


ASH AT WORK

PUBLISHED BY NATIONAL ASH ASSOCIATION, 1819 H STREET NW, WASHINGTON, D.C. 20006

 Printed on recycled paper.

Vol. XIII

1981

No. 3

NAA, 8 Others Will Co-Sponsor Reno Symposium

Eight organizations have joined the National Ash Association in co-sponsoring the Sixth International Ash Utilization Symposium to be held at the MGM Grand Hotel in Reno, Nevada, March 7-10, 1982.

Steering Committee Chairman Allan W. Babcock identified the participants as American Public Power Association, Department of Energy, Edison Electric Institute, Environmental Protection Agency, Electric Power Research Institute, Federal Highway Administration, the National Coal Association, and New York Power Pool.

Four of the agencies—APPA, DOE, EEI, NCA—have played vital roles in staging each of the past five symposia, Babcock noted. Initiated in 1967 at Pittsburgh, the event led to the establishment of the NAA the following year.

REGISTRATION OPENS

Registrations for the 6th International Ash Utilization Symposium are now being accepted by the NAA offices in Washington. The necessary enrollment papers are enclosed.

The blank also contains a hotel reservation form which should be forwarded directly to the MGM Grand Hotel in Reno to guarantee accommodations.

The chairman also reported the Steering Committee had engaged the services of Meeting Planning Associates of Menlo Park, CA to handle specific assignments for planning, managing,

(Continued on Page 2)

BG&E Tour Key To Change In Ash Views



Maryland Gazette Photo

Examining Amos Ash

VEPCO Becomes Member

Virginia Electric & Power Company, headquartered in Richmond, headed the list of eight (8) new members joining the National Ash Association.

The Virginia utility will be represented on the Board of Directors by J. I. Oatts, Senior Vice President—Operations. VEPCo currently operates five coal-burning generating stations and will be a Class P Voting member.

Executive Director James Covey stated the NAA was "extremely pleased" to receive a commitment from the firm. He met with company officials on August 10 for a needs assessment

(Continued on Page 3)

A Friend In Need Is a Friend Indeed!

BALTIMORE, MD—If officials of Baltimore Gas & Electric Company were asked to interpret this phrase today they would probably respond that it best describes the relationship they have with the National Ash Association and one of its affiliated members—American Electric Power Service Corporation.

After wrestling with the problem of how to cope with the environmental aspects of disposing of the ash from their Brandon Shores Station in Anne Arundel County the utility reviewed the options with Executive Director James Covey.

In brief, the latter suggested an on-site visitation to AEP's operations in the Charleston, WV area to review their ash management concepts and field practices with Ron Morrison and his Ash Utilization and Research staff. Many conversations later a plan of action was agreed upon.

Gary Fuhrman, BG&E's designated rep on the NAA Board of Directors, coordinated the program which involved the transporting of more than 130 individuals, in four different groups, to Charleston via chartered plane for a day-long field trip.

Top corporate executives of BG&E; planners, health and environmental officials, and interested citizens from Arundel County; and engineering consultants employed by the utility participated in the sessions. AEP officials termed the tour a mini-short course on the fundamentals of ash production and utilization techniques.

The tour included a visit to AEP's John Amos Station, an on-site inspection of the placement of fly ash in a

(Continued on Page 3)



