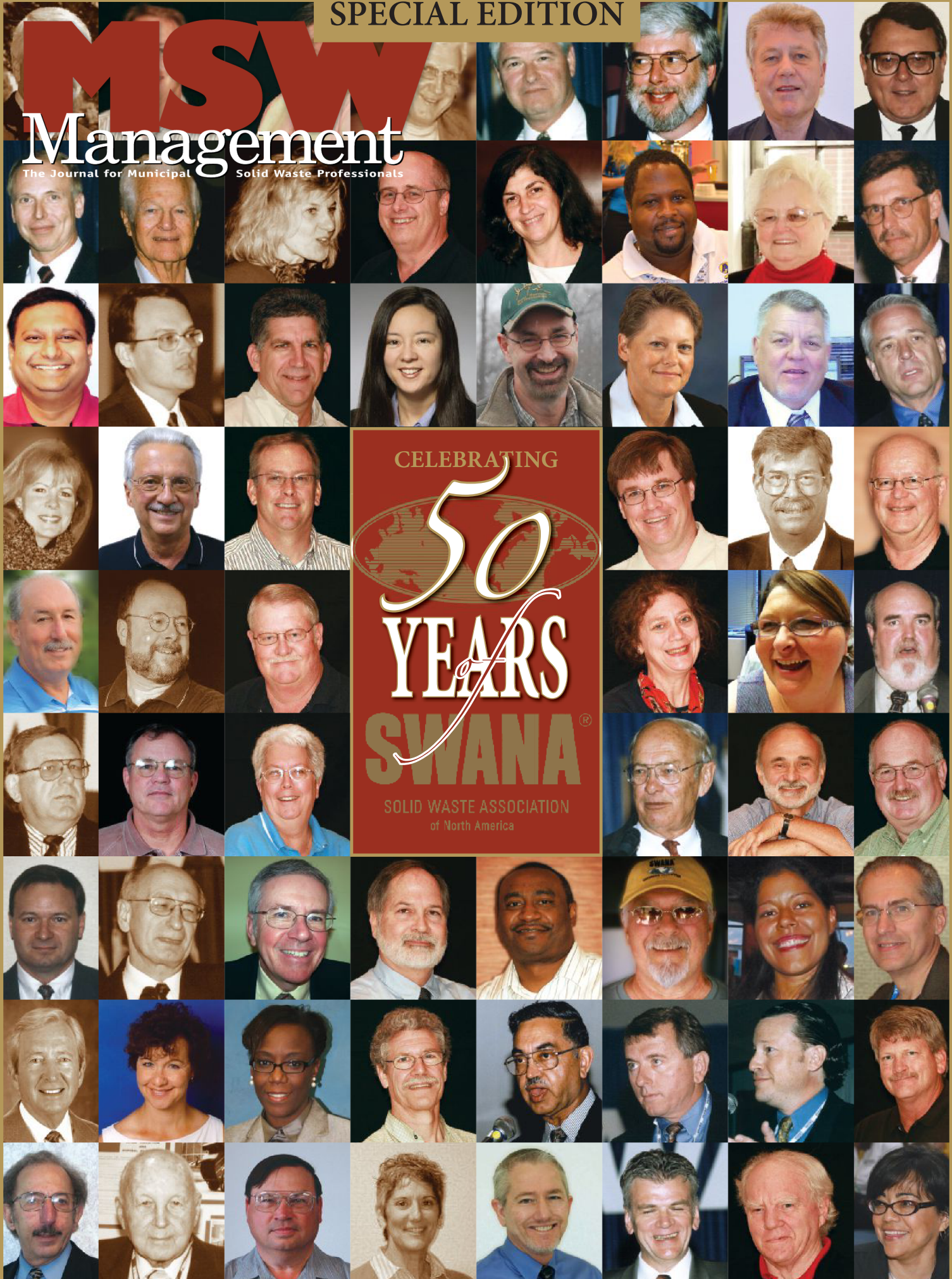


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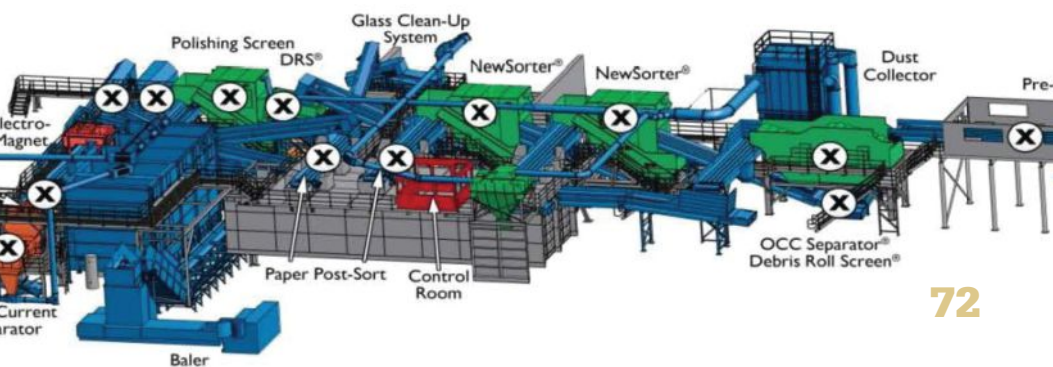


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SWANA GOLDEN ANNIVERSARY ISSUE



72

Contents

6 EDITOR'S COMMENTS

8 SWANA TODAY

10 THROUGH THE YEARS Moments of Decision

56 THE PAST Taking the Basics to New Levels

72 AT 50 YEARS SWANA Moving Forward

92 LOOKING AHEAD Poised for the Future



56

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SWANA's Golden Anniversary:

50 Years of Leadership

While many of the charter members of what began as the Government Refuse Collection and Disposal Association (GRCDA) in 1962 are no longer with us, their spirit and dedication live on in what has grown to become the largest waste management association in the world. Indeed, its legacy is felt far beyond the confines of North America, where its many programs and initiatives serve as models for others around the globe.

It is here that we at *MSW Management* wish to express our gratitude to those who have contributed most generously to the contents of this issue.

Much of the historical material, and specifically that covering the period from 1978 to 1996 was provided by GRCDA/SWANA's first executive director, H. Lanier Hickman, known far and wide as Lanny. Without his efforts in preserving much of the association's history before and during his tenure, this anniversary issue would not have been able to provide a cogent view of its development both in terms of its organization and activities.

The responsibility for extracting and bringing to bear the welter of materials and photographs contained in the association's archives fell to SWANA's associate director, Kathleen (Lane) Callaghan. It was a task involving countless hours of painstaking work that in its way highlights the dedication of staff members in support of the organization's many and diverse activities.

Also in line for our thanks is current executive director, John Skinner, whose support and encouragement from the outset allowed

this effort to get off the ground.

And we are truly grateful to those of you who took the time and effort to send us stories and photos. If, as you go through the issue, you find your submission has been truncated or left out altogether, please accept our apologies along with the guarantee that all is not lost. Thanks to the wonders of technology, the electronic version, at www.mswmanagement.com,

will include all the materials received to date as well as those from future submissions. We intend for this to be a "living document," so if you stumble across photos or recall some juicy tidbits from SWANA events of yesteryear, send them to me and allow us to memorialize them online.

Finally, I want to give special praise to award-winning journalist, Carol Brzozowski, for conducting numerous interviews and pulling together all of the disparate parts of GRCDA/

SWANA's history and activities into this, the story of the association's first 50 years, and then giving us a peek at what lies ahead.

While the programs and initiatives are what others see of SWANA, it is the people who constitute the true and enduring story. To an extent all too often overlooked by us caught up in our day-to-day endeavors, the association's members and staff have been the catalyst for positive change in what has risen to become the most truly environmental of all endeavors in our society.

Thus it is to SWANA people, past, present, and future that this special issue is dedicated with our heartfelt thanks and genuine admiration. Happy Birthday! **MSW**



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SWANA Today

SWANA's growth and development over its 50-year history is a testament to the dreams and vision of the early solid waste pioneers that formed the association. Today, SWANA has nearly 8,000 individual members from the public and private sectors, organized into 45 chapters in the US, Canada, and the Caribbean.

Over the years, SWANA members have created a wide range of professional development programs and services to meet their ever-changing needs:

- An extensive training program, including numerous technical courses that are offered at national and chapter events as well as through onsite training, home-study courses, and online electronic courses
- The premier solid waste professional certification program in existence in North America, including certification courses and exams in eight solid waste management disciplines
- An advocacy program that works to influence legislation and regulations at the federal, state, and provincial levels
- Seven Technical Divisions that develop programs for our conferences and symposia, provide faculty for training, run excellence awards programs, issue newsletters, and develop publications
- An Applied Research Foundation that carries out cutting-edge research and widely disseminates the results in the professional literature
- A wide range of annual technical conferences, including five specialty symposia, two training centers, several multichapter regional symposia and many individual chapter conferences
- Equipment and Truck Road-E-Os at the chapter and international level, where drivers, operators, and mechanics demonstrate their professional skills
- E-Sessions, which are online web seminars on current solid waste management topics that are held several times a month throughout the year
- The eLibrary, an online electronic library containing the papers from our conferences and symposia, as well as other important solid waste literature
- Opportunities to learn about solid waste practices worldwide through our national membership in the International Solid Waste Association (ISWA)
- Scholarship and internship programs, student memberships, and a

young professionals program to help develop future generations of solid waste management professionals

- Social networking opportunities, including an online membership directory on My SWANA, and SWANA groups on Twitter, LinkedIn, and Facebook
- Our monthly electronic newsletter, *I AM SWANA*, and our official journal, *MSW Management* magazine
- WASTECON, our annual conference and equipment exhibition, which stands out from the crowd as the only conference and exhibition by solid waste professionals for solid waste professionals

Looking back at the changes in solid waste management that have occurred since SWANA's inception makes you wonder what the next 50 years will have in store. Just from events on the near horizon, it

looks like SWANA will have many national and global opportunities and challenges. International efforts to respond to climate change and energy needs could transform national economies and solid waste practices to fit within a low-carbon, renewable energy future.

Product stewardship and extended producer responsibility could create new roles for manufacturers and designers in the management of discarded products. Such concepts as waste reduction and zero waste could redefine what we mean by solid waste management.

Conversion technologies such as gasification, pyrolysis, anaerobic digestion, and plasma arc could emerge from the drawing boards and provide a whole new suite of waste recovery options.

Regardless of the challenges and opportunities that may come up, there is one thing I know for certain: SWANA members will be leading the innovation, influencing the policies and shaping the future. We know we can learn from each other and can accomplish so much more by working together than we could ever dream of achieving alone. We understand that there is an undeniable strength when we embrace the diverse perspectives and knowledge of thousands of solid waste professionals and focus their talents on improving not only the working environment of our people but also the natural environment of our planet. **MSW**

John H. Skinner, Ph.D., is the executive director and chief executive officer of the Solid Waste Association of North America.



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Through the Years

Moments of Decision

In 1962, six sanitation workers in southern California incorporated an effort to share information on solid waste practices, notably safety. They called it the Governmental Refuse Collection and Disposal Association (GRCD A). There was no thought at the time of creating chapters. But word of its existence caught on and its influence spread to where it is today: a North American membership association of 44 chapters engaged in education, training, certification, and advocacy.

The following is a decade-by-decade chronology of its chapters, governance and technology. History from the early years with respect to chapters is spotty and in some cases, missing, with early chapter formation dates in some cases being estimates.



1961

12/5

The first organizing meeting of what would become the GRCD A is held at the Huddle Restaurant in West Covina, CA.

1962

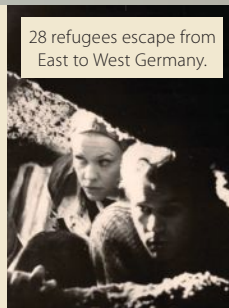
1/17

NASA civilian pilot Neil A. Armstrong takes X-15 to 40,690 m.



1/24

28 refugees escape from East to West Germany.

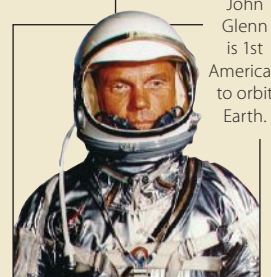


2/4



Russian newspaper *Izvestia* reports baseball is an old Russian game.

2/20



John Glenn is 1st American to orbit Earth.

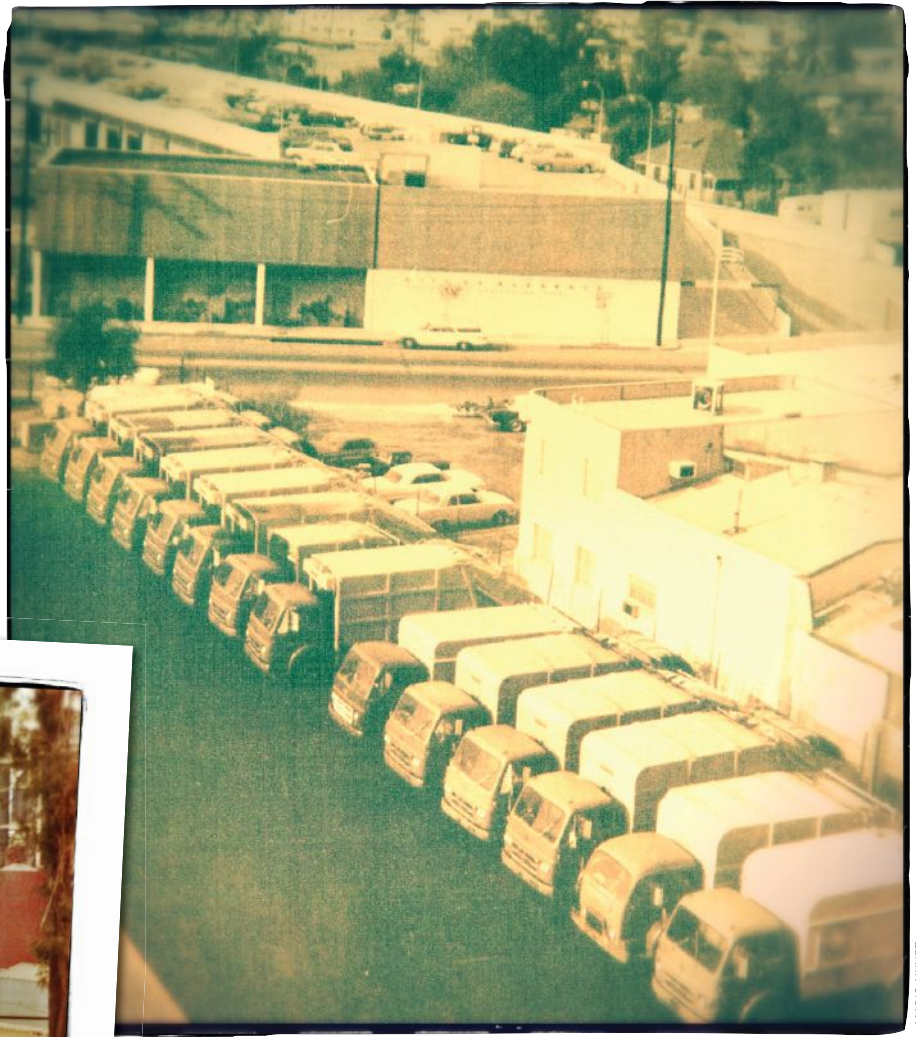
THE 1960s

The Southern California group would form in 1962 and become what would be known as GRCDAs first chapter. Years later, in 1987, it would change its name to the GRCDAs Southern California Founding Chapter.

In 1964, the GRCDAs Northern-Central Chapter formed and was dissolved the next year. The Northern California Gold Rush chapter is believed to have started in 1965; the Central California Sierra chapter formed in 1966. The Washington chapter was chartered in 1969.

THE 1970s

Six years later, GRCDAs experienced more growth on the Pacific Coast with the chartering of the Oregon Beaver chapter in 1975.



Left: An incinerator operation in Pasadena, CA, early 1960s. Above: The fleet in Glendale, CA, during the late 1950s.

Additionally, British Columbia (Pacific), Canadian Prairie (Northern Lights), Utah (Beehive), New Mexico Roadrunner, Oklahoma (Indian Nations), Arizona, and Florida chapters came into being in this decade.

As GRCDAs grew, governance became a more significant issue. To meet those needs, the International Executive Committee (EC)

and International Board of Directors (IB) were created.

GRCDAs grew from a West Coast association totally staffed by volunteers to an international association with a staff to serve as stewards of GRCDAs for the benefit of its membership.

The Executive Committee consisted of the officers, past president, two directors and two corporate directors elected by the corporate members and met three times annually. Bylaws were amended during 1979 to

add the Seminar Chairman to the Executive Committee effective in 1980.

The International Board of Directors met midyear and included the officers in addition to eight directors from the public sector and six directors from the private sector.

Key management issues were addressed in 1979. Prompted by the Executive Committee, GRCDAs established a schedule of accounts to manage the finances of the organization and began to keep a portion of its funds in interest-bearing accounts.

GRCDAs pursued nonprofit status as a

3/9



US advisors in South Vietnam join the fight.



6/12

Three convicts use spoons to dig their way out of Alcatraz.



8/5



Death of Marilyn Monroe

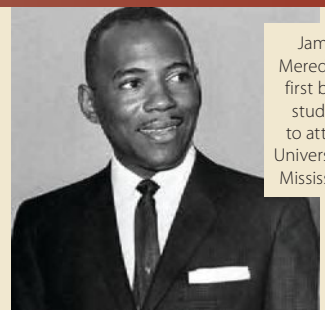
9/27

Rachel Carson publishes *Silent Spring*.



10/1

James Meredith is first black student to attend University of Mississippi.



501c3 to reflect its mission of research and education.

An awards program was established to honor exemplary industry operations.

GRCDA began advocacy efforts, making comments on proposed Noise and Resource Conservation and Recovery Act regulations.

Three technical committees were formed at this time.

The Land Disposal Committee addressed both sanitary landfill and landfill-gas management issues and over time was subdivided into a Landfill Management Division and Landfill Gas Management Division.

The Hazardous Waste Committee addressed household hazardous wastes and small-quantity hazardous waste generators and over time morphed into becoming part of the Recycling and Special Wastes Division.

The Resource Recovery Committee addressed both materials recovery and waste-to-energy (WTE) and ultimately subdivided into a Waste-to-Energy Division and Recycling and Special Wastes Division.

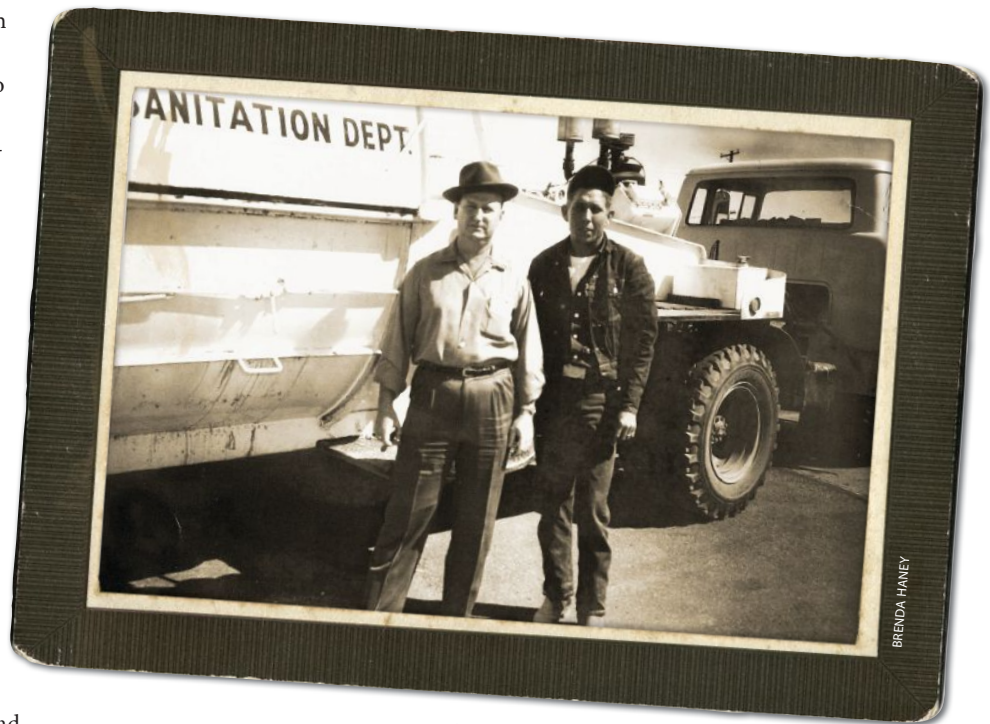
The executive director submitted a proposal for an application to the United States Environmental Protection Agency (EPA) for a training, technical assistance, and information dissemination grant.

