probably Foreign (Asian or European), from a public business. He or she is most likely to read, and download our publications list and membership list. We're probably most likely to have them stop by at 9am, 5pm or 11pm on a Friday.

As we see trends develop, we can adjust our home page to tailor certain information for maximum effect. ACAA

members will also be able to benefit from the many people that stop by ACAA's home page, by linking your site to ACAA. If you have a web-site up and running (or know of a site that would interest our visitors), contact ACAA about linking the sites. If you do not yet have any internet connection and you want to know more, contact ACAA staff with any questions. Soon you'll have a successful (and profitable) "hit list" of your own.

Popular Report on Leaching Methods Available

In April of 1997, ACAA published A Compendium of Leaching Methods by Susan Sorini of the Western Research Institute in Laramie, Wyoming. This compilation consists of detailed methodology for 66 leaching methods and summary tables which contrast parameters from similar methods. Ms. Sorini is active in the area of leaching procedure development and performance and serves as the Chairman of ASTM Task Group D-34.02.01 on Waste Leaching Techniques.

The demand for this comprehensive, 73-page report has depleted the initial 400-copy printing. This report is available to non ACAA members at \$75 per copy. Please contact ACAA for additional copies.

ACAA Chapter Meets with Ohio EPA Elects New Officers

ACAA's Ohio Chapter met on February 13 with Greg Sanders and Scott Sutliff of Ohio EPA's Division of Drinking and Ground Waters. Mr. Sanders explained the development of new procedures in which the local offices of ACAA will be more active in the beneficial reuse permitting process. Permitting is currently done through the state office and the new program should speed up the process of obtaining a permit.

ACAA's director of Technical Services, Barry Stewart, attended the meeting and presented Mr. Sanders with a copy of the Proceedings of the 12th International Symposium on Use and Management of Coal Combustion ByProducts for Ohio EPA's library.

The Ohio Chapter also elected new officers at this meeting. Clayton Willis, of JTM Industries was elected President, Gloria Hines, of AEP was elected Vice President, Joseph "Shwy" Szwejkowski, of Centerior Energy, was elected Secretary and Michael Bates, of Ohio Edison, was elected Treasurer.

New CCP Standards Available from ASTM

The full consensus standard ASTM E1861 Standard Guide for Use of Coal Combustion By-products in Structural Fills, will soon (3-4 weeks) be available from ASTM. This standard replaces ASTM PS 23-95 Provisional Standard Guide for Use of Coal Combustion Fly Ash in Structural Fills. The release of this standard is due to the hard work of many ACAA members.

The ASTM E50.03 committee continues to be active in the development of standards for the use of CCPs. ACAA's Barry Stewart attended the meeting of this committee in Baltimore, Maryland on April 16. Standards on the use of CCPs in landfill liners, and waste stabilization are currently under development in the Coal Ash task group E50.03.01.

In other ASTM News Committee D18 on Soil and Rock and Subcommittee D18.15 on Stabilization with Admixtures is holding a Symposium on the Design and Application of CLSM (Flowable Fill). The Symposium will be held June 19-20 at the Adam's Mark Hotel in St. Louis, MO. Over 30 papers on flowable fill will be presented, and ACAA members figure prominently in the program.

New standards for the testing of flowable fill are also available. Standard PS 30-95 was replaced by D5971, Sampling Freshly Mixed Controlled Low Strength Materials, last year and is currently available. Standard PS 31-95 has been replaced by D6024-96, however, that standard is not yet available (two weeks).

All ASTM standards may be purchased by calling ASTM customer service at (610)-832-9585 or by fax (610)-832-9555. For faster service ASTM offers a WebFax system from its website <http://www.astm.org>. This automated service costs \$0.75 per page (in addition to the cost of the standard) and has a turn around time of less than 10 minutes.

ACAA Provides Guidance for Meetings in China and India

On September 23-27, 1997 the "14th Annual Pittsburgh Coal Conference and Workshop" will be held in Taiyuan, Shanxi, People's Republic of China. This will be the first time that the conference has been held outside of the USA. ACAA is among the 34 "participating organizations" that are responsible for soliciting technical papers and promoting attendance at the conference. ACAA's Executive Director, Sam Tyson, is a member of the advisory board for the conference and notes that ACAA has been a supporter of this important annual activity in Pittsburgh since 1988. Each year since then, ACAA has organized one or two technical sessions, and typically ACAA's Director of Technical Services has both chaired a session and presented a paper. ACAA does not have a line item in its budget for participation in the 1997 conference; but, ACAA members can be proud that their trade association has had a role in this conference being held in China. Members interested in obtaining the most up-to-date information can find it on the conference web site: <http://www.engrng.pitt.edu/~pccwww/>. One of ACAA's new members in 1997 is the China Fly Ash Utilization Technology Center located in Shanghai, China.