American
Public Power
Association



Department
of
Energy



Edison
Electric
Institute



Environmental
Protection
Agency



Electric Power
Research
Institute



Federal
Highway
Administration



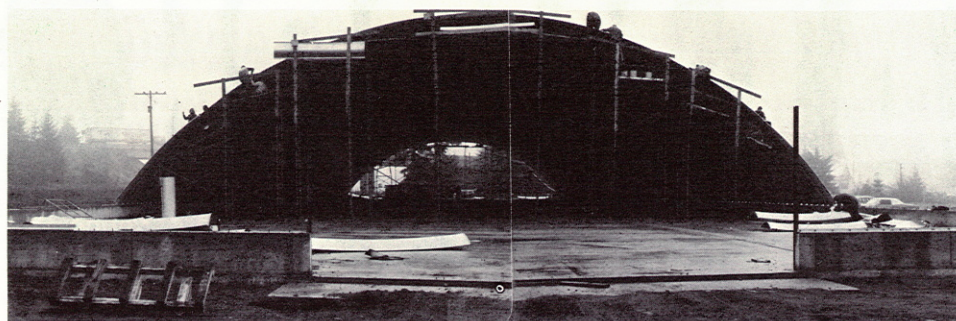
National
Ash
Association



National
Coal
Association



New York
Power
Pool



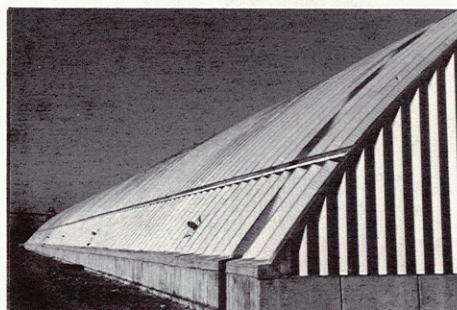
Warehouse Takes Shape

Pozzolan Photo



Installing Panels

Pozzolan Photo



Side View of Silo

Pozzolan Photo



Completed Ash Warehouse

Pozzolan Photo

Pozzolan Northwest Erects Ash Warehouse

MERCER ISLAND, WA—An ash warehouse? Why not? Well, Pozzolan Northwest, Inc., an ash marketing firm based here, has developed just such a facility to assure their customers of a continuous supply of fly ash.

The firm has erected a 40,000 sq. ft. quonset-type structure to serve as an ash storage silo for 25,000 tons of ash produced at Pacific Power & Light Company's Centralia Station.

And plans are already underway for the erection of a second storage facility at the same location to serve a growing clientele in the United States, British

Columbia in Canada, and Alaska.

The clear-span metal building is 100-feet wide 400-feet long, and is arched to a height of 26 feet in the center. The silo rests on a concrete slab with a two-foot high wall supporting the curved panels and is humidity controlled.

Company officials point with pride to the fact that the innovative silo represents the largest storage of Class F fly ash in the United States. Class F ash is the ASTM standard for the high calcium lightnrite and sub-bituminous coal ash.

NAA, 8 Others

(Continued From Page 1)

and coordinating the international program. MPA President Kathy Davis will direct this phase of the project.

Newly designated members of the Steering Committee include Andrew C. Hirsch, APPA; Ms. Stephanie Bialobok, DOE; James Evans, EEI; John Heffelfinger, EPA; Dr. Ralph Komai, EPRI; Nelson Castellanos, FHWA; Constance Holmes, NCA; Jack Weber, Weber-McNeil Material Sales, Inc.; Kevin L. McLoughlin, NY Power Pool; Ronald E. Morrison, American Electric Power; and John Gillis of the NAA staff.

Morrison, the immediate past president of the NAA, has served in a similar capacity for all the past ash symposia and was an original incorporator of the Association itself.

A registration fee of \$150 has been set for the Reno program, Babcock disclosed. Those enrolling prior to January 31, 1982 will be entitled to a \$25 early bird bonus, he added. The one-day attendance fee has been established at \$50.

As in the past, all registrants will be provided with a bound copy of the technical presentations published by the Department of Energy. "We are extremely grateful that the DOE has once again consented to print and distribute the official proceedings," the chairman stated.

The Steering Committee also designated United Airlines as the official air carrier for the Reno Symposium. For further airline reservation information phone 800 323-0639.

Babcock revealed that a special effort will be made to attract exhibitors serving the ash industry and to present live demonstrations of actual ash applications.

"Because of the location of the Symposium we will offer a special activities program for attendee spouses and guests," Chairman Babcock reported. The programs are being coordinated through the Reno Convention Bureau and the MGM Hotel. Spouse registration has been set at \$50.

The MGM Grand has reserved 500 rooms for ash symposium attendees.