GRCDA had a number of committees—mostly technical—that had been functioning since the organization's inception. Many were single-output committees and did not continue over the years. Over time, permanent technical committees became technical divisions.

In 1979, committees performed various tasks, although some of them did not yield many results. Those that did included equipment survey, which determined what types of collection, transfer and disposal equipment was being purchased and used by GRCDA members, an effort to increase sales of exhibit space at the annual meeting.

The Chapter Manual Committee developed a "how to" on organizing, planning and operating a GRCDA chapter. This output was to include a process for establishing a new chapter, model bylaws, and meetings techniques, among other factors. It was developed and used in a variety of ways by chapters.

Many of the organizational problems between GRCDA and its chapters were based on the lack of a set of rules or guidelines developed to define the relationships between GRCDA and its chapters. The emergence of the affiliation agreements during this time period



Sanitation workers in Irving, TX, 1955

did a great deal to improve the culture between the parent organization and its chapters.

The Management Plan Committee created a document to address GRCDA management and operations. It evolved over the years, and while it served to guide the establishment, growth, and operations of the central office, it was not perceived to have worked well for the interaction between the central office and the chapters.

At the end of 1979, Executive Director Lanny Hickman was in negotiations with the EPA to assist the agency in technical assistance, training, and information dissemination.

THE 1980s

Chapters emerging during this decade include Illinois Land of Lincoln, Texas Lone Star, Minnesota (Land of Lakes), New Jersey, Virginia (Old Dominion), Alabama, Georgia, Alaska (Great Lands), Ohio (Buckeye), Michigan (Great Lakes), Colorado (Rocky Mountain) North Carolina, Ontario, Pennsylvania (Keystone), Connecticut, Massachusetts, New York, and South Carolina.

One of the first meetings of the Iowa-Nebraska chapter was inspired by Hickman, who at the time worked in a field office of the Iowa Department of Environmental Quality.

The Iowa-Nebraska Chapter grew for seven years until 1988, when it separated into two chapters: Nebraska (later renamed Nebraska Cornhusker) and Iowa (Iowa Society of Solid Waste Operators).

1963

2/9

1st flight of Boeing 727 jet



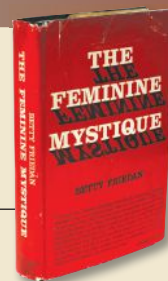
2/11



Julia Child's show, *The French Chef*, premieres.

2/19

Betty Friedan publishes *The Feminine Mystique*.



4/4



Bye Bye Birdie is released.

6/9

Congress enacts Equal Pay Act, requiring equal pay for equal work, regardless of sex.



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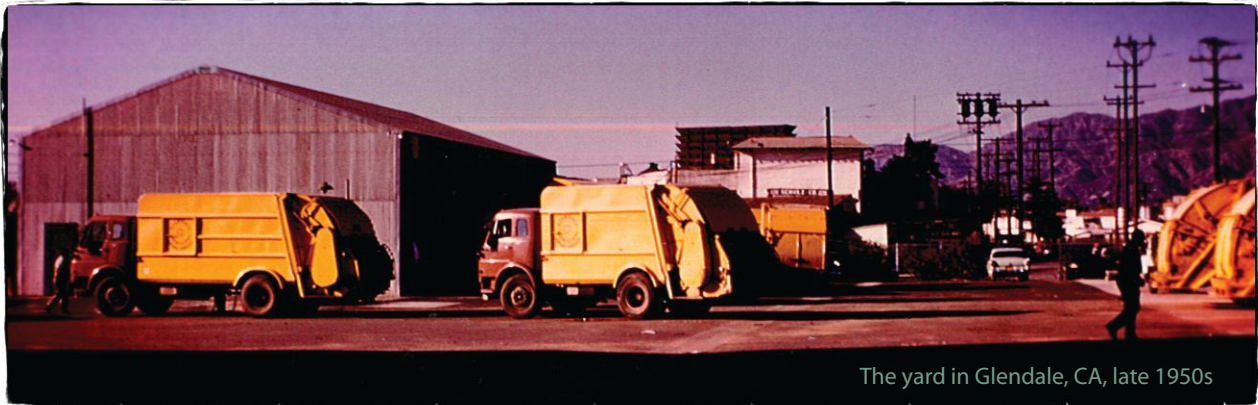
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The yard in Glendale, CA, late 1950s

MARIO NUNEZ

In the 1980s, the Louisiana chapter came onboard, but its status was suspended in 1984 for nonpayment of dues and failure to comply with chapter status requirements.

In 1983, the Mid-Atlantic Chapter—representing Maryland, Delaware, and the District of Columbia—was granted provisional status.

As GRCDA grew, so did its governing body and practices.

Policy development proceeded on an as-needed basis until 1983, when a formal set of policies and procedures for the development of association policies was instituted.

Officer positions were not open to private sector members, so officers who left public service for private entities had to resign. The executive director's contract was extended from 12 to 18 months. Agreements were made to produce a trade journal; the initial agreement was with *Waste Age* magazine.

GRCDA authorized the development of a policy manual to help structure its management and organization and codify policy and technical decisions.

The association secretary was charged with the responsibility of maintaining a record of policy decisions. Hickman recommended that chapter presidents be used as the review group for proposed policies, with the Executive Committee concurring.

Planning was under way for the first show east of the Mississippi, with the Marriott in Orlando, FL, chosen as the site for 1984.

A revised five-year plan was approved through 1985, with the key goals being having a full-time executive director, administrative assistant, and secretary; publication of the proceedings of the Annual Seminar and Equipment Show; development of a human resources and technical information and retrieval system; promoting the growth of the association to its 25 chapters; expanding attendance to the Annual Seminar and Equipment Show; and sponsoring 15 GRCDA training presentations per year.

By spring 1981, GRCDA had experienced more growth with the need for increased staff responsibilities. Hickman considered several options, with the most viable one being a move to a suburban location with close access to Washington DC's mass transit system for easy means to get downtown.

With money saved in rent, the association hired an administrative officer in addition to the part-time secretary/clerk to help with increased responsibilities and moved its offices to Silver Spring, MD, in early 1982.

Meanwhile, on a part-time basis using gratis office space at Hickman's home, Kay Hickman took on the responsibilities of printing and mailing the newsletter and handling registration for the international seminar and equipment show.

GRCDA had to find new office space a few years later when the owner of the row of offices sold the property with the existing

buildings razed and replaced it with a high-rise office building. The Executive Committee approved a move of the GRCDA International Headquarters to Georgian Towers in Silver Spring, MD.

Increased space was needed to accommodate staff growth with new EPA grants and contracts on the horizon. A part-time support employee was hired. The GRCDA international offices make a conversion to computers and networking.

By the end of 1982, a number of financial management practices were in place, including a general and administrative account, a convention account, and a special account for contracts, grants, expenses, and income.

A first variable account was in Washington DC for investment funds. An international account was based in Sacramento, CA, and managed by the treasurer. The executive director continued to transfer money to the treasurer as the international account was under the control of the Executive Committee, not the executive director. The headquarters' accounting procedures were now being reported on a project basis.

In spring 1982, the growth of GRCDA appeared to necessitate legal assistance with such issues as the liability potential between the association and its chapters. An association legal counsel was hired: Barry Shanoff, who serves to this day.

Also in 1982, the idea of changing the

1963

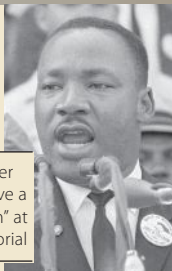
6/11

Buddhist monk burns himself to death in protest of persecution of Buddhists in Vietnam.



8/28

Martin Luther King Jr.'s "I have a dream speech" at Lincoln Memorial



11/2



President Diem toppled by US-supported coup in South Vietnam

11/16



Touch-tone telephone introduced

11/21

The first Annual Meeting of the GRCDA is held in Santa Anita, CA.

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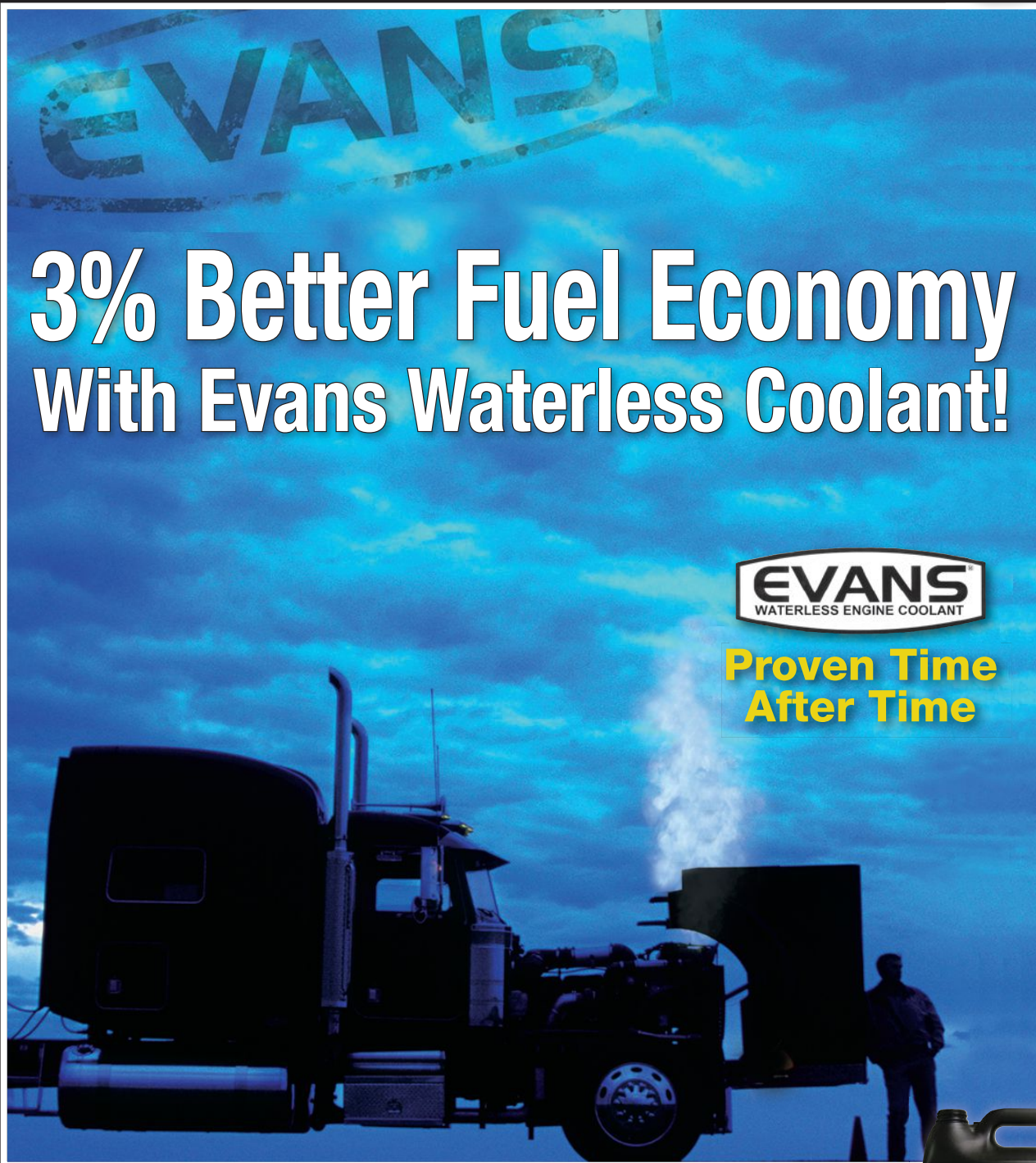


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organization's name to be more reflective of the association and the field of solid waste management began to surface, but got little support.

In 1983, the International Board of Directors transitioned to its new configuration, with each chapter electing a representative to the International Board with the designation of *chapter director*. The number of corporate directors remained at six.

GRCDA created a new membership category—Agency for Government Solid Waste Agencies—allowing employees of an agency member to join at a lesser rate. Another category to emerge: Honorary/Lifetime.

GRCDA's presence began to extend to such annual meetings as the National League of Cities and the National Association of Counties. Also that year, the GRCDA trademark was approved by the US Patent and Trademark Office.

In 1983, model chapter by-laws were developed to assist new chapter formation and existing chapters to bring their operations more in alignment with the overall GRCDA activities and programs.

Chapters were included as partners in the implementation of the policy to promote certification of landfill managers. Chapters also began the custom of adding a cultural/geographic/historic descriptor to their state/provincial title.

When GRCDA spun off from the original three California chapters, the annual seminar and equipment show went with the national GRCDA, as did the show's income.

This led to the development of the Western Symposium, a joint partnership of the three California chapters, which led to other regional symposia. Nurtured to some degree by GRCDA's International Board, the Executive Committee and GRCDA staff, several regional chapter and GRCDA partnerships were formed.

Ground rules were established to limit overlapping states and interference with the annual GRCDA International Seminary and Equipment Show.

The Florida Sunshine chapter also hosted the GRCDA's 1984 annual exposition and first international truck Road-E-O in Orlando.

Lawrence Lecture guidelines for selection of the lecturer were approved, opening the door for the first Lawrence Lecturer in 1985.

The Lawrence Lecture trust fund moved into an income-financing financial instrument.

By 1987, GRCDA membership reached 2,700. A dues increase effective fiscal year 1988 was approved by the International Board. Successful pilot testing resulted in full centralization of membership dues collection.

Lori Swain joined GRCDA in 1987 as a program analyst to work on the EPA-funded small-quantity hazardous waste generator program, bringing to the table years of experience in environ-



The Glendale, CA, fleet in the late 1950s

MARIO NUNEZ

mental work as well as a master's degree in environmental science and communications.

Planning was under way to make some major changes in GRCDA's structure and organization. Major amendments to the bylaws were planned for consideration by the Executive Committee and International Board in 1989. The establishment of technical divisions was under way.

In 1988, GRCDA actively recruited a marketing and sales manager who would have major responsibilities for the equipment show and GRCDA promotion.

Also that year, the GRCDA became a sponsor of the American Academy of Environmental Engineers.

During 1989, GRCDA experienced a 20% increase to 4,016 members. Of the 680 new members; 75 were employed in the government sector and 25% were employed in the private sector.

In 1989, two regional symposia were in place, the Eastern Regional Symposium—a partnership of the Mid-Atlantic, Pennsylvania

1964

1/11

The Beatles release "I Want to Hold Your Hand" – sparking the British Invasion.



2/2



Hasbro launches GI Joe action figure.

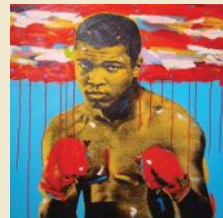
1st appearance of Beatles on "Ed Sullivan Show" (73.7 million viewers)

2/9



2/25

Ali defeats Liston to become World Heavyweight Champion.



3/9

1st Ford Mustang produced



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MODEL 500
High Dumping with Superior
Ground Clearance

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MODEL 300HM



MODEL 350



MODEL 450E



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and Virginia chapters—and the Southeastern Regional Symposium, a partnership of North Carolina, South Carolina, Georgia, Florida, and Alabama.

During this decade, GRCDA headquarters put into place staff resources to assist chapters in legislation/regulatory issues with their states and provinces, technical assistance on meetings, assistance to bring speakers to their meetings, and use of the library and other data sources in the association.

A training program was developed for orientation to assist new International Board members as they began their term on the International Board and Executive Committee.

Funds were authorized for the purchase of a word processor, GRCDA's first step into the computer world.

A \$100,000 term life insurance policy on the executive director was put into place with GRCDA as the beneficiary. Additionally, a plan for management of the association in the event of the death of an executive director and search procedures to select a new executive director was under development.

Upon Hickman's recommendation, the Executive Committee explored the concept of regionalizing the International Board. Another concept developed enabling each chapter to elect a director to the International Board to serve two-year renewable terms; the initial first terms would be staggered and decided by lottery.



BUFFALO TURBINE

Groundwork was laid to begin a process to determine the liabilities of the association from acts by the chapters and by the International Board.

As the association moved seriously into technical symposia, cooperative meeting efforts with the chapters, and support of meetings in grants and contacts, Kay Hickman was designated meetings manager to provide complete meetings management services to GRCDA. Her style was viewed as offering both a warm, personal touch to the process of meetings and no-nonsense dealings with venues used by the association.

The planned awards program was under way, including Professional Achievement Awards for regular and sustaining members, a Chapter Achievement Award, a Past International President's Award, and a Distinguished Service Award. The awards banquet was added on the Thursday of the International Seminar and Equipment Show.



BUFFALO TURBINE

1964

3/27



Earthquake strikes Alaska, 8.4 on Richter scale; 118 die.

6/10

The North Central California Chapter of the GRCDA receives its charter.

8/5



US begins bombing North Vietnam.

9/14

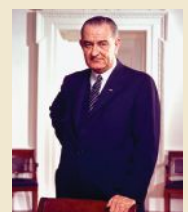


Berkeley Free Speech Movement

11/3



Johnson elected president





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A number of modifications to the association's bylaws were approved by the International Board, including a change in the Executive Committee to include president, vice president, treasurer, secretary, past president, one corporate director selected by the International Board corporate directors, an International Seminar Chair, and an International Equipment Show Chair.

The six International Board corporate directors represented the following areas of GRCDA interest: contract solid waste management systems services, manufacturing of solid waste management equipment and systems, sales of solid waste management equipment and systems, resource recovery/landfill gas recovery systems, financing of solid waste management systems, and solid waste management consulting services.

The International Board took steps to obtain nonprofit 501(c)3 status for GRCDA US chapters, with similar arrangements for the Canadian chapters explored.

To accommodate the growth of regional symposia and the annual seminar and equipment show, the Executive Committee adopted a policy requiring show dates for regional symposia to be approved by the International Board. No regional symposia were to be held within 1,000 miles of the International Show or within five months of the International Show dates and no chapters hosting the International Show could also host a regional program.

A rotation policy was adopted for the International Seminar and Equipment Show—North America was divided into

three zones and the show would be rotated through each zone.

The Grant Scholarship program was approved by the International Board, with the Executive Director instructed to develop funding and an operating plan.

After several years of discussion by the International Board and within the chapters, the International Board voted at its annual

establishment of regional symposia if the chapters chose to host them.

Throughout the 1980s, GRCDA had been developing certification and training programs and also establishing a number of regional-based symposia. Faculty members included GRCDA members and staff. A training and certification event consisted of one staff member to teach and handle the

logistics of the course and two GRCDA members certified in the subject being taught.

Early efforts leading to the creation of the Landfill Operators Training and Certification Program began with the introduction of the certification concept.