Sam Tyson is also a steering committee member for the "International Conference - Fly Ash Disposal and Utilization" which will be held in New Delhi, India on January 20-22, 1998. This conference is being organized by the Central Board of Irrigation and Power, New Delhi, in association with the government of India and in collaboration with ACAA member Tarun Naik, of the Center for By-Products Utilization, Milwaukee, Wisconsin. Other ACAA members on the steering committee are Tony DiGioia, GAI Consultants and Wolfgang Vom Berg, ECOBA. Again, while ACAA does not have a line item in its budget for participation in this 1998 conference, there will be meaningful opportunities for the participation of ACAA members. Registration information is available from Mr. C.V.J. Varma via E-mail: cbip@giasdl01.vsnl.net.in, in New Delhi, India. Another new ACAA members for 1997 is the Coal Ash Institute of India in Calcutta, India.

At the invitation of the U.S. Department of Energy, Coal and Power Import/Export, ACAA's Tyson has become a member of the coal advisory group which provides comments and suggestions regarding "USA-India Bilateral Consultations". Current activities focus on three areas: (1) information exchange and workshops on thermal power plant efficiency; (2) coal preparation techniques and technologies; and (3) coal ash characterization and utilization. ACAA members having a special interest in this activity are invited to contact Sam Tyson for more information.

ACAA Members Meet with Regulatory Officials in Pennsylvania

Representatives from ACAA's electric utility members in Pennsylvania met on May 28, 1997, in Harrisburg with representatives from the state's six regional offices of the Department of Environmental Protection (DEP). Joel Pattishall of Pennsylvania Power & Light presented an overview of coal ash uses, both on behalf of ACAA and on the basis of success stories that are abundantly available in Pennsylvania. The need for management oversight in order to implement successful coal ash utilization projects was stressed. Additionally, attendees from the DEP regions and the Pennsylvania Electric Association (PEA) found common ground for sharing information to increase opportunities for beneficial uses of ash.

Previously, on August 8, 1996, the PEA arranged a meeting in Harrisburg in which ACAA's Sam Tyson presented information about coal ash management and use to the DEP's Deputy Secretary for Pollution Prevention and Compliance Assistance. That meeting helped to create an awareness of the many beneficial uses of coal ash. ACAA is committed to working with members at the state and regional levels to advance the management and use of coal ash.

Coal Ash and Coal Combustion Products (CCPs) - Innovation for a Sustainable Future

ACAA's Coal Ash and Coal Combustion Products (CCPs) - Innovation for a Sustainable Future tells the story of CCBs using a wide range of full-color photographs and informative text. This "coffee table" book is currently in production and will be published by October 1997. Coal Ash and Coal Combustion Products (CCPs) - Innovation for a Sustainable Future is available for \$35 for ACAA members and \$75 for non-members. Fill out the enclosed form and order today! For more information on this limited edition book, contact ACAA staff.

CCP Book Order Form

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Qty. _____ Total _____

☐ Check enclosed ☐ Charge to VISA ☐ Charge to MasterCard

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2760 Eisenhower Avenue, Suite 304, Alexandria, VA 22134-4553 USA
Phone: 703-317-2400 Fax: 703-317-2409 Internet: <http://www.ACAA-USA.org>

ACAA Vendor Selling Promotional Items

HW Koogler & Company has ACAA promotional items available for sale. The selection of items bearing the ACAA logo ranges from golf shirts and hats to pens and coasters.

For a full-color catalog and more information on ACAA apparel and promotional items, contact:

HW Koogler & Company, 8804 Northshore Drive, Knoxville, TN 37922
Telephone: 423-690-6596 - Fax: 423-691-2236

1997 Committee Meeting Schedule

July 14-16, 1997
Minneapolis/St. Paul Airport Hilton
3800 East 80th Street
Minneapolis, Minnesota 55425
Phone: 612-854-2100
Toll Free: 800-637-7453
Fax: 612-854-1039

October 13-15, 1997
Old Town Alexandria Holiday Inn Select
480 King Street
Old Town Alexandria, Virginia 22314
Phone: 703-549-6080
Toll Free: 800-368-5047
Fax: 703-684-6508

1999 Symposium

January 11-14, 1999
Disney's Coronado Springs Resort Hotel
Orlando, Florida

ACAA Task Forces Take Advantage of New Meeting Format and Get Down to Work in Austin

A number of task force chairs took advantage of the fact that they were already in Austin for ACAA's April 1997 meetings and announced concurrent meetings of their task forces. The task force meetings took place during the afternoon and evening following the committee meetings and workshop as well as the following morning in some cases. It is expected that this

practice will continue and expand as more task forces are created. ACAA members wishing to become involved in the work of an existing task force should coordinate directly with task force chair to confirm the exact time and location of meetings. The next committee meetings and workshop will be held on July 14-15, 1997 in Minneapolis, Minnesota.

Ash at Work is a Publication of : American Coal Ash Association

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