RENO

*The Place To Be
March 7-10, 1982*

Marketing Emphasized At Kentucky Seminar

LEXINGTON, KY—The emphasis was on ash marketing at the Seventh Kentucky Coal By-Products Seminar held here in mid-June and attended by 69 intense and interested enrollees.

Director Jerry G. Rose identified the group as a good cross section of construction, supplier, governmental, and utility industry reps. The one-day program was sponsored by the UK Institute for Mining and Minerals Research.

Ash industry spokesmen, all affiliated with the National Ash Association, stated the power production residuals must be treated as useful engineering construction aggregates if they are to successfully compete in the market place with other natural resources.

This means, they added, that a uniform product must be available on a daily basis.

Robert Styron, an Atlanta research chemist, cited that a mineralogical analysis of fly ash is an important factor in the quality evaluation process particularly as it relates to strength gaining factors in concrete.

A marketing agent, John Ashby of Pozzolan, Inc., told the audience there are ample supplies of fly ash available in Kentucky since the state is only utilizing about three percent of reported production. Ashby also termed the specifier—the person who prescribes what is to go into the concrete—as the most important person involved in the use of fly ash in the mix.

Ashby related a company test involving five different brands of cement has revealed that the characteristics of the cement itself can have a significant effect on the early age strength and rate of gain in strength. He added the program confirmed the fact that the inclusion of fly ash in the mix improves the concrete strength at later ages.

The other speakers were NAA Executive Director Jim Covey and Dennis L. Kinder, a research engineer with American Electric Power Service Corporation.

VEPCO Becomes . . .

(Continued from Page 1)

pertaining to ash production, disposal, and marketing.

A Mexican utility, Minera Carbonifera Rio Escondido of Coahuila, was accepted as a special member as a non-coal burning electric utility. When the first of four (4) planned 300mga coal fired units comes on stream the company will become a Class P voting



Inspecting Ash Fill

BG&E Tour . . .

(Continued From Page 1)

structural fill, a housing development and a commercial shopping center constructed on such fills as well as the site for a proposed industrial park and an adjoining tank farm.

Causes Flip-Flop

A reporter for the Maryland Gazette said the "Charleston tour caused a flip-flop in fly ash views" on the part of residents and officials who were concerned about the utility's plans to use ash as a fill material for an eventual industrial park.

A staff writer, Mary Humberson, said; "After visiting several fly ash construction sites in Charleston, WV this week, most north county residents and local officials on the tour say they are willing to cooperate with Baltimore Gas & Electric Co.'s proposal to use the coal waste on 180 acres on Marley Neck."

member. General Director Fernando Velasco is the designated representative to the Association.

The six Class O non-voting members included three other foreign firms including one each from Taiwan, the Netherlands, and Brazil. They are Power Research Laboratories of Taipei; Aarding, BV of Nunspest; and Instituto de Administracao e Tecnologia de Caixas, do Saul R.S.

International Coal Refining Company of Allentown, PA; Oh-Kay Chemical Corporation of Dallas, TX; and Mario Construction Company of Stirling, N.J. round out the list of new members.



VIP's Return To Bus

However, before the project can go forward the Arundel County Code labeling fly ash a refuse will have to be changed.

The Maryland utility is now finalizing plans of the establishment of an ash management program and developing site plans for presentation to county and state regulatory agencies.

In mid-June, the NAA also joined BG&E officials for a meeting in Annapolis with state officials to explore possible new programs and legislation to promote creative ways of disposing of fly ash.

The Maryland General Assembly passed legislation in 1974 classifying "pozzolans" or more specifically fly ash as a natural resource and putting the material in the same category as limestone, sand, and gravel. The NAA played an active role in the development of the bill introduced by Senator Bill Goodman.

North Dakota Accepts Use Of Basin Electric Ash On Highways

STANTON, ND—Fly ash from Basin Electric Power Cooperative's Leland Olds Station near here was recently used in the widening of a six mile stretch of North Dakota Highway 83 between Bismark and Washburn.

The North Dakota Highway Department utilized about 2,300 tons of ash as a road base material on the project which added two traffic lanes to the highway.