A GRCDA survey showed that states were supportive of the need for landfill operator training and landfill operator certification, but were not prepared to attempt to establish the necessary infrastructure to do either.

While certification by GRCDA had no legal or regulatory basis, its certification would help achieve some of the goals of a certification program, such as job/work pride, demonstration of professional qualifications, and improved skills.

GRCDA would make it known that the association was a training organization, not a certifying organization. The goal of the program was to create a recognized training effort that would result in operators with demonstrated excellence in operating a sanitary landfill to meet state and federal EPA sanitary landfill guidelines and regulations.

It was assumed that in time, the merits of certification would be recognized by state agencies and certification by state agencies would become the norm. In the interim,



A rearloader, Glendale, CA, 1965

MARIO NUNEZ

business meeting to regionalize the association's governance and management structure into five regions.

Regionalization brought a number of changes in how GRCDA governed and managed its association activities. The midyear meeting of the International Board was no longer held, replaced by each of the five regional councils' own meetings, where agenda items from GRCDA as well as regional items would be addressed.

Each regional council would choose a regional director to plan, organize, and manage its regional council and meeting. The regional council directors became a member of the GRCDA Executive Committee, thereby giving greater input into GRCDA management.

The regional structure also enabled the

1965

2/13

Peggy Fleming, 16, wins ladies senior figure skating title.



Malcolm X assassinated

2/21

3/8

American combat troops sent to Vietnam



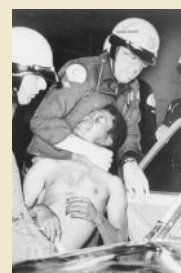
3/23



Gemini 3 launched, 1st US two-man space flight (Grissom and Young)

8/11

Watts riots begin in south-eastern LA, lasting 6 days.



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GRCDA would certify successful candidates based on established criteria for the training and certification program.

Where a state established a certification program, GRCDA would not issue certificates to candidates in that state, but wanted its training program designated as a qualified training program for certification in that state.

GRCDA established the Manager of Landfill Operations program (MOLO). The association agreed to provide training and certification for the proper operation and management of a municipal solid waste sanitary landfill.

The association also established that sanitary landfills must have a certified manager of landfill operations on site at all times. The landfill manager must have responsibility for compliance with all construction permits conditions, such as being held accountable to build the landfill according to the design and specifications.

The manager also must be responsible for compliance with all environmental controls and monitoring requirements, such as acceptable of operations of all leachate and landfill gas control systems and compliance

with air and water quality permit conditions.

The training course would consist of three days of classroom lectures and field exercises.

Faculty members would be certified landfill managers. A written examination and oral interview would complete the training course.

In MOLO's early days, the certification requirements were unusually stringent, given the current status at that time of the quality of landfills and the educational and experience levels of people working on the sites.

Other certification efforts would follow. The International Board approved Hickman's recommendations of criteria for voluntary certification of solid waste managers.

During the 1980s, GRCDA would take measures within the organization and in partnership with other entities to advance the cause of technical training. There would be partnerships with the EPA's Solid Waste Office on developing information on solid waste management practices for dissemination, small-quantity hazardous generator training for local governments, and technical assistance. EPA grants also would fund a project to study small-quantity hazardous

waste generation.

GRCDA also would co-sponsor, along with the EPA, the US Department of Energy, and the National Solid Waste Management Association (NSWMA), an International European Waste-to-Energy Conference in 1980 as a means to examine European WTE technologies and their operations.

In 1986, GRCDA was working actively with the EPA on the development of Subtitle D Landfill regulations and on the agency's efforts to regulate landfill gas emissions from MSW landfills.

GRCDA would also be involved with other agencies in conferences on waste flow control.

Through the decade, GRCDA worked on many projects funded by the EPA's Office of Solid Waste, including a Subtitle D project to develop and present a variety of training efforts associated with sanitary landfill design and operation. Planned programs included training for state landfill enforcement personnel and presentations relative to the Subtitle D regulations.

The EPA Survey Project was a one-year joint effort with the American Public Works Association and was funded to conduct a

survey on the needs of local government to meet new federal and state regulatory requirements.

The EPA Peer Match Project provided funds for GRCDA and the National Recycling Council to provide onsite technical assistance through peer matching. Each organization was to develop a database of member skills and establish a college of advisors to provide peer-matching services.

The EPA Technology Transfer Project provided funds for GRCDA to develop summary reports and case studies of research and project efforts that were considered to be useful in the decision making for municipal solid waste management systems.

The EPA Household Hazardous Waste (HHW) Conference Project



MARIO NUNEZ

1965

8/31

The Aero Spacelines Super Guppy Aircraft makes its first flight.



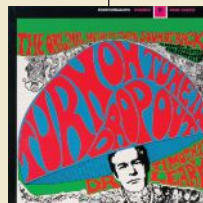
11/5



Poet Allen Ginsberg coins the term "flower power" for the anti-war, 1960s lifestyle.

11/5

Timothy Leary coins the phrase, "Tune in, turn on, drop out."



11/11

The third GRCDA Annual Seminar and Equipment Show is held at the Edgewater Inn in Oakland, CA.

11/29



Dale Cummings does 14,118 consecutive sit-ups



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provided funds for the preparation and presentation of an annual household hazardous waste conference, provision of technical assistance, and an HHW newsletter. GRCDA would manage the conference and the remainder of the project was to be done by a contract with Waste Watch.

The EPA National MSW Information Clearinghouse would automate and expand the GRCDA/SWANA library and establish an electronic bulletin board.

The EPA Outreach Project provided meetings planning and management support to the EPA's Office of Solid Waste. Support was provided for regulatory public hearings and agency-sponsored conferences. One notable conference was an International Municipal Solid Waste Management Conference.

Additionally, funding was also provided to broaden the interface between US municipal solid waste management managers and their counterparts in Europe and Asia, primarily through the International Solid Waste Association (ISWA).

The association entered the technical and political areas of landfill gas management by creating a technical committee focused on it.

In 1984, guidelines for the establishment and operations of the technical committees were developed. Technical committees consisted of Collection, Disposal, Hazardous Wastes, Landfill Gas, and Resource Recovery.

Among the committees' functions were to develop manuals to assist MSW operators. For example, a manual on contracting for residential solid waste collection was developed by the Collection Committee.

The Disposal Committee completed a plan and criteria for the Landfill Excellence Program. The program, launched in 1986, was followed rapidly with similar programs

for collection systems, recycling systems, and landfill gas management systems. The first landfill excellence awards would be presented in 1986 at the Reno International Seminar and Equipment Show. The Disposal Committee also began creating a landfill operators training course.

The Resource Recovery Committee planned a Resource Recovery Excellence Pro-

gram, arguing against legislation that would effectively eliminate requirements for utilities to purchase power from alternative energy providers.

Association advocacy efforts pressed forward in this decade on such issues as Subtitle D Landfill Regulations. Clean Air Act regulations on Waste-to-Energy combustors and landfill gas emissions were addressed jointly with such organizations as National Solid Waste Management Association, National Association of Counties, and the National League of Cities.

In 1989, the International Board approved the establishment of technical divisions.

The International Board authorized the establishment of a technical director for GRCDA, with Clay Ervine the first to fill the position. Ervine was a former United States Public Health Commission Corps commissioned officer and a former director of environmental protection

for Montgomery County, MD.

GRCDA also established a technical library, using Hickman's personal collection as a starting point. In 1988, the association launched a technical division newsletter and a new public education committee was formed.

In international activities, GRCDA was working with the Swedish Solid Waste Association planning a study trip to Sweden in 1990. Swedish WTE, recycling and landfills would be studied and a technology interchange work session would be held.

THE 1990s

In 1990, with increasing membership and a growing number of chapters came an increased chapter/member service requirement from the GRCDA international office. To answer this need, a formal chapter assistance program was developed and



MARIO NUNEZ

gram, presenting its first symposium in 1986.

The Landfill Gas Symposium, the first specialty conference established by GRCDA, continued to grow, with the 1983 conference attracting more than 200 attendees.

By 1987, GRCDA had a number of training programs up and running including MOLO, Manager of Municipal Solid Waste Collection Systems, and Manager of Recycling Systems.

Advocacy efforts were in full swing during this decade. In 1985, GRCDA submitted comments to the Department of Transportation on proposed new truck weight regulations based on chapter input.

Led by Bernie Zahren, advocacy efforts to ensure the continuance of tax credits provided to landfill gas recovery projects were an ongoing activity by the Landfill Gas Management Committee and GRCDA.

GRCDA testified on the Public Utility Regulatory Policies Act hearings in Wash-

1966

3/4

4/25

6/6

7/19

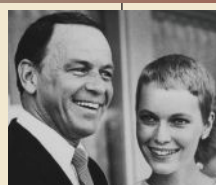
9/8



John Lennon, says "We [Beatles] are more popular than Jesus."

The GRCDA is incorporated in the State of California.

Stokely Carmichael launches "Black Power" movement.



50-year-old Frank Sinatra marries 21-year-old Mia Farrow in Las Vegas.

"Star Trek" premieres on NBC-TV.





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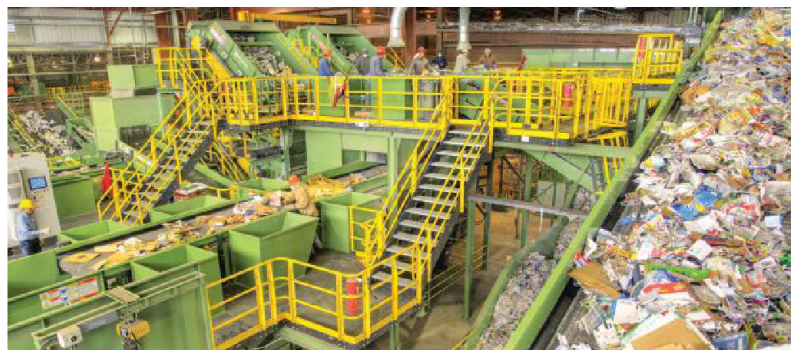
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operated by GRCDAs chapter development programs unit.

The program included services to existing chapters, development of new chapters, chapter liaison, chapter files, leadership, legislative tracking, technical assistance, administrative committees, Road-E-O, and the Public Education Committee.

New projects to facilitate chapter services include a leadership program, a revised legislative system, a chapter officers' newsletter, a chapter slide presentation, a tabletop display, increased chapter visits, and revision of chapter documents.

Through its chapter programs, the association committed to assisting groups in non-chapter territories in chapter formation. The process includes formation of committee development, election of officers/directors, formation of program subcommittee, formation of organizing subcommittee, submission of petition for provisional chapter status and vote of the International Board, completion of paperwork, the provisional chapter requests for full chapter status, International Board and membership vote, and formation of a full chapter.

During the 1990s, efforts ensued to restore chapter status to Louisiana. Chapter formation efforts were under way or being completed for Tennessee, Arkansas, West Virginia, Hawaii, Rhode Island, Mississippi, Kansas (Sunflower), Atlantic Canada, Indiana (Hoosier), New Hampshire, Wisconsin, Kentucky, Nevada, Missouri, New Hampshire/Vermont, North Dakota, and Iowa.

A major move in governance in this decade occurred when GRCDAs changed its name to the Solid Waste Association of North America (SWANA).

Hickman continued to promote the idea that GRCDAs was nothing like what it had been in the early 1960s when it was formed. Pressure for a name change also came from some officers and the executive director, while a strong minority of long-term members wanted to keep it as is.

Hickman pointed out that the term *refuse* was out of step with the current terminol-

ogy—*solid waste*. He further pointed out that the organization transcended collection and disposal to encompass waste-to-energy, recycling, landfill-gas management, manager/executive training, and advocacy.

The International Board agreed and charged the Executive Committee to come up with a proposed new name with recommendations solicited from the membership. There were two conditions: the name had to encompass the term *solid waste* and have a geographical designation.

The two final choices: Association of Solid Waste Professionals (ASWP) and the Solid Waste Association of North America (SWANA). The vote for SWANA was unanimous. The acronym was more acceptable than ASWP; it included the association's international nature, and it defined the mission: solid waste.

A five-year phase-in period was instituted. Over that time, new membership certificates, membership pins, flags, and banners would be purchased by SWANA.

The trend toward broadening the participation in governance continued as the bylaws were amended to include a representative of the technical divisions on the International Board and Executive Committee.

The regional councils met during the annual International Board annual meeting in Vancouver, BC.

By 1990, the four International Board committees—planning, financial, policy, and membership—were fully operational. These committees met in Vancouver and made recommendations to the International Board. The approach streamlined the International Board's business.

Meanwhile, certain statements in the SWANA mission statement were modified. The word *government* was removed from the mission "to develop an increased professionalism in the field of solid waste management."

The word *reduction* was added to the mission "to develop environmentally sound, economically competitive, and effective integrated solid waste management systems including reduction, recycling, collection,

and disposal of solid waste."

Other mission statements included "to foster development of environmentally safe and technologically sound solid waste management practices and facilities" and "to foster a cooperative atmosphere among solid waste management professionals through public education, dissemination of information, continuing education, professional development and research programs to best serve the public interest."

In 1990, the association instituted an annual technical awards program, Excellence in Solid Waste Management. The technical divisions developed criteria for excellence both in technology and management and made the presentations at the annual seminar and equipment show.

Policies approved by the International Board included source reduction, integrated solid waste management planning, biomedical waste management, and managing ash (MSW combustor ash).

The Planning Committee ruled out the concept of reorganizing SWANA into US and Canadian associations.

The Executive Director Transition Committee began to make plans in advance of Executive Director Lanny Hickman's 1996 retirement. An organizational change due to the rapid growth in membership, programs, policy, and advocacy split off some executive director responsibilities, creating a chief executive officer (CEO) and a chief operating officer (COO). A chief financial officer (CFO) position would be established as well.

The COO would be responsible for the association's day-to-day direction and devote more time to outreach activities.

The focus of the executive director/CEO would be shifted more to advocacy, outside networking and building stronger ties with organizations with similar interests of SWANA policy issues and to train the key staff in their roles and responsibilities.

By 1991, SWANA operations were organized and budgeted into management and operations—the Office of Executive Director and Administrative Services, Meetings

1966

9/21



Jimmy Hendrix changes spelling of his name to Jimi.

10/16

Draft protestors arrested in Oakland



11/8



Movie actor Ronald Reagan elected governor of California

11/12

Dick the Bruiser beats Mad Dog Vachon in Omaha, to become NWA champ.





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In 1992, the International Board approved a number of policies, including full cost accounting for municipal solid waste management, importation/exportation of municipal solid waste, controlling the municipal solid waste stream, the key to successful integrated solid waste management, and municipal solid waste training, research, and development.

At the end of 1992, SWANA membership stood at 5,328. A slowdown in the economy affected the association like other North American operating businesses. During that year, financial considerations factored into the association, pushing back plans a year to open a staff office in Canada.

As an alternative, the association opened a drop box bank account in a Canadian bank in Ottawa.

The association took steps to consider changing the membership categories to four: regular (working in the public sector), sustaining (working in the private sector), agency (a not-for-profit organization) and corporate (a for-profit organization).

SWANA added the position of controller, whose responsibility it is to maintain the association's financial records and financial management. SWANA headquarters was reorganized into two main operating groups: Technical Assistance, Information and Training Group, and Membership and Chapter Services Group.

With the adoption of the new five-year plan and new management structure, the

goals of the five-year plan budgeting and operations were organized by goals:

- **Advocacy**—the major focus would be on waste flow control.
- **MSWM state-of-art reports**—planned reports included MRF, drop boxes designs, leachate management, landfill gas management, ash management, white goods management, waste tire management and battery management.
- **Membership management**—membership records management, membership growth, support of chapters, formation of new chapters (targets of opportunity included the Caribbean, Missouri and Kentucky), support of the Road-E-O, and future sites analysis and studies.

During 1993 and 1994, the association governance and management underwent an intense examination and evaluation. The mission statement, goals, and objectives were significantly altered by the Executive Committee in a new long-term strategic plan, shaping SWANA's future direction.

The goals included:

- Identify the association's customers. Historically, SWANA was based on public sector solid waste management professionals and organizations with the private sector addressed as a secondary level of membership to a certain extent. Two key issues discussed but not acted on included limiting the officers to public sector and a different dues structure for public and private employees. Surveys were developed to help identify customers.
- Develop consensus of roles and responsibilities between the Executive Committee, the International Board, chapters and staff pertaining to decision-making, planning, implementation, and evaluation. This adopted objective reflects the growth and

change of the association from a totally member-driven organization to one with a staff empowered to keep the organization running and strong. An organizational flow chart was developed.

- Develop a marketing plan to address the needs of the majority of identified customers, addressing the changing customer base as SWANA expanded its programs in training, certification and advocacy. The marketing plan focused on collection, transfer, landfilling, Waste-To-Energy, and recycling, MRFs, and composting.
- Develop a strategic management plan to address SWANA's mission.
- Develop a program plan for fiscal year 1996.
- Effectively develop a process to communicate the mission, goals, and objectives to

THE BEST OF MEMORIES By Brian Guzzone

While I only worked for SWANA for five years, it was by far the best job I ever had.

We had such a blast in those days, and the stories I wish I could tell your readers! I'm still great friends to this day with several SWANA staff from the '90s. We were a great and committed (some said crazy) group of folks that believed in the SWANA mission.

And as a testament to Lanny and SWANA, I'm still in the garbage business...17 years and counting! Hats change, but I still bleed leachate!

the membership based on a general consensus that SWANA had a broader role than its historic local government culture: to assist all solid waste management professionals and recognize the fundamental responsibilities of local governments to provide for municipal solid waste management needs. This eventually led to a policy position that local governments had the responsibility to ensure environmentally and economically sound solid waste management services, but that local government need not necessarily deliver

1967

1/10

PBS (National Educational Television) begins as a 70-station network.



1/13



The Rolling Stones appear on *The Ed Sullivan Show*.

1/15

The first Super Bowl is played in Los Angeles, California.



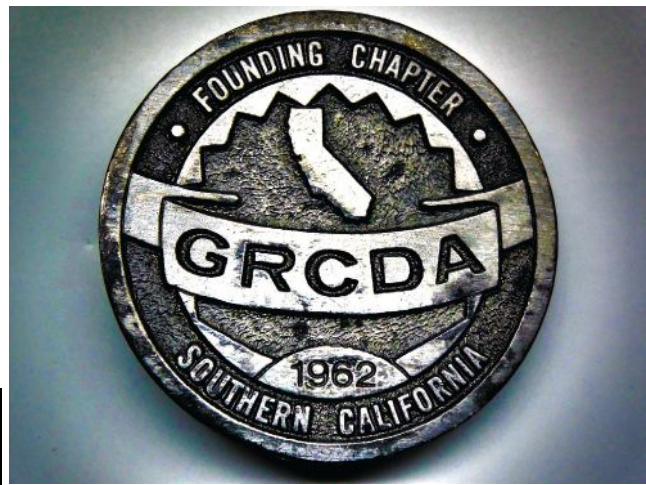
1/27



Apollo 1 fire kills astronauts Grissom, White, and Chaffee.

2/15

First anti-bootleg recording laws enacted



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In 1979, when I became manager of the Monterey Regional Waste Management District (originally the Monterey Peninsula Garbage and Refuse Disposal District), my predecessor, Bill Parsons, the first full-time manager of the district, told me I should get involved with GRCD. He said that it was the best organization to learn about solid waste management, especially from the public sector perspective. So I joined the Gold Rush chapter and started going to meetings and conferences.

The first international conference I attended was in Phoenix in August 1980. That was the first of 25 WASTECONs in a row. Lanny and Kay Hickman and Bob Lawrence took me under their wings and made me feel at home in the wonderful world of waste. I had a good time and learned a lot that year, but it was so hot in Phoenix (even in the pool) that rooms at the Hyatt were about \$35 per night. Lanny always looked for hotel bargains, which sometimes meant that the conference hotel might not be in the heart of town. The 1984 Landfill Gas Conference in Piscataway, NJ, was a good example. William Merry, the current general manager of the MRWMD, and I had quite an adventure getting to and from New York City. I wouldn't recommend the bus stations in New York or New Brunswick late at night.



When I look back at my 30-plus years of GRCD/SWANA, I have so many memories I can't imagine what it would have been like without this organization. When I started with the MRWMD, we were mostly burying garbage and just starting to expand recycling. SWANA gave board members Charlie Benson and Gary Bales and district staff an opportunity to learn better ways of doing things. We toured facilities all over the US and Canada. We saw landfill gas bubbling up through the pavement of a closed industrial site built on top of a landfill in Winnipeg. We saw and smelled the inside of N.C. Vasuki's bioreactor in Delaware. We saw all types of MRFs and other waste processing facilities. We visited the "Urban Ore" store in Berkeley and the highest point in Florida, a landfill in Dade County.

I will always remember John Pacey of EMCON telling other industry professionals at one of the first landfill gas conferences (in Pacific Grove, where I live) that smaller landfills could successfully produce electricity from landfill gas. With his help, MRWMD installed one of the first LFG power plants in the US. The tours, conference sessions, equipment shows, and vendor and consultant contacts provided the basis for our own facilities. We came home and built our MRF, household hazardous waste facility and the "Last Chance Mercantile," and went on to win the first-ever SWANA award for "Best Solid Waste System" in 1998.

I made many lifelong friends at SWANA meetings, conferences and the California Legislative Task Force, which we formed in the 1990s. My family and I got to see a lot of North America that we would not have seen otherwise. When the Annual Conference was scheduled in August, we would spend some vacation time in the area near the conference city. My daughter learned to swim in the hotel pool in

DC following the first Baltimore conference. That reminds me of the Wednesday night events, which are some of my favorite GRCD memories. The crab feed in Baltimore, the MASH party in Reno (my ice hockey buddy Rick Mauck looked great in a dress), the Rodeo in Dallas, the Oktoberfest at Snowbird near Salt Lake City, and the lumberjack competition in Vancouver (we danced to the music of Al Lynch and his band) are some of my favorites. Now Al and I and our wives travel together and we e-mail daily.

There were some wonderful times at other conferences, too. The Western Regional at Lake Tahoe was always fun, especially when the old Elvis suite was a hospitality room (as long as the chairs stayed on the balcony). I enjoyed the nighttime poker games at the LFG conferences with John Pacey, Bob Stearns, Brian Stirrat, and others. I also recall some pranks during the mid-'70s involving my old friends Jim Considine, Nancy McCann, and Pam Day. My wife and I helped Jim fill Nancy's hotel bathroom with balloons after she and Pam short-sheeted his bed the year before. Nancy retaliated the following year, but Jim had checked out of his room and TV star Bill Macy had checked in.

SWANA is bigger now and maybe a bit more professional, but I am sure that some folks are still dancing on Wednesday nights in August, and no one gets to sleep through the Thursday Night Awards Banquet anymore. They just get to sleep in on Thursday morning, unless they are getting an award. Thanks to the Hickmans and John Skinner and all of the other great SWANA friends who educated, helped, and entertained me. Congratulations on 50 wonderful years!

J. David Myers is the former general manager of the Monterey Regional Waste Management District in Monterey, CA.

1967

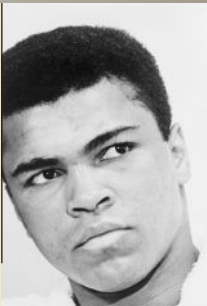


3/18

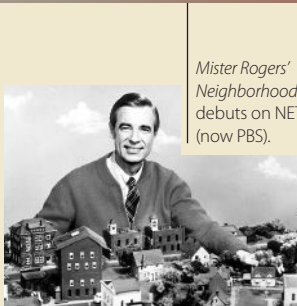
Oil tanker Torrey Canyon hits a rock and spills oil off England's Cornish coast.

Muhammad Ali refuses induction into army and is stripped of boxing title.

4/28



5/22



Mister Rogers' Neighborhood, debuts on NET (now PBS).

6/8



Israel attacks USS Liberty in Mediterranean, killing 34 US crewmen.

11/9

The fifth GRCD Annual Seminar and Equipment Show is held at Del Webb's in San Francisco, CA.



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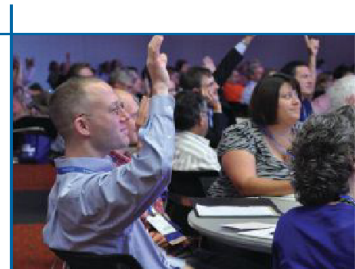
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those services.

- Provide a sufficient and more stable revenue base for SWANA.
- Foster trust between the chapters and the International Board, the Executive Committee and staff.
- Establish goals consistent with the mission statement.
- Have the chapters and association function as unified organization.
- Create unanimity among the chapters and the association on the SWANA mission.
- Determine if SWANA should continue to be an advocacy association.
- Address the structure of the membership classes.
- Develop a new transition plan for the executive director. The International Board

wanted the transition plan updated and adopted by the time Hickman's departure was to occur in 1996.

- Provide staff to support the mission of the organization. A number of caveats were adopted to better define the objective, including staff, chief of staff, executive director, endorsement of the implementation of SWANA's staffing plan through the review and approval of the budget and planning process, and development of a staffing plan to support the strategic management plan.
- Develop strategies to increase SWANA's influence in setting national and international policy.
- Develop a program to enhance and increase volunteer participation.
- Communicate and educate the integrated

solid waste management policy makers of the practical realities of integrated solid waste management.

- Develop strategies to increase SWANA's influence in setting state and local policy. The International Board redirected the emphasis to chapters rather than SWANA and referred the objective to the policy committee for implementation.
- Develop programs that will assist practitioners to develop skills to keep up with the evolution of integrated solid waste management.
- Train and facilitate the certification of solid waste professionals.
- Develop universally accepted definitions for the solid waste industry.
- Foster the establishment of standards of practice in the solid waste profession.
- Support research and development and innovation in the solid waste profession.
- Establish favorable SWANA name and product recognition.
- Establish an effective public relations program.
- Expand and enhance the networking between SWANA and other associations.
- Develop policies and programs that are sensitive to geographic differences.
- Educate the public regarding environmentally and economically sound solid waste management practices.
- Develop a staff/education program including field assignments.

The objectives were assigned to the four International Board committees.

The Finance Committee recommended establishment of an investment policy, turned down a staff recommendation to require the chapters to pay the costs of their chapter corporation registered agent, and turned down a staff recommendation to terminate the annual Road-E-O, among other measures.

The objectives were grouped under the four strategic management plan goals, with a fifth goal created: further research, development, and demonstration.

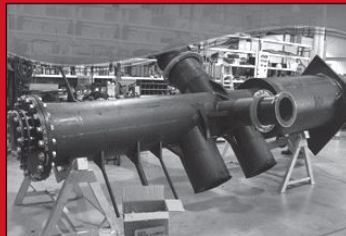
At the 1995 business meeting, SWANA



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1968

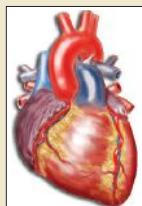
1/1



Evel Knievel fails in his attempt to jump Caesar's Palace Fountain.

1/6

Dr. N.E. Shumway performs 1st US adult cardiac transplant operation.



1/23



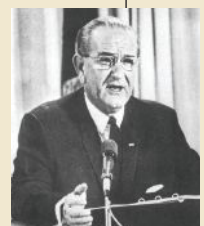
Spy ship USS Pueblo and 83-man crew is seized in Sea of Japan by N. Korea.

2/24

Discovery of 1st pulsar announced

3/20

LBJ signs a bill removing gold backing from US paper money.



took another major step toward becoming an association of professionals. After more than 30 years of limiting the officers to employees of public agencies, a paper ballot to allow retired members, life members and sustaining members to serve as officers in the association amended the bylaws.

A number of policies were approved in 1995. SWANA's Advocacy Policy was approved based on the two principles—the guiding principle, which is “local government is responsible for municipal solid waste management, but not necessarily the ownership and/or operation of municipal solid waste management systems” and an advocacy policy that “SWANA's advocacy shall represent the professional interests of its members.”

As for annual meetings, historically the host chapter received a portion of the net of the annual show. As the meeting grew in size and complexity, the tasks and workload for a host chapter grew.

Tasks with clear definition and outputs for a host chapter were developed and crafted into an association policy. A dollar value was assigned to each task. A host chapter could then—based on their membership size and ability to carry out a task—pick those they wanted to do and annual show management would do the balance.

A new executive director/CEO selection process was under way. A search team composed of members of the Executive Committee had been established. A selection process plan with criteria had been developed and a scoring process was to be used, based on interviews, to rank the candidates. Advertisements were being placed in trade magazines and journals and the association newsletter included advertisements.

The Executive Committee was authorized to hire on or before July 1, 1966, an executive director/chief executive officer who would take the position effective October 1, 1996.

In the recruitment for the new executive director/CEO, more than 100 candidates responded to the request for interested persons. Of those, 50 met the steps in applying for the job. Each of the 50 was scored by

each member of the transition committee, generating a list of nine candidates.

Eight were interviewed over a period of two days in Baltimore. By mid-May 1996, there was a final list of three and negotiations were under way with two of the candidates.

Executive Director and CEO John Skinner took his position with SWANA in August 1996.

At midyear 1996, SWANA had 6,100 members. The association needed broader coverage until such a time that SWANA had reached a critical mass in its membership and programs. Eventually, *MSW Management* became the house journal for SWANA.

SWANA was the National Member for the US and Canada in the International Solid Waste Association (ISWA).

Training documents and programs were boosted in the 1990s.

The Manager of Integrated Municipal Solid Waste Management Systems training manual was published in 1990, launching the program. The manual was based on a master's degree thesis by Frank Lancaster, written as part of his MBS program at Colorado State University. Dean A. Longo, Harvey Gershman, and Barry Shanoff also contributed to it.

In 1992, it was renamed the Planning and Managing Integrated Municipal Solid Waste Management Systems.

Members of the recycling division led the development of the training and certification program for managers of MSW recycling systems. Staff from Gershman, Brickner and Bratton (GBB) were key in the development

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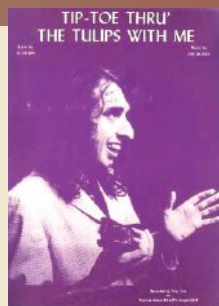
4/4

Martin Luther King Jr. is assassinated in Memphis, TN.

6/6



Senator Robert F. Kennedy dies from his wounds after he was shot the previous night.



6/29

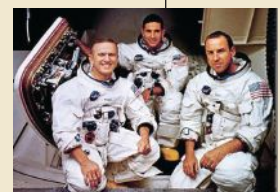
Tiny Tim's "Tip-Toe Thru' The Tulips With Me" peaks at No. 17.

11/7

The sixth GRCA Annual Seminar and Equipment Show is held at the Hacienda Inn in Fresno, CA.

12/21

Apollo 8 (Borman, Lovell, and Anders), 1st manned Moon voyage



of the training and certification program. The manual underwent major revisions in 1995.

The course, *Paying for Your MSW Management System: Revenue Generation and Cost Accounting*, previewed in 1992 after a major effort by many GRCDA members to develop it and present it.

The idea for a training course on *Financing Integrated Municipal Solid Waste Management Systems* was based on a presentation given by Harvey Gershman, president of Gershman, Brickner and Bratton (GBB) at SWANA's Annual Recycling Symposium.

Subsequent discussions with Truett DeGeare of EPA's Office of Solid Waste confirmed SWANA's views that formal training in the area of costs, economics and full cost accounting had great merit.

Financial support from the EPA allowed SWANA to conduct a series of case studies on enterprise funding, essential to developing the training manual, which was done by GBB staff members.

In 1991 and 1992, the Committee on Resource Recovery and the Environment was established by SWANA, the Conference of Mayors and NSWMA to provide technical information on resource recovery.

Funded by corporate and governmental contributions, its purpose was to be a counterbalance to the strong environmentalist organizations' attacks on resource recovery, primarily waste-to-energy.

Its technical director was Walt Schaub, Ph.D., of Cornell University, who had many years of experience in the field of incineration and served on the US EPA Science Advisory Board.

In 1991, the Waste-to-Energy Division held its sixth annual Waste-to-Energy symposium. That specialty conference, under the leadership of SWANA, merged with the Air and Waste Management Association, the American Society of Mechanical Engineers and the Integrated Waste Services Association annual waste-to-energy conferences to form the North American Waste-to-Energy Conference, held in 1993.

Additionally, SWANA had entered into a

contract with the Department of Energy (DOE) for a program called Management Information and Technology Evaluation, established to review and analyze project outputs from the DOE's waste program.

SWANA also transitioned from government funding to independent funding for a suite of services that included a toll-free hotline and fax line for technical assistance, access to an electronic bulletin board with information on current solid waste management issues, a computer network message center allowing users to interact with other solid waste professionals, and access to the SWANA library online and document ordering services.

Waste flow control (WFC) became a major issue in 1993. The pending US Supreme Court hearing of *Carbone vs. Clarkstown* drew the battle lines between the public and private sectors.

Efforts by SWANA helped forge a coalition with the National League of Cities and the National Association of Counties; fundraising paid the costs of legislative counsel to help in the Congress.

A WFC legislative strategy was developed to attempt to move WFC legislation through Congress. It was considered essential regard-

less of the outcome of the Carbone case.

SWANA filed an independent amicus brief on behalf of the members of SWANA with a selected number of solid waste authorities—all SWANA members—and special purpose districts as co-participants.

The EPA was charged by Congress to prepare a report on the significance of WFC. The EPA held hearings in a number of locations in the US at which select SWANA officers testified on behalf of SWANA.

The Executive Committee, recognizing the impact that waste flow control would have on its membership, added a guiding principle to the association's mission statement: "SWANA believes that local government has the primary responsibility for planning and managing its integrated municipal solid waste management systems. Local government must determine the most environmentally safe and economically sound methods for providing solid waste services, whether they are delivered by the public sector, the private sector or under a public/private partnership."

In the meantime, SWANA continued to partner with federal agencies on a number of projects.

SWANA, in partnership with the EPA,



1969

1/12

Superbowl III: NY Jets beat Baltimore Colts, 16-7 in Miami Superbowl.



1/30



Beatles perform their last gig together, a free concert.

4/22

Neil Armstrong steps on Moon at 2:56:15 a.m. (GMT).

1st human eye transplant performed

7/21



7/25



Edward Kennedy involved in Chappaquiddick car accident that killed Mary Jo Kopechne

was involved in contracts and grants to deliver solid waste management services to the public and private sectors. Projects included the Solid Waste Assistance Program (SWAP) and Peer Match—technical assistance and peer matching efforts; the MSW Technical Assistance and Information project that included support of EPA MSW conferences, a household hazardous waste conference, special studies on selected municipal solid waste practices and assistance to EPA Region IX (San Francisco) in its efforts to address landfill regulations.

The US DOE partnered with SWANA in a number of contracts with its solid waste program to evaluate solid waste management technologies. The evaluations included MRFs and dropoff centers, analysis and examination of plastics in MSW streams, analysis and examination of Hg/PVC in MSW streams, and emissions from MSW processing facilities.

SWANA also partnered with the US Department of Agriculture, assisting in rural solid waste management needs.

Also, SWANA partnered with the Indian Health Service in a program to provide technical assistance to tribal reservations on the implementation of sanitary landfills and collection systems.

During the 1990s, SWANA launched centralized MSW Training Institutes. Regional symposia—a partnership of SWANA and the chapters—had reached a level of success that responsibility for them was handed off to the chapters.

SWANA was in the middle of the debate on the content of the proposed new source performance standards and emission guidelines (NSPS & EG) for landfill gas control. The levels of control proposed by SWANA were the ones that eventually were used by the EPA when the agency promulgated the regulation.

SWANA also was part of the WTE owners/operators negotiating the NSPS and EG for municipal waste combustors. This group battled environmental activists such as the National Resource Defense Council over emission levels and quantities.

"It is fair to say the outcome pleased no one fully," Hickman says.

SWANA represented its landfill own-

ers/operators in negotiations with EPA on the Resource Conservation and Recovery Act (RCRA) Subtitle D Landfill regula-

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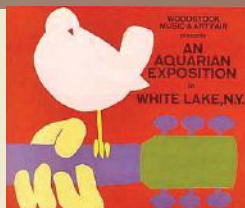
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8/9

Manson family commits Tate-LaBianca murders.



Woodstock rock festival begins.

8/16

10/22



Paul McCartney denies rumors of his death.

11/8

The Pacific Northwest becomes the fourth chapter to join the GRCA, with the State of Washington plus British Columbia as its region.

11/10



"Sesame Street" premieres on PBS TV.

tions, specifically the financial tests for financial assurance.

SWANA also was involved in a number of other EPA regulatory efforts, including the small landfill exemption (Subtitle D rule), Toxics Release Inventory Program, Hazardous Waste Identification Rule, and New Source Review for Landfill Gas.

Applied research activities such as collection optimization studies, were funded by a number of sources (EPA Office of Solid Waste, Department of Energy Waste Program, National Renewable Energy Laboratory, American Plastics Council, National Soft Drink Association, and Proctor and Gamble) and also by SWANA.

Reports from this work, made available through the SWANA library, included the *Municipal Innovative Technology Evaluation Series*, *Automated Plastic Sorting*, *Drop-Off Recycling Programs*, *High Oxygen Combustion of Sludge Program*, *On-Board Weighing for Collection*, *Integrated Municipal Solid Waste Management Study*, *Management Techniques for Successful Integrated Municipal Solid Waste Management Systems*, *Practices for Urban Wood Waste*, *Full Cost Accounting and Enterprise Accounting*, *Case Studies on Composting of Municipal Solid*

Wastes, and *Construction and Demolition Debris Recycling*.

Other applied research under way included development of a manual of practice for operations of landfill-gas recovery systems and assessment of landfill-gas generation models for the Department of Energy.

In 1996, the year Skinner took the helm, Kentucky, Nevada, and Arkansas were approved as provisional chapters. The International Board and Executive Committee evaluation process was being considered. Technical policies were being consolidated. The technical division chapter liaisons were being put in place for first time.

Changes to bylaws were occurring. In one change, no more than one International Board officer can be from life, retired or sustaining member classes provided, however, that an officer who is a regular member and becomes a retired or life member is still eligible to hold office.

The International Board gave general empowerment to the executive director/CEO and general counsel to produce the formulation of a SWANA position on legislative issues that impact the industry on the whole and to revisit the advocacy structure.

A bylaws amendment was put on the ballot: If an existing officer changes his or her job and goes from a regular to a sustaining member, and as a result of that, violates the rule of one sustaining member sitting in the chairs, that individual should be allowed to finish his or her terms and complete the process of moving through the officer chairs.

Soon after Skinner took over, SWANA established the Grant H. Flint International Scholarship Awards Program.

The program is initiated by the chapters through their chapter scholarship committee. Eligible candidates must be natural or adopted children or grandchildren of a member (sponsor) in good standing as of May 1 of the calendar year. SWANA student members in good standing are also eligible for Category II.

Candidates residing in a chapter area must be selected and recommended by the chapter for an International Award.

Current award categories include Category I: graduating high school seniors or graduate equivalent certified candidates who have been accepted for enrollment in a junior college, a four-year college, or a university (any program).

Category II is for currently enrolled full-time college or university students who are entering their junior or senior undergraduate year and pursuing a degree in environmental science, engineering, or other suitable major related to the field of solid waste management.