The basemix consisted of a blend of 12 percent Olds ash—a highly reactive Class F material, three percent lime and 85 percent aggregate.

As a result of the 83 project, the ND Highway Department has made a decision to use ash from Basin's William J. Neal Station at Velva as the base course aggregate for a three-mile project near that station in 1982. This program calls for the placement of a 80/20 mix of fly ash and bottom ash in a six-inch lift over a gravel base.

Basin's Ash Marketing Specialist, Bill Grosz, said early tests confirmed this material could be "used as a cement replacement."

"The Test results showed that mixtures of fly ash and cement could create concrete strengths comparable to mixtures using only cement," Grosz related, "the end products were denser and less permeable," he added.

The ND utility is also experimenting with the use of the fly ash from its Laramie River Station near Wheatland, WY as a soil stabilizer in highway construction. The ash has been used to treat a section of an unpaved road leading to the Grayrocks Reservoir—the water supply source for the station.

The spokesman said the utility is "still establishing track records for some fly ash applications." One such use is the use of LRS ash to stabilize irrigation banks. The Water and Power Resources Service in Wyoming is taking a long look at this application.

Ash from Neal Station's disposal pond has been utilized as a structural fill beneath a 1,000 foot section of railroad near the coal unloading building which had been settling. The earth under the tracks was excavated and a compacted fly ash fill was put down to support the trackage.

Grosz said the project was successful and resulted in a substantial cost savings to Basin Electric.

Grosz concluded "the economics, strength, and apparent durability of fly ash products point to a bright future for Basin ash."



Fly Ash Basemix

Basin Photo



Loading Bottom Ash

Basin Photo

Shooting Of Highway Film Said Nearing Completion

WASHINGTON—Filming is nearly complete on a documentary film depicting the use of power plant ash in highway construction.

Executive Director Jim Covey said the National Ash Association is developing the film on the subject in cooperation with the Federal Highway Administration.

The film will zero in on many well-known ash uses including base construction, structural fills, soil stabilization, flexible and rigid pavements, embankments and grouting.

Director Covey said the film will be premiered at the 6th International Ash Utilization at Reno next March.

The film is being produced by Nick Smith, a cinematographer/producer for WWVU-TV at West Virginia University. Dennis L. Kinder, a research engineer for American Electric Power Service Corporation, and Al Babcock, ash consultant for Allegheny Power Service Corporation, are serving as technical coordinators.

HERE & THERE

Coal Filter Media

LEXINGTON—A two-year study by a University of Kentucky researcher has concluded that bottom ash is an effective media to filter microscopic coal particles from synthetic crude oil.

Dr. James K. Shou, senior engineer at the UK Institute for Mining and Mineral Research, said the ash might be used at the commercial level as a low-cost substitute for distomaceous (plant fossil) materials now being used to separate solids from liquefied coal.

He noted his analysis is based on laboratory findings.

* * *

Settlement Reached

AKRON, OH—The U.S. Environmental Protection Agency and Ohio Edison Company have reached an out-of-court settlement under which the electric utility will curb fly ash emissions at 10 of its coal-burning power stations.

The company will spend \$500 million, the costliest agreement to date under the Clean Air Act which includes \$1.5 million in cash penalties.

* * *

Cement Forecast

SKOKIE, IL—The Portland Cement Industry forecasts an estimated 435 million tons of cement will be consumed in the period from 1981 through 1985.

The projection says the industry appears to be entering the best five-year period in its history—surpassing by 10 percent the 397 million tons shipped in 1970-1974.

* * *

PFA Meeting Set

LONDON, England—Papers are now being accepted for the First International Symposium on "The Use of Pulverized Fuel Ash in Concrete" to be held at the University of Leeds on April 14-16, 1982.

The program is being co-sponsored by the Civil Engineering Department at Leeds, The Concrete Society, and the Central Electricity Generating Board.

Papers are being solicited in the following areas: (1) Properties and Characterization of fly ash (PFA), (2) Fundamental Aspects of PFA Concretes; and (3) Design and construction of structures using PFA Concretes.

For further information contact the NAA offices in Washington.