Other scholarship awards sponsored by several SWANA private sector members and established to recognize key people from their firms/companies also have been established.

Another major program established in 1996 to benefit young people was the SWANA Lanny and Kay Hickman Internship Program. The funds were established in 1998 to honor Lanny, the retired executive director of SWANA and Kay, the retired meetings director,



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1970

3/12

US lowers voting age from 21 to 18.



4/13



Apollo 13 announces, "Houston, we've got a problem!" as oxygen tank explodes en route to Moon.

4/22

First Earth Day held internationally to conserve natural resources.



4/22

Flat Earth celebrated.

5/4



National Guard kills four at Kent State in Ohio.

for their many years of service to the association and the field of solid waste management.

The program provides an opportunity for selected college and university students to integrate classroom skills with a supervised work experience including but not limited to investigative and analytical research, writing brief documents, and the development of technical reports.

The annual internship is offered to students who are currently studying in fields associated with solid waste management or another field of study related to a specific work program.

Candidates must have at least a 3.0 GPA on a 4.0 GPA system or international equivalent, must be entering or be in their junior, senior, or graduate level, and must be willing to commit a full semester or term to the internship program.

Candidates are recruited from the United States, Canada, and Europe utilizing ties among SWANA's chapters, technical divisions, ISWA, the solid waste media community, and colleges and universities.

Students majoring in academic programs related to the specific

work program for a given internship period are given first priority for internship consideration for projects suggested by the technical divisions, SWANA staff, SWANA members, members' organizations or others with an identifiable need. A statement of work is established for each internship.

The Senior Executive Seminar was held for the first time in 1997 and has continued as a successful event. Historically, seminar attendance has been by invitation only and has included approximately 80 executive directors, CEOs, vice presidents, and other high-level decision makers from public and private sectors.

The conference provides a venue and opportunities for attendees to share experiences with other senior executives in a casual atmosphere, get a candid look at some of the best-run solid waste systems in the world, and attend one of the most sought-after, invitation-only seminars in the industry.

In 1996, SWANA was a major contributor to US Congressional action to extend the Section 29 LFG tax credits for another year. SWANA was actively involved in a number of other advocacy related



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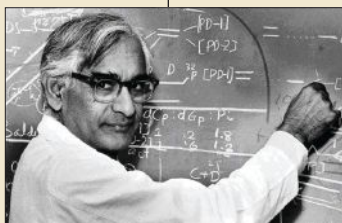


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5/14

Police kill two students in racial disturbance at Jackson State University in Mississippi.



First artificial gene synthesized

6/3

Soviet author Alexander I Solzhenitsyn wins Nobel Prize for Literature.



10/8

10/26



Doonesbury comic strip debuts in 28 newspapers.

11/5

The eighth GRCA Annual Seminar and Equipment Show is held at the Hyatt Hotel in San Jose, CA.

SWANA'S INTERNATIONAL OUTREACH By Philip Stecker

Over a 15-year span, from the late 1980s to the early 2000s, I had the opportunity in concert with SWANA's international outreach to travel and do municipal solid waste work in eight Asia-Pacific countries, from China on the north to Australia and New Zealand in the southern hemisphere.

The developing countries were each dedicating significant effort to the challenge of modernizing their solid waste management systems. This was a journey of partners with my wife Barb, having ties to 20 years of my technology pioneering at Outagamie County.

Our journey through diverse societies, cultures, and climates began in the naturally beautiful and vibrant Hong Kong, one of the greatest population densities in the world, where there has been a cultural mix of Chinese roots and British colonization for more than 150 years.

We then lived in the tropical climate and diverse culture of Malaysia at a latitude just three degrees north of the equator.

Mainland China, with its huge population and rapid economic development, afforded great educational opportunities rooted in SWANA's landfill and land-fill-gas technology transfer programs, with travel by air and train to many destinations around the magnificent country.

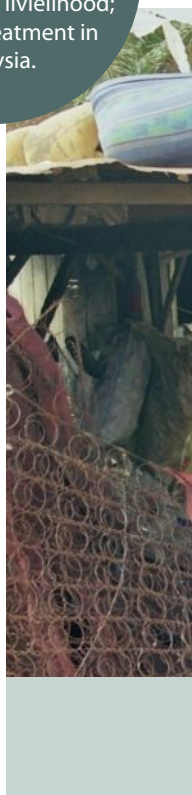
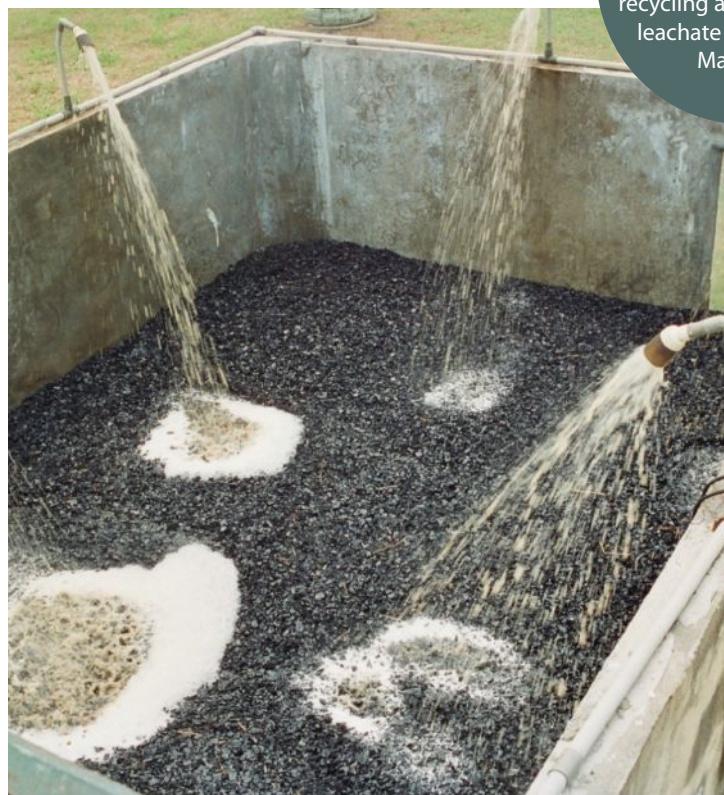
The Philippines, an archipelago of 7,107 islands, provided an unforgettable experience of the poverty and livelihood as well as tragedy and hope of the Payatas waste-picker community.

SWANA ultimately served as a model for the Philippines' formation of a similar organization to help modernize its solid waste management practices.

Philip Stecker is the director of solid waste for Outagamie County, WI.



Photos, clockwise from top left: Chinese recycling teams; a dump site in the Philippines; recycling as a livelihood; leachate treatment in Malaysia.



1971



Charles Manson and three women followers are convicted in Tate-LaBianca murders.

1/25

UCLA starts 88-basketball-game win streak.

1/30

2/6

Alan Shepard hits a golf ball on the Moon.



2/9



Quake in San Fernando Valley kills 64 and causes more than a half-billion dollars in damage.

3/29

1st Lt. William Calley Jr. found guilty in My Lai massacre



7/2

Oregon passes first bottle bill.





Because of space constraints, we are able to present only a fraction of Philip Stecker's international outreach material. The remainder will be included in the online version, available at www.mswmanagement.com.

7/31

Apollo 15 astronauts take 6½-hour electric car ride on Moon.



11/18

The ninth GRCA Annual Seminar and Equipment Show is held at the Ramada Inn in Fresno, CA.

12/19

Stanley Kubrick's *A Clockwork Orange* premieres.



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interests, including HW Identification Rule, Clean Water Act 404 Regulations, and Clean Air Act Title V Landfill Emissions Control.

In the realm of training, two onsite training packages (training done by managers for their work forces) were developed in 1996: Training Collection Operating Personnel, and Landfill Health & Safety.

To address travel costs of certified managers and operators and provide more options for continuing education to meet certification requirements, four home-study training packages were developed in 1996: landfill gas management, groundwater monitoring, leachate treatment and management, and C&D recycling.

Training institutes were initiated to offer a variety of SWANA training programs at

one site.

Three new symposia were initiated in 1996: landfill, collection, and planning and management.

MOLO continued to be the flagship certification program for SWANA, with the association now certifying collection systems managers, recycling systems managers, and managers of integrated solid waste management systems as well.

In the meantime, SWANA's Internet home page had received 90,000 hits in 1996, although the power of the Internet had yet to be tapped into by SWANA.

Efforts in 1997 included the development of two onsite training packages; home study packages (making four available); a new certification category, *technical associ-*

ate, for day-to-day managers of solid waste facilities or program; an excellence awards expansion including the Christmas Tree Recycling Excellence Awards Program; the Tech Division Information Service program completed its second year with more than 1,200 participants, and a new structure for Tech Divisions and Committees.

In the Applied Research arena, the Integrated Municipal Solid Waste Management Cost study results were being implemented by SWANA through a program to assist local governments to make true comparative costs within an integrated system.

The collection optimization study work was in final form, with a number of workshops planned in 1997. Some of the optimization techniques to be included were route

Several thoughts come to mind regarding GRCD/ASWANA:

In 1962, I was a junior in high school in Ventura, CA. In those days a few people still delivered their own household trash to the city dump, which was located in a wetland adjacent to the Pacific and which was "open" 24/7 to citizens, flies, and rodents. Some teens would visit the dump to browse through magazines recovered from the discarded waste by the local scavenger who had built a ramshackle shop at the dump. We also shot BB guns at the rats and floated debris in the adjacent estuary for other targets. I had no inkling at the time that in just a few years I'd start a 44-year career as a solid waste engineer.

Assignment to the Federal Bureau of Solid Waste Management after graduation in 1968 was my first introduction to waste as the focus of a professional endeavor. (Few in my family or circle of friends could believe I was being paid to think about trash.) As a commissioned officer in the US Public Health Service (PHS, a uniformed but not military service), I was part of a federal program formed to encourage municipalities to improve solid waste collection, processing, recycling, and disposal practices...including the closure of 5,000 open dumps (one of which was in my hometown). I later learned that H. Lanier (Lanny) Hickman, a high-ranking PHS officer at the time, had selected me to be part of this group because I had taken a soils engineering course... and soils were commonly used as cover for landfills. (Lanny, of course, later became the first executive director of SWANA.)

Later in 1968 I, was invited by the Governmental Refuse Collection and Disposal Association (GRCD/ASWANA) to present the federal solid waste program at one of its first annual meetings (this in Santa Clara, CA). There were maybe 40 people in the room, a Kodak Carrousel slide projector, and no concurrent sessions or an exhibit hall. The crowd certainly was enthusiastic and engaged, but it was pretty small compared to WASTECONS today. A highlight of that assignment was my first meeting with Bob Lawrence, namesake of SWANA's Lawrence Lecturer Award, an all-round nice guy, and other California-based founders of GRCD/ASWANA.

I subsequently started my career with SCS Engineers in 1971, since it was one of the first engineering practices to focus on solid waste management, which resonated with my PHS experience. I soon joined GRCD/ASWANA, mainly because Bob Stearns, a founding principal of SCS, was an avid supporter of that organization.

GRCD/ASWANA was a tongue twister to some in the waste industry. For instance, it was not uncommon for those new to the industry (and even colleagues) to butcher the organization's acronym to GCRDA. For that and other reasons, in 1992, Lanny Hickman proposed a new name: Solid Waste Association of North America (SWANA). The name stuck, and it's still sticking.

Dave Ross, P.E., is senior vice president with SCS Engineers.

BEGINNINGS By Dave Ross

1972

3/23



Evel Knievel breaks 93 bones after successfully clearing 35 cars.

5/4

The "Don't Make A Wave Committee" changes its name to "Greenpeace Foundation."

5/26



Nixon and Brezhnev sign the SALT accord.

6/3

"Hot Rod Lincoln," by Commander Cody and His Lost Planet Airmen, hits No. 9.



8/12



Last American combat ground troops leave Vietnam.

optimization and full cost accounting.

In 1997, the association began on a test basis the process of implementing training by chapters under a partnering agreement with SWANA, with early results deemed positive.

Distance learning training packages were being provided by the association. The development of a policy position of advocacy related to legislation was authorized.

In 1998, the International Board directed that general counsel and executive director/CEO solicit from all chapters an updated review and certification of chapter bylaws. The New Hampshire/Vermont Chapter becomes Northern New England Chapter. Louisiana was approved as a regular chapter.

THE NEW MILLENNIUM

Some 10 years would pass before another new chapter was begun. In 2008, the Caribbean/Puerto Rico chapter was formed, due in large part to the efforts of past president Tom Parker's support of local volunteers and SWANA members in Puerto Rico.

The Formation Committee's work promoted the formation of a local chapter that would provide training and certification opportunities, networking with solid waste professionals within the island and connections to other professionals throughout North America.

In 2000, the first officer transition meeting was held in Silver Spring. It was a year of many policy developments, updates, and revisions. The tire, construction, and demolition and composting courses were under development. Brainstorming began on the e-business strategy.

At the International Board's annual meeting, Alberto Garza Santos of Promotora Ambiental S.A. de C.V. of Mexico spoke about solid waste management in Mexico and interest in forming a chapter.

The training manual for the Managing MSW Collection Systems underwent major updating and refinements in 2000.

In developing the transfer station training manual, the emergence of a training

course for transfer station managers came from a grassroots movement of a number of Florida GRCDAs members.

SWANA technical staff in Silver Spring provided logistical support in the production of the working draft.

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9/1

Bobby Fischer (US) defeats Boris Spassky (USSR) for world chess title.



11/8

The tenth GRCDAs Annual Seminar and Equipment Show is held at the Hilton Inn in San Diego, CA.

12/7

Apollo 17, the final manned lunar landing mission, is launched.



12/29

Life magazine ceases publication.



12/30

President Nixon halts bombing of North Vietnam and announces peace talks.

Other programs of note include the Executive Committee's Strategic Planning/E-Business Strategy plan, which resulted from a brainstorming session in June 2000, and the establishment of the SWANA Applied Research Foundation in 2001. More information on these programs appears in the *Moving Forward* section of this issue.

In 2002, the staff requested the development of a media strategy to increase SWANA's name recognition and visibility. The designation "sustaining" member changed to "corporate" member.

A full array of landfill, collection, management, recycling, and household hazardous wastes training and certification was offered in 2003. The state of Washington adopted the SWANA MOLO course as a requirement for certification of managers of landfills. A program of training courses would be offered in Washington over a period of time to provide training and certification opportunities for all candidate landfill managers in the state.

In 2003, the small haulers/small consultant membership category was changed to small business. A small distributor category was

added for staff of fewer than 10 people.

After the turn of the century, SWANA focused many of its efforts on legislative advocacy.

In 2003, SWANA supported federal tax credits for the utilization of landfill gas in the final comprehensive energy bill.

In 2004, SWANA supported Section 45 tax credits for landfill gas to electricity production.

In 2005, SWANA promoted landfill gas as part of renewable resources in America's Jobs Creation Act, H.R. 4520; SWANA supported ISWA's petition for reconsideration of the Clean Air Interstate Rule and its petition for reconsideration of the Clean Air Mercury Rule; SWANA supported the Recycling Investment Saves Energy Act that was included in the Senate energy bill tax title and continued its support through 2006.

In the aftermath of Hurricane Katrina in 2005, many SWANA members expressed a desire to share the experience and lessons learned by those who have previously had to deal with the management of disaster debris with the state and local government managers now charged with removal and cleanup of the solid wastes caused by the hurricane. Subsequently, a report was developed for the Louisiana Department of Environmental Quality, summarizing the responses received from SWANA members as well as other referenced documents regarding the management of disaster debris. The document was compiled by the staff of SWANA's Applied Research Foundation.

In 2007, at its midyear meeting, the International Board approved a flow control statement: "SWANA recognizes flow control as an effective and legitimate instrument of integrated municipal solid waste management. To the extent it is allowed by law and after public discussion, including the consideration of economic, environmental and social impacts, and input from residents, businesses, and other interested parties, flow control can be implemented without unduly interfering with the free movement of municipal solid waste and recyclables across jurisdictional boundaries."

Also, the SWANA Resolution on Rail-Based Transfer Stations was finalized:

"Uniformity and consistency in the regulation of rail transportation can deter burdens on commerce and promote efficient rail operations. To that end, Congress created the Surface Transportation Board (STB) in 1995 as the successor to the Interstate Commerce Commission. With exclusive jurisdiction over railroad operations, the STB has the power to exempt virtually any kind of activity deemed to be 'transportation by rail carrier' from state and local regulation.

"Through various decisions and orders, the STB has ruled that certain waste transloading activities on or near railroad rights-of-way constitute 'transportation by rail carrier' and thus are exempt from state laws governing solid waste management.

"While SWANA favors smooth operation of this country's rail



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1973

1/15



Four Watergate burglars plead guilty in federal court.

1/16

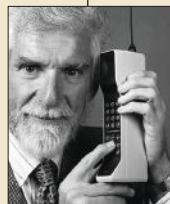
NBC presents 440th and final showing of *Bonanza*.



1/23

President Nixon announces an accord has been reached to end Vietnam War.

4/3



The first portable cell phone call is made in New York City.

6/9

Secretariat becomes first Triple Crown winner in 25 years.



system—indeed, a considerable volume of municipal solid waste is safely and efficiently carried to disposal sites by rail—SWANA supports the traditional state and local responsibilities for solid waste management facilities can and should be carried out, and SWANA opposes any exception based on the proximity of the waste handling site to railroad lines.

“The STB preemption as applied to trackside solid waste facilities removes critical controls that are essential to mitigating environmental degradation and public health and safety hazards. State and local regulations are not designed to impede the transportation of waste, but rather ensure that these operations are conducted in a manner that will protect the environment and public health and safety in all communities where they are located.

“For these reasons, SWANA supports measures to end the STB’s authority to exempt railroad-related solid waste facilities.”

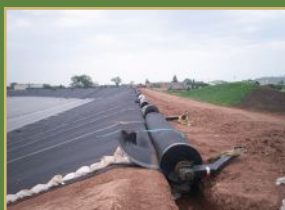
In 2007, SWANA created a Body of Knowledge (BOK) to identify the critical skills and knowledge required for managers operating in specific disciplines. The first BOK developed was Manager of Land-

fill Operations (MOLO). There is now a BOK for the other eight disciplines, including bioreactor and leachate recirculation landfill, MSW collection systems, composting programs, construction and demolition materials, household hazardous waste/conditionally exempt small quantity generators collection facility operations, MSW system management, recycling systems, and transfer station systems.

The last BOK (on hazardous household waste) was finished in 2010. In 2011, SWANA began a review and update for BOK associated with scheduled course updates once every five years. Updates have been completed for MOLO, HHW, C&D, and transfer station.

With the development of BOKs, certification exams for all courses were also updated. The process began in 2007 with MOLO and concluded in 2010 with the update of the recycling exam.

SWANA encouraged the Senate to include recycling in its America’s Climate Security Act of 2007, which identified several projects and programs—including agriculture, forestry, and land use—that qualified to provide eligible allowances to covered industries to offset a percentage of their GHG emissions.



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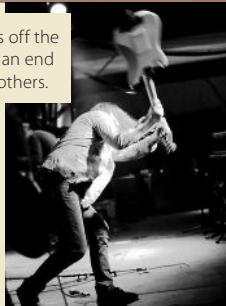
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7/14

Phil Everly storms off the stage, declaring an end to the Everly Brothers.



8/15



Black September kills three, wounds 55 in Athens, Greece.

9/29

“We’re An American Band,” by Grand Funk, peaks at No. 1



10/26



President Nixon releases White House Tapes.

11/7

The eleventh GRCA Annual Seminar and Equipment Show is held at the Holiday Inn in Santa Cruz, CA.

SWANA also responded to a request from House Energy and Commerce Chairman John Dingell on the design of a national greenhouse gas control program. SWANA supported the inclusion of waste-to-energy in a national Renewable Portfolio Standard, lobbied with the Renewable Energy Business Alliance for extension of the Production Tax Credit, and worked with the EPA to approve the Pesticide Container Recycling Rule.

In 2008, SWANA worked with the EPA to develop a greenhouse gas reporting system for solid waste operations.

In 2009, regular chapter status was granted to the Caribbean-Puerto Rico Chapter.

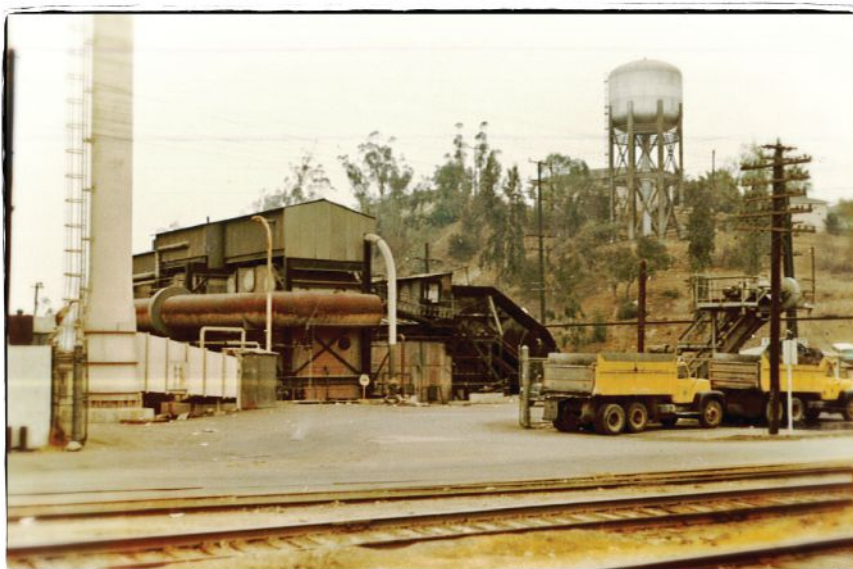
Also in 2009, SWANA supported credit parity for solid waste renewables, proposes specific changes to the American Clean Energy and Security Act, submitted comments on the implementation of the Clean Railroads Act of 2008 and proposed changes to EPA's Landfill Emissions Factors. SWANA also recommended changes to EPA's Greenhouse Gas Reporting Program.

In 2010, SWANA supported the Stationary Source Regulations Delay Act, which would delay any new EPA permitting or performance standards rulemaking with respect to carbon dioxide or methane emissions from stationary sources. SWANA and NSWMA supported the EPA's Landfill Methane Outreach Program.

Also in 2010, SWANA is given the opportunity to comment on the Climate Action Reserve draft Organics Composting Protocol. The association also offered comment on the EPA's Call for Information: Information on Greenhouse Gas Emissions

associated with Bioenergy and other Bio-genic Emissions.

In fiscal year 2011, because the Flint scholarship fund had dropped below the recommended \$40,000 fund level as specified in the policy, there was approval to add \$2.50 to annual membership dues beginning with fiscal year 2011 for the purpose of sustainably funding scholarships in the future.



MARIO NUNEZ

Modifications to the policy meant \$20,000 in scholarship awards were approved for fiscal year 2010 and beyond to be paid from the scholarship reserve fund.

During the first decade of the 21st century, SWANA drastically changed its method of communicating information to members by incorporating the new eLibrary and eSessions into the fold.

In 2010, all exams were edited to include metric measurements, a Canadian-specific metric version was completed for MOLO, and a Spanish version of the MOLO exam for US and metric was completed.

In 2010, SWANA staff signed a Memorandum of Understanding with Keep America Beautiful to become a national partner for America Recycles Day.

In response to the Haiti earthquake, the Executive committee discussed a donation

of help through the industry's expertise, although it was believed that the logistics would make this difficult. Skinner was asked to explore different options.

In the meantime, SWANA was approached by a representative of the US Army, Capt. Andy Coulter of the 82nd Airborne Division, who was working in Haiti, concerning assistance in helping improve

municipal solid waste collection services in the aftermath of the earthquake.

Up until the withdrawal of US troops, Capt. Coulter was working to provide assistance with solid waste management and vector control issues in Haiti. He contacted SWANA in an unofficial capacity in his request for assistance.

Wastes were piling up, posing serious sanitation and public health problems.

There was an interest in having a small group of SWANA members with expertise in solid waste collection make a site visit to consult with Port Au Prince public works officials. However, travel expenses would not be paid.

Jeremy O'Brien, SWANA's director of applied research, coordinated this effort for SWANA and sent out an inquiry to determine members' interest in assisting in the effort at their own expense.

Executive Director/CEO Skinner approached the Clinton Foundation to see if there was interest in a joint effort, but since it was not viewed as climate-related, the foundation declined.

SWANA then received an official letter from Jean Harry Toussaint, the director of the solid waste department at the regional authority mandated to manage the solid

1974

2/5

Patty Hearst kidnapped



2/27

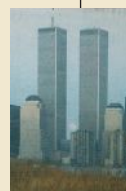


People magazine begins sales.

3/16

First performance at new Grand Ole Opry House at Opryland in Nashville, Tennessee.

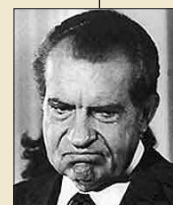
4/5



The World Trade Center opens in NYC (110 floors).

8/9

Richard Nixon resigns presidency; Gerald Ford becomes 38th president.



waste system Service Metropolitain de Collecte des Residus Solides (SMCRS) in Port Au Prince.

SMCRS is the state-appointed agency to collect and dispose of solid waste in the greater Port-au-Prince area, including eight cities and a population of 2.5 million.

The SMCRS invited SWANA for a “prospecting visit” in Haiti in order to discuss possibilities of assisting Haitians by helping develop efficient waste collection routes and automation support.

SWANA issued an invitation to members of SWANA’s collection technical division to voluntarily participate in the SWANA Haiti Response Team. Based on the responses received, SWANA formed a SWANA Haiti Response Team of five SWANA solid waste collection system managers and a SWANA staff person.

Toussaint indicated he would appreciate a visit from the SWANA team within a few weeks, reporting that “the streets are narrow and the people throw trash all around enticing vectors for all kind of diseases.”

The goal of the SWANA team was to assist the SMCRS through a three to five-day site visit to assess critical solid waste collection issues in the Port-Au-Prince service area and the development of recommendations for collection routing and automation support to improve the efficiency and effectiveness of solid waste collection services in the service area.

Skinner sent e-mails to the Executive Committee outlining the requests, a background memo provided by O’Brien with an overview of the situation, information on insurance to cover the team, and a draft assistance volunteer waiver and release.

Further discussions focused on the team’s health and safety, SWANA’s potential liability, and how expenses would be covered. O’Brien gave the Executive Committee an overview of the action plan of action before the specific issues were discussed.

He reported the situation in Haiti had deteriorated further following the pullout of US armed forces and that it was difficult

to correctly determine the magnitude of the damage there. The situation had been poorly managed because there were many compet-

ing interests involved in the recovery efforts.

He also mentioned Claudia Moeller, a SWANA member currently living and work-

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9/2

President Gerald Ford signs the Employee Retirement Income Security Act.



Watergate trial begins.

10/3

10/29

Law bans discrimination based on sex or marital status in credit applications.

11/21

Freedom of Information Act passed by Congress over President Ford's veto.



12/28



A 6.3 earthquake strikes Pakistan, killing 5,200.

ing in Haiti, who felt that SWANA could provide long-term needed support through its training programs and technical expertise.

It was noted that the SMCRS request focused on MSW collection and not disaster debris removal and management.

The Committee then discussed its three major concerns.

The health, safety, and security of the team was seen as a serious issue, especially since the pullout of US armed forces. The Executive Committee's consensus was that sending a SWANA team to Haiti was not a good idea and other avenues should be discussed. It was suggested that Moeller take photos onsite that would help in understanding the situation, and possibly conduct a meeting stateside or remotely.

The Executive Committee also agreed there was no confidence in the Haitian government, and that a visit there would be premature.

Expenses such as travel, time investments, and other miscellaneous costs were another concern. It was suggested that the money would be taken from the operating fund, which would lower unrestricted reserves.

Skinner indicated there was an available net of \$20,000 and \$30,000 of other expenditures held in abeyance. It was also noted that obtaining corporate sponsors may be an option.

The Executive Committee agreed that a definition of the mission should be developed with specific details on what to do and how to do it. The committee authorized Skinner to move ahead with assistance by a Haitian response team meeting stateside to determine needs and plan of action, with cost not to exceed \$5,000.

At its 2010 midyear meeting, the International Board moved to support the recommendations of the team position paper, developed by the Response Team, on Municipal Solid Waste Collection Needs in the Port-au-Prince, Haiti.

SWANA would coordinate its efforts with Toussaint of SMCRS. The International Board also supported SMCRS in using the

document to seek financing from funding agencies and other organizations that may be able to meet equipment-related and other needs identified in the paper. SWANA would periodically examine the need for new or additional technical assistance training to assist SMCRS.

At a June 2010 meeting at the offices of the Solid Waste/General Services Department of the City of Clearwater, FL, ways to assist the SMCRS and the Haitian people by helping develop efficient waste collection routes and strategies as well as automation support for the SMCRS services were discussed.

Germain Paulemon, the general director of the SMCRS, was grateful, thanking SWANA "for the interest it showed in helping the people of Haiti plagued with various calamities especially the devastating earthquake."

He offered special gratitude to O'Brien for his relentless work in making the meeting possible.

In 2011/2012, SWANA established a new process for exams. A psychometrician is expected to review all exams and deliver a report on their validity and reliability. A professional item writer is expected to work with SWANA's faculty to create a new bank of questions for each exam so that they are fair, valid, reliable and defensible. The rollout date for the new exams for MOLO, C&D, Collections and Transfer Station is WASTECON 2012.

Chapter partnering is another program with ongoing improvements. The program's intent is to offer training opportunities at the regional/local level, build visibility for SWANA and chapters, increase membership, certify more solid waste professionals, and generate revenue for the chapter. SWANA and the chapters participate in a revenue sharing partnership.

Contract training is an offshoot of the chapter partnering. It was rebranded in 2011 as SWANA Training@Work.

The program's intent is to expand training beyond SWANA training centers at

major conferences and symposia, build visibility for SWANA and chapters, increase membership, certify more solid waste professionals, and generate revenue.

SWANA Training@Work has two options: in-house training and onsite training.

In-house courses are sold as packages through SWANASTore. Managers or supervisors can teach these user-friendly courses in one session or as modules over several days, weeks, or months. Courses offered include collection operations basics, landfill gas basics, landfill operations basics (available in Spanish), and waste screening at MSW management facilities (available in Spanish).

Onsite courses include the nine certification courses and the four courses offered through the in-house program. The difference is SWANA will arrange for a SWANA faculty member to teach at a location. The courses are available on a contracted basis with incentives for new membership.

Premium packages include a certification course, certification exam, a one-year SWANA membership, and a one-year tech division membership. Standard packages include the certification course and exam only.

SWANA piloted the program in 2011 with success and is developing a comprehensive marketing campaign to promote the SWANA Training@Work program targeting the private sector.

Several courses went through updates in 2009 and 2010, including home study courses update (SWANA Training @ Home), landfill operations basics (also in Spanish), waste screening at MSW management facilities (including a Spanish version), collection operations basics, construction and demolition debris management, landfill operations basics, landfill gas basics and on-site course update (SWANA Training@Work)

Over the years, SWANA has had partnerships and joint certifications with several industry associations. The US Composting Council is a joint sponsor of the compost-

1975



International Women's Year begins.

1/1

2/20



Margaret Thatcher is elected leader of the British Conservative Party.

3/10



Dog spectacles patented in England

4/12

Linda Ronstadt releases "When Will I Be Loved?"



6/21



Steven Spielberg's Jaws opens.

ing programs exam.

SWANA began offering certification courses via webinar in 2011 with MOLO, Recycling and Composting.

The North American Hazardous Materials Association is a joint sponsor of the HHW/CESQG collection facility course and exam. The Construction Materials Recycling Association is a joint sponsor of the managing construction and demolition materials course and exam.

THE LANDFILL GAS DIVISION

Throughout time, the GRCD/MSWANA Landfill Gas Management Division has been viewed as “an association within an association,” says Hickman.

“The old saying, ‘no good deed goes unpunished,’ applied unbeknownst to the pioneers in the development of the sanitary landfill,” he says. “Improved siting, planned placement and unloading and compaction practices that emerged as the sanitary landfill developed resulted in improved utilization of air space, safety, and the emergence of engineering principles in the design of disposal facilities.

“The most common denominator, however, in the change from dumps to sanitary landfills was the application of daily cover. Daily cover resulted in many good things including appearance, vector control, minimization of infiltration of run-on from rainfall, and fire control to mention the most notable positive attributes.”

However, those good deeds were punished, Hickman contends.

They were “punished” in the early emergence of sanitary landfills with the generation of an unexpected byproduct of the degradation of the solid waste in sanitary landfills: landfill gas.

“The early literature in the 1950s and 1960s addressing the design and construction of what eventually became sanitary landfills rarely mentions the emergence of a gas from the landfills. When noted, it was more in the context of a peculiarity rather than either a technical problem or an opportunity,” Hickman says.

portunity,” Hickman says.

In the beginning of the movement supporting the phenomenon of the generation

of methane in sanitary landfills was a group of men and women who acted almost as an independent association and brought about

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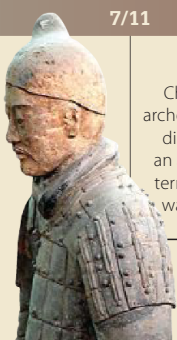
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7/11



Chinese archeologists discover an army of terra cotta warriors.

7/17



Apollo 18 and Soyuz 19 make first US/USSR linkup in space.

8/23

Communists take over Laos.

9/14

Rembrandt's "Nightwatch" is slashed in Amsterdam.



10/10

Israel formally signs Sinai accord with Egypt.



THE NEW BREED...

The Caribbean Puerto Rico Chapter was approved as a provisional chapter in July 2008. In June 2009, the chapter, established in Puerto Rico, officially became the 46th chapter of SWANA.

Hanna K. Rodríguez-Morales, SC, serves the chapter as International Board (IB) representative and is a member of the Steering Team for the Young Professionals Group, SWANA's new breed.

SWANA has been the leading organization in the solid waste management industry in North America for 50 years. Our industry and technology is constantly evolving; the time has come to shift our views and membership services for SWANA's future.

As we step forward into SWANA's next 50 years and beyond, we should never forget how the organization and the industry started. Let us always remember and take into account those Life Members that have long served and contributed to what are currently SWANA and the solid waste industry.

¡Sigamos trabajando para nuestro futuro y el de futuras generaciones!

(Let's continue working for our future and future generations!)

Saludos cordiales,

Hanna K. Rodríguez-Morales, SC



1976

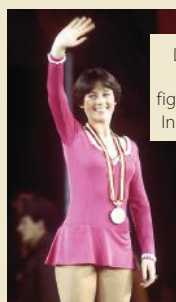
2/13

3/2

3/14

3/26

4/1



Dorothy Hamill wins Olympic figure-skating gold, Innsbruck, Austria.



Walt Disney World logs its 50-millionth guest.



Jockey Bill Shoemaker wins his 7,000th race.



Queen Elizabeth II sends out the first royal e-mail.



Stephen Wozniak and Steven Jobs found Apple Computer.

the establishment of the GRCDA/SWANA Landfill Gas Management Division and its annual Landfill Gas Symposium.

It's viewed as a unique organization within SWANA and the only-one-of-its-kind international symposium dedicated just to the management of landfill gas (LFG).

Introduction of the sanitary landfill as a preferred method of the disposal of solid waste was believed to be the most rapid in California. Large privately owned disposal sites and the emergence of the Sanitation Districts of Los Angeles as a major player in the disposal of municipal solid waste led to the growth of deep canyon filled sanitary landfills.

By the early 1970s, odors, occasional surface fires and migration from covered

landfills began to raise questions about what problems these somewhat unexpected side effects of the design of sanitary landfills reflected.

Early studies focused on quantification and qualification of the nature of the gas, and, early on, the presence of high percentages of methane signaled potential problems.

"We have to appreciate that there was little or no history of techniques for sampling and analyzing landfill gas," says Hickman. "However, the petroleum industry—especially the natural gas portion of the petroleum industry—offered analytical methodologies that were adaptable to landfill gas analysis.

"Migration patterns were also studied and the causation of migration was explored. These early studies did much to lay the founda-

tion for eventual development of some common terms and comparable sampling and analytical methodologies."

The passage of the Solid Waste Disposal Act in 1965 and the commitment of the new USPHS Solid Waste Program to eradicating open dumping and utilization of the sanitary landfill brought about research efforts that began to augment all of the efforts of the early pioneers in landfill gas management.

Highlights of that period were numerous:

- Efforts were made to predict LFG generation rates.
- An explosion at a National Guard Armory in Winston-Salem, NC, heightened the interest in establishing LFG control programs. The significance of migration of LFG to surrounding neighbors

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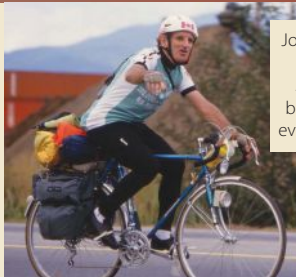
The Utah Refuse Collection and Disposal Association (URCDA) is formed.

9/28

Congress passes the Toxic Substances Control Act



10/6



John Hathaway completes 50,600-mile bicycle tour of every continent.

10/21



American Saul Bellow wins Nobel Prize for Literature.

10/30

Jane Pauley becomes news co-anchor of *The Today Show*.

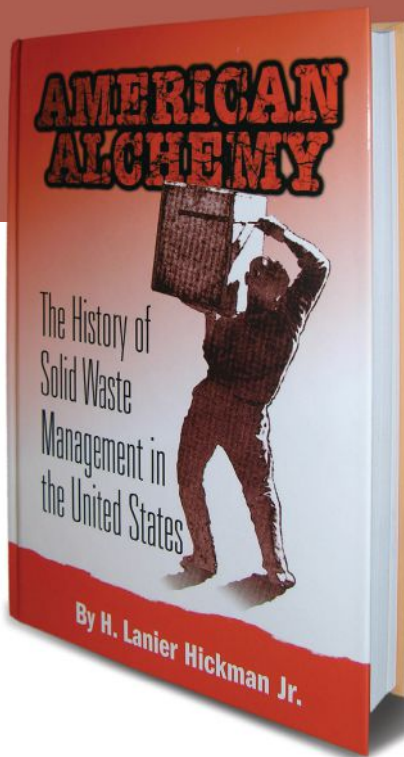
brought about concerns of liabilities for landfill owners.

- The Sanitation Districts of Los Angeles County made a major investment to address LFG migration at the Palos Verdes sanitary landfill. The eventually led to the first high-Btu LFG recovery system.
- To make the point that LFG was an energy source, Joe Edberg captured LFG from a landfill, generated electricity generated by an LFG-fired internal combustion engine driving a small-kilowatt electric generator to light a Christmas on top of the landfill.
- The first private enterprise, created just to penetrate the LFG to energy market, NRG NuFuel Co., a high-Btu-based enterprise was established.
- A number of consulting engineering firms began to enter the field.
- Two federal agencies entered the picture in the late 1960s. The US Public Health Service Bureau of Solid Waste Management was funding research related to the issues of gas generation rates, technology assessments and spreading the word about the potential of LFG problems at sanitary landfills and the potential benefit of LFG-to-energy.
- The DOE Municipal Waste Program in the early 1970s focused solely on the energy benefits of LFG and technology and systems research to enhance the recovery and utilization of LFG as an energy source.
- The DOE's Solid Waste Program was committed to building a scientific

and engineering base for landfill gas management. Led by Don Walters, the program provided funds to the bring LFG management pioneers together to exchange information and talk about the various systems and technologies being created.

Some were reluctant to disclose the "secret technologies and numbers" to those they considered competitors, which proved to be a major hurdle for the DOE as federal monies could not be used to give one enterprise an advantage over another.

To address this challenge, the DOE awarded a contract to the Johns Hopkins Applied Research Laboratories to plan and organize conferences and referee the fair and open interchange of information. The conferences



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H. Lanier Hickman

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American Alchemy: The History of Solid Waste Management in the United States

by H. Lanier Hickman Jr.

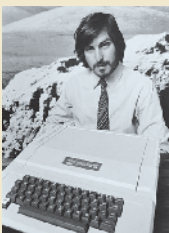
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1977

1/3

Apple Computers incorporates.



1/27



President Carter pardons most Vietnam War draft evaders (10,000).

2/19

Fleetwood Mac's *Rumours* album released



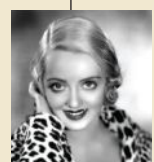
3/1



Bank of America adopts the name VISA for its credit cards.

3/2

Bette Davis is first woman to receive AFI Lifetime Achievement Award.



were the genesis of the SWANA International Landfill Gas Symposia.

The first DOE-sponsored and funded invitation-only conference was in March 1978 at the Johns Hopkins Applied Research Lab in Laurel, MD.

Fred Rice, a SWANA member involved in LFG management from the beginning and a major player in the establishment of the Landfill Gas Management Division within SWANA, says the evolution of the Symposium and Landfill Gas Management in the US began in 1978, when interest in LFG management had reached a point where support from the DOE Waste-to-Energy program had resulted in the program funding a gathering of the leaders in the LFG management growing industry.

Johns Hopkins Applied Research Laboratories were provided funding to bring the leaders together in a "show and tell" on control technologies, analytical procedures, and markets, among other topics.

That first meeting, in Laurel, MD, was the origin of the current SWANA Landfill Gas Symposium.

In 1978, a number of consulting firms had entered into the development of LFG projects, notably Lockman Associates, SCS Engineers, and EMCON Associates.

Fred Rice of Getty Synthetic Fuels and John Pacey of EMCON Associates urged the LFG group to consider approaching GRCDA on a possible partnership. Hickman agreed, making four proposals:

- GRCDA would establish a Landfill Gas Management Committee to provide services to the LFG group and to represent LFG interests in Washington, DC.
- All of the services for which an independent LFG association was thought to be needed would be provided by GRCDA.
- No special fees or costs would be assessed the LFG group other than the standard GRCDA membership rates.
- GRCDA would work with the current Johns Hopkins Laboratories and other DOE contractors to assist them in the planning of the annual conference.

After discussions including Rice, Paley, and a representative from the California State Department of Health, the LFG

group organized the initial GRCDA LFG Management Committee.

Following the formation of the GRCDA



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Trans-Alaska oil
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6/7



Anita Bryant leads successful crusade
against Miami gay rights law.

6/10

Apple Computer ships its 1st Apple II.



7/7

12,000 police
occupy
university in
Mexico City.

12/31

Cambodia drops diplomatic
relations with Vietnam.



LFG Management Committee, efforts began by the committee to get organized, establish a database of LFG interests and to have a more formal process for the formation of the annual symposium.

A number of subcommittees were formed and the development of a number of manuals of best practice began. GRCDCA began formal discussions with DOE regarding its plans for the future support of the symposium and the interrelationship between their programs and GRCDCA interests. Similar discussions were also held with the EPA's Solid Waste Office.

At an LFG Management Committee annual business meeting, Hickman informed the committee that the DOE had initially planned to fund the symposium for just a few years as a stimulus for establishing a focus on LFG

Management and that 1982 would be the last year of its financial support. He laid out a number of options for the committee to consider and made several proposals:

- The committee must recognize that, for the symposium to succeed, it should be self-supporting.
- The committee had to take full responsibility for the technical quality of the programs offered at the symposium.
- The symposium would continue to be developed and offered as a specialty technical conference and not a trade show.
- When possible, symposium sites should be near LFG projects.
- GRCDCA would take all financial risks. Any funds after expenses would go into the GRCDCA general account. GRCDCA would

pledge to ensure funding for the LFG Management Committee and would provide staff support for committee activities.

- Working with the committee, promotion and management of the symposium would be under the auspices of GRCDCA.
- The Committee agreed. Discussions then focused on the 1983 symposium, and it was decided that to improve the financial chances that the sixth symposium should be held in California, probably in the LA basin. Industry Hills was proposed as the preferred site, and GRCDCA staff were assigned the task of securing a symposium venue.

In 1983, the symposium was held at the Sheraton Hotel in Industry Hills, CA, near an 18-hole golf course built on a closed landfill. The LFG Management Committee issued its first practices and procedures manual.

In 1988, the 11th symposium was held in Houston, TX. The symposium was dominated with discussions about the planned EPA regulations of LFG emissions. A special regulatory subcommittee was established to track, interact with the EPA, and provide input and comments as the EPA regulation development process proceeded.

The subcommittee expanded to bring in the National League of Cities and National Association of Counties and was labeled the Solid Waste Action Committee (SWAC), bringing political clout of local governments into the picture and giving SWANA improved access to Congress.

In 1989, the 12th symposium was held in California. Tax credits for LFG projects were extended by the US Congress for one year. Working to keep the tax credits became an ongoing effort by SWANA and the Landfill Gas Management Division. Special funding was established to help finance the effort.

In 1990, the 13th symposium was held in Lincolnshire, IL. A number of meetings to provide input and comments of drafts of the LFG New Source Performance Standards (NSPS) were held with EPA in the Research Triangle in North Carolina and Washington DC throughout 1989 and 1990. In 1990, SWANA formally submitted six

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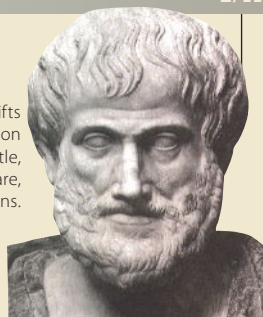
The Sex Pistols' final concert (at the Winterland in San Francisco)

1/21



The Bee Gees' *Saturday Night Fever* album at No. 1 for 24 weeks

China lifts a ban on Aristotle, Shakespeare, and Dickens.



2/11

First "micro on a chip" patented by Texas Instruments



2/14

2/16

First Computer Bulletin Board System (Ward & Randy's CBBS, Chicago)



sets of comments on EPA's New Source Performance Standards.

From 1990 to 1995, SWANA and its partners in SWAC held a number of meetings with a number of key points emerging:

- The agency was using flawed landfill screening criteria and data on which to base its proposed regulations.
- The proposed Method 2E was too complex and rigid.
- It had failed to use good engineering practice.
- It had used invalid data for the basis of the Lo and k factors.
- In the opinion of SWANA's/SWAC's world-recognized LFG management experts, the proposed rule was technically flawed.
- The economic analysis to determine economic impact of the proposed rule was unrealistic and low.
- The "cookie cutter" approach for selecting landfills for regulation was invalid.
- The agency was including too many landfills to achieve reasonable reduction of emissions from landfills.

Toward the end of 1995, it was obvious that the regulated community (SWANA and SWAC stakeholders) and the EPA air pollution group charged with writing the rule were at an impasse.

"It was obvious that the EPA group was going to move forward with a flawed rule that would probably not achieve the intent of the rule and would throw a regulatory net over way too many landfills," says Hickman.

"The position of SWANA created a firestorm of pressure on EPA to reconsider the scope of the rule and to get EPA upper air pollution involved in the conflict between SWANA/SWAC and the EPA rule development group. This pressure led to an agreement between the agency's air pollution decision makers and the regulated shareholders."

The night before the meeting, the SWANA/SWAC group met at the SWANA offices in Silver Spring to plot a strategy for the next day's meeting. The group consisted of representatives from the National League of Cities, National Association of Counties and

SWANA representatives Greg Vogt, of SCS Engineers, Fred Rice, and Lanny Hickman.

The group decided to put a proposal

on the table at the meeting the next day rooted in a fish-or-cut-bait position. The group proposed that the cutoff size of



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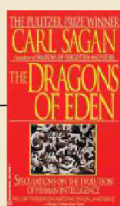


4/2

Velcro goes on the market

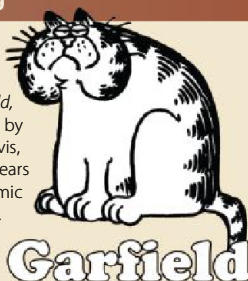
4/17

Pulitzer prize awarded to Carl Sagan for *The Dragons of Eden*



6/19

Garfield, created by Jim Davis, first appears as a comic strip.

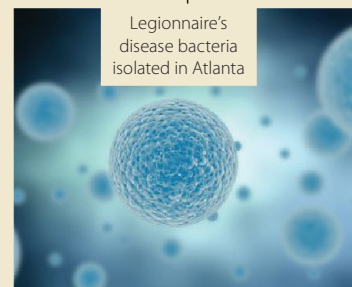


7/1

Lanny Hickman takes over as executive director of the GRCDA.

8/11

Legionnaire's disease bacteria isolated in Atlanta



landfills to be regulated should be 2.5 million tons of planned/actual tonnage of capacity. The result of the proposal would capture 90% of the gas emissions and only have to regulate 10% of the landfills.

The stakeholders also suggested a modification of the Lo and k factors. At the meeting the next day, the proposal was presented. "Their key guy said, 'That seems reasonable to me. Is there any reason we cannot accept their proposal?' Obviously, his staff agreed to his request. We were totally dumfounded and many of us wondered why we had not asked for such a meeting earlier," Hickman said.

Over the next several months, SWANA representatives—led by Greg Vogt and SWANA staff—worked with the EPA to

complete the rule. The resolution between the EPA and the SWANA Landfill Gas Management Division clearly established the division as a key player in future landfill-gas management efforts in the EPA, Hickman says.

In 1991, the 14th symposium was held in San Diego, CA. As was usual, when the meeting was held in California, attendance was high. The technical program was highlighted with a variety of technical and management policy issues related to the EPA developing LFG NSPS.

In addition, efforts led by Bernie Zehran of Zehran Energy to gain Congress' continuation of the tax credit for landfill-gas-to-energy project continued.

In 1992, the 15th LFG Symposium was

held in Arlington, VA, just across the Potomac River from Washington, DC. It was the first time the symposium was held in the environs of the US Capitol. It enabled EPA representatives to be included in the program. Additionally, SWANA and its LFG members were able to schedule a number of Capitol Hill visits with the staff and members of House and Senate committees who affected the LFG management industry, including tax credits, alternative energy, and regulation, among others.

Over the time period of 1992 and 1993, SWANA issued the *SWANA LFG Field Practices Manual*, the first *SWANA LFG Training Course*, and a *SWANA Total Quality Management Video on the Conversion of LFG to CNG*.



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5/4

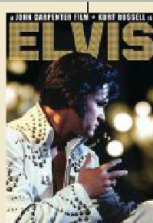
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5/26

VILLAGE PEOPLE

YMCA

YMCA files libel suit against Village People's "YMCA" song

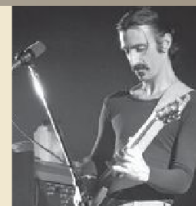


43 million watch *Elvis* on ABC.

Margaret Thatcher elected prime minister of England



Chris Evert's 125-match winning streak on clay comes to an end.



"Dancin' Fool," by Frank Zappa, hits No. 45.

In 1994, the 17th symposium was held in Long Beach, CA. Monitoring, meetings, and testimony at hearings continued on both of the key technical-policy fronts of the LFG Management Division: tax credits and LFG NSPS. In 1994, SWANA issued *Specifications for the Construction of LFG Recovery Systems*.

In 1995, the 18th symposium was held in New Orleans, LA. The development of the LFG NSPS was drawing near the end of the process.

"Issues remained between the EPA and SWANA and it was apparent that technical differences might ever be resolved," says Hickman. "SWANA and the LFG Management Division escalates their efforts beyond just being a bunch of 'techies.'"

A meeting between SWANA stakeholders and EPA air regulation management was held and agreement was reached for a resolution of the technical and policy issues.

Over the past several years, SWANA had increased international presence, primarily working with ISWA. Through the encouragement of SWANA, ISWA expanded its Landfill Working Group to include LFG specialists. SWANA named Greg Vogt of SCS Engineers as its LFG representatives. Fred Rice issued the first of his *Gas Roots* history of LFG management in the United States.

In 1996, the 19th Symposium was held in North Carolina's Research Triangle. Since its inception, when the LFG group and Lanny Hickman struck a deal to house the LFG group in GRCD/AN/ANA and launched the symposium as a property of SWANA, the symposium had always been a technical program without a trade show.

"However, pressure from within the LFG Management Division's membership to add a limited-size technical trade show was argued for and against by the membership and SWANA management," says Hickman. "An agreement on the limits and nature of a trade show with a clear commitment to not interfere with the technical program was struck, and the first trade show to become an extended part of the symposium took place in 1996."

The biggest news in 1996 was the issuance of the *LFG NSPS for Landfill Gas Management Systems*.

In 1997, the 20th symposium was held in Monterey, CA. By 1997, SWANA's Landfill Gas Management Division and the EPA's Landfill Methane Outreach Program (LMOP) had matured into a cooperative effort. The symposium was maturing and sought noted speakers to kick off the meetings. In 1997, Professor Bob Ham from the University of Wisconsin—who had been working in the field since his Ph.D. candidate days—was the opening speaker.

The SWANA LFGMD completed and issued their Operations and Maintenance Manual for LFG Waste-to-Energy Systems.

Partnering with LMOP, the division also

released a video about LFG, its energy value and controlling methane in LFG.

Over time, the symposium grew into an international technical specialty conference and "the meeting to attend" if one wanted to keep up with the evolution of the landfill gas management industry. It continues to grow and expand as a pre-eminent technical program focused on an important part of solid waste management. **MSW**

Source: Information for this chronology is drawn from "A Summary of SWANA History," written by SWANA staff members.

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6/18

SALT II is signed by the United States and the Soviet Union.

7/1



Sony introduces the Walkman.

10/17

Mother Teresa of India awarded Nobel Peace Prize



11/1

Federal government makes \$1.5-billion loan to Chrysler.



11/6



Ayatollah Khomeini takes over in Iran.

Taking the Basics to New Levels

It was 1961, the dawn of an era of rapid and significant social, political, and technological changes.

The Soviets send the first man in space. John F. Kennedy is elected president—the first Catholic holding the office—while the man who would become the first black president, Barack Obama, was born.

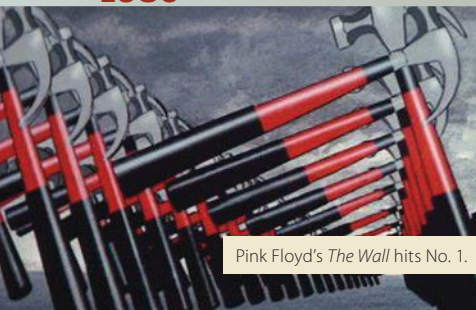
In 1961, Kennedy is confronted with the Bay of Pigs invasion and also in that year establishes the Peace Corps. The American civil rights movement takes shape; meanwhile, race riots erupt across the country. The Berlin Wall is constructed. The Cold War heats up; school children practice for the worst-case scenario by diving under their desks in practice drills.

And while it's usually not found in history timelines, six sanitation superintendents in the Los Angeles basin—led by Grant Flint—gather together over concerns about safety because they had no mechanism to share ideas.



1980

1/18



Pink Floyd's *The Wall* hits No. 1.

8/28

The Texas Lone Star Chapter receives its charter at the GRCDA's annual membership meeting in Phoenix, AZ.



Iraq invades Iran in an attempt to control the Shatt al-Arab waterway.

9/22

9/23

Big Thunder Mountain Railroad opens.



11/21



Fire at MGM Grand Hotel in Las Vegas kills 84.

12/04

Two months after death of drummer John Bonham, Led Zeppelin breaks up.



MARIO NUNEZ

Their initial networking effort would come to change the face of solid waste management and launch a trade association that would elevate the industry's knowledge base, practices, and image.

Around the same time, Lanny Hickman—who would eventually become the leader of the fledgling effort as it grew into an association—took a job with the US Public Health Service (USPHS) commissioned corps. He heard about the sanitation workers' efforts and was awestruck.

"A sanitation guy could call somebody halfway across the country and say, 'I've got a problem,' and people shared information," he says. "It was all public agencies, so they weren't hurting the bottom line by doing that."

The six sanitation supervisors would start meeting on a regular basis while reaching out to others to join their effort. They formalized their efforts in 1962, incorporated and created a logo.

Since its founding, the Solid Waste Association of North America (SWANA) has offered its members opportunities to enrich their professional and personal lives through networking, training, research and development, and advocacy work.

It has provided the support members need to embrace and celebrate the pride that comes in working in a profession that elevates the health and well being of the environment, to say nothing of those who live in it. In contrast, there are parts of the world where improper sanitation practices lead to illness and disease.

With the association staff providing the backbone, the collaborative volunteer efforts of its chapter members have created a strong body of people who serve humanity as stewards of the environment.

Back in the early 1960s, they were known as the "garbage men" who picked up "trash." As they organized, there were disagreements among them over their very own identity.

"They argued over the name of their group and finally agreed on Governmental Refuse Collection and Disposal Association [GRCD], Hickman says.

GRCD, as implied by its name, was limited to government employees, non-private sector people.

"They realized not too far along the way they would step over on the private sector side, so they opened it up to the private sector, but they did not allow them to hold office," Hickman says. "But they could be directors."

Word spread north from Southern California.

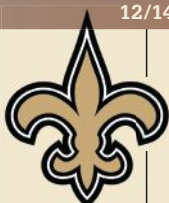
"The guys up in the middle part and northern part of California started hearing about this and kept coming down to their meetings," says Hickman. "Pretty soon the concept of chapters began to emerge. They formed the Southern California chapter. They had a Northern California chapter and split into two—the Northern Chapter and the Central Chapter—and then the Southern chapter."

A membership association is only as good as its chapters, for it is the volunteer chapter efforts that extend the association's reach and influence into the field on a day-to-day basis. The chapter effort continued to grow, and before long, the group started an annual conference and equipment show. Eventually, its location would circulate throughout North America, with various chapters serving as hosts and drawing attention to local solid waste needs.

"The next thing you know, there was an Oregon chapter and a Washington chapter. The guys up in Vancouver, BC, heard about

12/12

US copyright law amended to include computer programs



New Orleans Saints end 14-game losing streak, beating NY Jets 21–20.

12/14

12/30

"Wonderful World of Disney," last performance on NBC-TV



1981



1/19

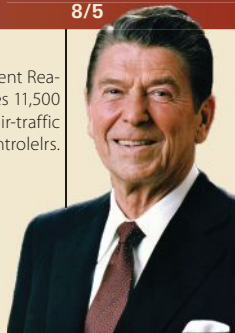
US and Iran sign agreement to release 52 American hostages.

3/30

President Reagan fires 11,500 striking air-traffic controllers.

8/5

President Reagan shot and wounded by John W. Hinckley III



“That was California Dreaming...it was the 1978 GRCDA International Seminar and Equipment Show at the Sheraton Harbor Island Hotel in San Diego, where we went from a regional show to a real national one. We had Mike Curb, lieutenant governor of California, give an address at the opening-day lunch, a golf tournament at the Torrey Pines Golf Course, dinner in Tijuana, and a full house at the show, so everyone was smiling and happy. We had attracted enough heavy equipment vendors that we took the risk of holding the next year's show in Phoenix and rented a real convention center for the first time, rather than using the meeting space in the conference hotel. It really was a great time, and it was when Lanny coined his own favorite quote: ‘This week, GRCDA belongs to the president, the rest of the year it’s mine.’”

—Bob Epler



From left: Tom King, Jerry Fairbanks, Robert Lawrence, Bill Larson, Lanny Hickman, Robert Epler

them, and they started a chapter in Canada,” says Hickman.

By 1978, there were more than 10 chapters—still all of them were on the West coast. But as the saying goes, what starts in California usually migrates east. Yet it would be

in the East—specifically Capitol Hill—where the association would set up its headquarters in order to be close to the politicians whose decisions would impact the industry.

Soon, chapters started popping up in Utah, Arizona, and New Mexico.

Meanwhile, Hickman was performing a number of duties for USPHS. He was one of the earliest hires to work in a solid waste program. After a stint in the personnel office where he recruited engineers, he followed his desire to return to

7/7



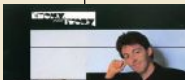
Sandra Day O'Connor nominated for the Supreme Court

8/1



MTV premieres at 12:01 AM

2/27



Paul McCartney and Stevie Wonder record “Ebony and Ivory.”

4/24



IBM-PC computer introduced

9/3

The Iowa-Nebraska Chapter receives its charter at the GRCDA's annual business and membership meeting in Salt Lake City, UT.

6/19



Heaviest known orange (5½ pounds) exhibited, Nelspruit, South Africa

the technical side and ran programs that interfaced with solid waste practitioners.

"I ran a technical systems program, a training program, and a survey analysis program, and we interacted with the American Public Works Association (APWA) and GRCD. They only had about 800 members, but the dedication and commitment of those guys out there was just unbelievable," he says.

Hickman retired from the USPHS in 1978, but he didn't retire from work altogether. He had an interest in serving as the GRCD executive director, and he had the knowledge and contacts, leveraging relationships he had with the National Association of Counties, the National League of Cities, and state associations to do the job.

"I had gone into consulting right after I retired and had a pretty good size list of companies, and I represented their interests in Washington," Hickman notes. "I knew everybody. GRCD took a gamble on me, and I took a gamble on them."

He was given a half-time position, boxes of files, and a checkbook with \$13,000 in it.

"We opened an office in Washington and the thing just kept growing," Hickman says. "When I left, they had more than 38 chapters with about 7,000 members and actually had money in the bank."

"I told the board of directors of GRCD when I went to work with them that my target was to supplant the APWA and the National Solid Wastes Management Association [NSWMA], which represented the private sector in our field, as the lead technical association in solid waste management. NSWMA is a great organization, too, but their mission is not the same."

As GRCD's executive director, Hickman focused his efforts on what he did best professionally and liked to do the most personally: helping local governments.

Meanwhile, his wife Kay, who would take on several roles in GRCD, set up a work center in the family room where she and their children would put labels on the newsletter.

It has been that volunteer effort, starting with the Hickman family and extending

throughout the organization, that has made GRCD what it is today, Hickman points out.

"I spent a lot of time recruiting volunteers

to do stuff," Hickman says. "I kept telling the staff we're only going to do as much as we can get the members to do with us, because we

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1982

2/1

"Late Night With David Letterman" debuts on NBC-TV.

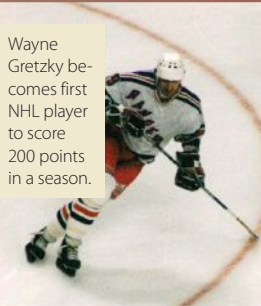


2/2

Landfill Operator's Conference convenes at the Starlite Village Inn in Ames, IA.

3/25

Wayne Gretzky becomes first NHL player to score 200 points in a season.



4/1

US formally transfers Canal Zone to Panama.



4/19

Sally Ride announced as first woman astronaut.

5/12

Pulitzer prize awarded to John Updike for *Rabbit is Rich*.

6/11

ET the Extra-Terrestrial is released.



don't own this thing, we're stewards. We're keeping it for the next generation of members. The 'kids' bought into that pretty well, and I think they still do."

One example Hickman holds up as an exemplary volunteer is Steve Lippy, who helped form the Mid-Atlantic chapter.

"I gave Steve a two-page handbook that told him what to do and how to do it," Hickman says. "He took it and ran with that. He's very determined about how he wants to do things, as a lot of us are. He carried that Mid-Atlantic chapter and even when he went through all of the chair positions and ran our show in Baltimore, he continued to be a dominant member."

There are only a few years in which Lippy was not working for his chapter or SWANA, Hickman says.

"The same is true for Steve's involvement with the International

Board of Directors, where he served several terms representing his chapter," Hickman adds. "Steve has represented SWANA on the American Academy of Environmental Engineers Board of Trustees. He has been a key contributor to the WASTECON events held in his chapter area. He has been a constant, year in and year out, in his commitment to SWANA's mission. Steve personifies the term 'volunteerism': the act of volunteering one's time or services for a cause."

Hickman credits one of his hires, Lori Swain, with the chapter development growth.

"She came to us with two degrees and great people management skills. Our organization evolved, and so we had a chief operating officer in her.

Now she's got her own association," he says.

There had been a lot of great pride among the chapters, demonstrated in part by their offering of state flags to the association they received their charters.

The chapter flags were part of the SWANA landscape since 1978. As chapter growth surged, the flags became more noticeable.

That's due to Tim Hunt. Hunt, an active member of the local APWA chapter became a GRCD member in 1975 with the help of a friend, Ben Warner. He was the driving force behind the formation of the Florida Sunshine chapter in 1978, the first in the Southeast.

Hunt was an active member of the Kiwanis Club, where flags hold special meaning. He also was a 25-year Army Reservist who had been the color sergeant for flag ceremonies at Fort Ord. Hunt proposed that flags play a more integrated role in GRCD/SWANA activities.

"It began modestly with a parade of the flags carried into the ballroom by representatives of the various chapters at the opening of

the annual meeting. At that

time, the host chapter for the annual meeting flag was placed in a place of honor location directly behind the US and Canadian flags. All other flags were placed in alphabetical order," says Hickman.

In time, the flags were collected by chapter flag bearers and taken to the entrance of the grand opening of the equipment show on Tuesday morning. Finally, the flags appeared at the annual awards banquet, which was the official closing of the annual meeting.

"More ceremony emerged when at the end of the evening of the awards banquet, the next year's host chapter moved its flag from its alphabetical location to the place of honor just behind the US and Canadian flags," says

"I joined GRCD in the early '80s. In 1989 I was issued a GRCD Landfill Operation certification, No. 253 gold seal, in a frame that I have on my wall. I believe this was the first year certification training was offered. Just a couple of weeks ago, Constance Hornig was kidding me that she has a GRCD Belt buckle."

—Jim Penor, solid waste coordinator,
City Borough of Juneau, AK



8/17

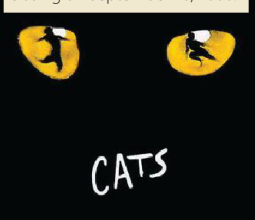
The first compact discs (CDs) are released to the public in Germany.

9/29

1st broadcast of "Cheers" on NBC-TV

10/7

Cats opens on Broadway and runs for nearly 18 years before closing on September 10, 2000.



1983



1/15

Hartford Whalers' smallest crowd (4,812) watches the team beat the New Jersey Devils during blizzard.

Wayne Gretzky sets NHL all-star record of four goals in one period.

2/8



Michael Jackson's *Thriller* album goes to No. 1 and stays there for 37 weeks.

2/26

Hickman. "It was a grand scene at the official opening of the annual meeting, when to the stately and regal cadence of the pipes; the flags were brought in and placed on the platform behind the head table."

While the chapter growth spread the mission of GRCD in quantitative ways, the establishment of a trade show that would become known as WASTECON launched the mission in qualitative ways that would also include training and certification.

Credit Bob Lawrence for that. Lawrence was one of the major players behind the formation of what would be the Oregon Beaver chapter.

"Bob Lawrence's contributions to GRCD are legendary," notes Hickman. "He served two terms as the international president. He was the driving force behind the formation of the Northern California Chapter.

"His most important contribution, however, is what is now WASTECON. Serving as the international seminar chairman, his vision of a conference and exposition just for solid waste people carried the meeting from ballrooms in small hotels to major exhibit halls in major cities."

Lawrence would take on many leadership roles in GRCD/SWANA. The Lawrence Lecturer award was established in his honor to recognize those who have made significant industry contributions.

Hickman has observed with amusement over the years as the words used to describe that which is thrown away change from *garbage* to *refuse* to *solid waste* to a *renewable energy source*.

"They're just pandering," Hickman says of solid waste facilities that use what they consider to be more "acceptable" terminology. "Call it what you want. A rose is still a rose by any other name."

Yet Hickman says he'll take the credit for embedding the term *solid waste* into the phraseology.

"The Congress passed the Solid Waste Disposal Act in 1965. It was called *solid waste*—it was not called *refuse disposal*," says Hickman. "We refused to use the word *garbage* in any of our publications or correspondence.

We started talking about nomenclature. We started talking about defining what we do in engineering terms."

Hickman says GRCD would give a planning draft to the states, and they would respond as a "refuse branch."

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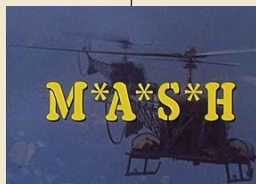
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43M052012D

3/2

Final episode of *M*A*S*H* draws 125,000,000 viewers



4/6

The GRCD's International Board of Directors approves the certification policy for solid waste facility operators.

5/21



David Bowie's "Let's Dance" single goes No. 1.

8/4

While warming up before 5th inning, Yankee Dave Winfield accidentally kills a seagull.

Arnold Schwarzenegger becomes a US citizen.



9/16

12/13

A crowd of 9,655 sees highest-scoring NBA game: Detroit 186, Denver 184 (3 OT).



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"We'd come back and say it's not the 'refuse' branch, it's the 'solid waste' branch," says Hickman. "The training programs we instituted and the certification has caught on so well that all of that has helped change the image."

So has the work of the federal government.

"The US Public Health Service solid waste program started defining some of this stuff, doing time and motion studies on collection, and it started to take off as a scientific, tech-

nical-based activity," Hickman says of solid waste collection. "That got us the trucks we have and the landfills and the fancy incinerators."

At the time the federal solid waste disposal act was passed, there existed a half-million open-burning dumps, Hickman says.

"Today, we have 102,000 well-engineered sanitary landfills," he adds. "It took a long time to get there, but institutions don't move

LOOKING BACK, LOOKING AHEAD By Chris Voell

As you know, I was not only there witnessing the birth of SWANA, but in the operating room assisting Dr. Hickman in pulling off a very tricky transition from GRCD to SWANA, along with my colleagues Lori Swain and Brad Roberge as the main brain trust at that time. It was a long road convincing the founders of GRCD to change their beloved name, but in the end we convinced them that it was time for the association not only to make a positive impact here in the US, but also around the world. And it has.

I spent the majority of my career to date at GRCD/SWANA—13 years in all. I started at GRCD on June 1, 1986, as a fresh-faced kid of 21, and departed in April 1999. I drove down from Buffalo to the big city of Washington, DC, to start my great adventure, and proceeded to go the wrong way around the DC Beltway, turning what should have been a five-minute trip to Silver Spring into more than an hour. An auspicious start to my career.

I worked with literally dozens of staff people in my 13 years at the organization and will always remember the hard work and dedication they put forward for the membership. When I started with GRCD, there were three staff people. When I left SWANA, there were 27. I still keep in touch with many of them today, as

they've gone on to other pursuits here in the DC area. Many of us who worked at SWANA not only loved our jobs but also the people with whom we worked. I know it made me happy to go to work every day. Working for Lanny Hickman as my mentor for 10 years is the best thing that could have happened to me as a young man. Lanny taught me to work hard, play hard, and always keep the needs of the members as the only thing that really mattered. And he helped foster the kind of atmosphere that grows relationships among staff and the members. The thousands of members I had the pleasure of working with and for were a true blessing. Actually liking the members you work for, and believing in the work they had been charged with completing, kept me with the organization for so long, and I will always have many, many great memories of the work and great social times that I spent.

SWANA is a shining example of how a nonprofit organization can truly change an industry for the better. I'm glad I was able to play a part in that, and wish SWANA another successful 50 years.

Chris Voell is national program manager, AgSTAR USEPA, Climate Change Division.

1984

1/10

3/30

4/5



After 117 years US establishes full diplomatic relations with Vatican.



US ends participation in multinational Lebanon peace force.

With 31,421, Kareem breaks Wilt's career scoring record of 31,419 points.

rapidly. They gradually evolve.”

Hickman says he’s cognizant that he was viewed as “anti-resource recovery.”

“I’m a pragmatic guy,” he says. “I said it is not a holy grail that we’re doing here with this recycling—we’re managing trash, for heaven’s sake, and it’s just another way to get rid of it. I would tell people if we’re going to spend \$65 a ton burying it in the landfills, spend \$65 a ton and recycle it, usually you have to pay somebody to take the stuff away. I think economic realities set in. They’re still managing solid waste. It goes out the other end—it becomes a natural resource, a recovered resource.”

Yet it hasn’t been just about the waste being managed—the industry’s history is also a reminder of the changes in the human labor it has taken to do so.

“Probably the most dominant strike by solid waste workers was in Memphis back in the 1960s, early 1970s,” Hickman points out. “I was talking with the sanitation superintendent in Memphis and he invited me to visit. They have three people there who are in their 40-plus years as members of the sanitation department and they were there when they had a strike.”

The strike is chronicled in a book—and movie—titled *At the River I Stand*.

“They went on strike over very simple things,” Hickman says. “They were forced to work in the rain, and our industry, from a safety standpoint, discouraged collection service during this time. A couple of their guys got inside the garbage truck to get out of the rain, and they somehow got trapped into the packer and it killed them.”

“That was coupled with all of the other distresses. Of the 1,300 sanitation workers, all black, none was in a supervisory position. They were all supervised by what used to be the overseers in the plantation.”

The workers went on a 65-day strike that would come to be remembered as one of the pivotal events in the Civil Rights Movement, culminating with the assassination of Martin Luther King Jr. and with President Lyndon Johnson’s order for Undersecretary of Labor James Reynolds to settle the strike.

“They were low on the totem pole,” Hickman says of the sanitation workers. “They did not have programs to support them. They did not have training to help them. It was the second most dangerous business in America at that time—mining being the most dangerous. It was all done on the backs of men, mostly black men.”

Thanks in part to the association’s efforts, the labor force and technology have changed all of that, Hickman points out.

“Another thing that has changed dramatically is workers are tossing cans in the back and they get in and drive the truck for awhile and then they rise to the level of superintendents. We gave them the management training to do that.”

While the labor force had its own chal-

lenges, so did Hickman as GRCD’s executive director.

“The biggest challenge was to get the members to understand it was a business,” he says. “It was not the kind of business that closes down factories and lays people off, but it is a business where the costs kept going up because the technology was changing and the labor work force was changing.”

Part of operating GRCD as a business meant hiring a marketing director who would make a commission on top of a salary, Hickman says, adding it was a tough sell (the marketing director would be the one who came up with the name WASTECON for the trade show).

“Many members—particularly ones that were running authorities and special pur-

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4/16

Pulitzer prize awarded to Mary Oliver for *American Primitive*



4/23

AIDS virus identified



Government orders air bags or seat belts to be required in cars by 1989.

7/11

7/28



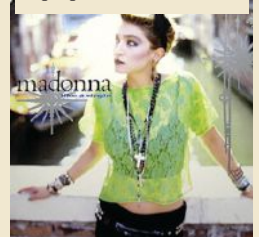
23rd modern Olympic games opens in Los Angeles.

8/22

The Mid-Atlantic Chapter receives its charter at the GRCD’s annual business meeting in Orlando, FL.

12/22

Madonna’s “Like a Virgin” single goes No. 1 for 6 weeks.



pose districts—were running real businesses, because they were self-funded through the fees they collected,” Hickman says. “They had a lot more business acumen than just the ‘born and bred’ employee—it was tough to get them thinking it was a business.”

“The mission statement I helped write was that our mission is to provide efficient, effective, and economical solid waste management services to people who generate the solid waste. To do that, you’ve got to have trained people. You’ve got to have people who take pride in their work and who are smart enough to get the job done.”

Hickman says when he first got into the industry, “there were a lot of guys working in the sanitation and solid waste operations who were doing a hell of a job, but they had no prestige in the community.”

Nor did they have the training to be able to look a city council member in the eye and communicate that operations should be conducted in a different way, Hickman says. GRCDA/SWANA training helped to develop those skills, he adds.

“I would not demean those guys, because

the guys who started GRCDA were those kinds of guys,” Hickman says. “They didn’t come out of a university with an engineering degree or a marketing degree or an MBA. They were the ‘salt of the earth’ and they had the idea and they knew what they wanted to do with it.”

Another challenge that had continued from the beginning was the organization’s name. In 1990, GRCDA became SWANA.

“It was painful trying to change the GRCDA name,” says Hickman. “It took us a few years to get that idea across. I had a half-dozen guys who were with me all of the way. A successful executive director needs to have people who sign on with what he wants and what they want. It’s the same as the solid waste superintendent or sanitation superintendent—he or she has to have the support of the town council or he or she is going to have trouble getting his or her programs going the way he or she wants them to do.”

Hickman says his crowning achievement in directing the GRCDA/SWANA was the establishment of the training and certification programs.

“That’s the foundation of what the association does,” he says. “That’s what they can hang their hat up on. The training and certification programs have always had the most impact.”

Hickman recalls being approached in airports by someone who recognized him as an instructor for a Manager of Landfill Operations course.

“They’d tell me they were using the training they got in their operations back home,” Hickman says. “It was always wonderful to hear that. Now we’ve got a guy who’s been trained and certified and he’s a candidate to carry on the good work. That’s what I take the most pride in.”

Hickman also relished the politics.

“I enjoyed messing around with the politicians up on Capitol Hill and the regulators,” he says. “We had some very great successes. When I went to work for them, I spent the first year talking to all of the people I knew in Washington.”

Hickman says there’s an old saying about leaving a woodpile higher than when you find it.

“That’s happened to me twice in my ca-

GROWING STRATEGICALLY

N.C.

Vasuki, who served as the international president of SWANA in 1992 and 1993 as well as in numerous other positions, says the greatest contribution the organization made to the industry is that it “changed what people considered a mundane task into a professional environmental improvement program.”

Vasuki credits Lanny Hickman and Tim Hunt for their skills in imparting self-confidence in the people who work in the industry, particularly those in the lowest levels.

“That was a crucial step in making people proud of what they were doing and that they are a greater part of the community’s cleanliness and environmental improvement,” he says.

Vasuki, the general manager and chief executive officer of the Delaware Solid Waste Authority from its inauguration in October 1976 to his retirement in January 2007, says he could see the impact on his own staff.

“It was just a job for a lot of people when they first started out,” he says. “Once they started going through some of the training courses and attending GRCDA/SWANA meetings,

their performance improved. They had an interest in the whole industry.”

That’s important, because those working in the field have good ideas, Vasuki says.

As for his own accomplishments, Vasuki says he is most proud of the comprehensive strategic plan that was developed during his leadership terms.

“The strategic plan was a case for the growth of the organization, particularly from the financial side,” he says. “GRCDA was not doing very well on the financial side. Subsequently, with the strategic plan, the name change in 1990 and the growth, SWANA’s financial side significantly improved.

“It’s become the world’s largest professional organization in the solid waste industry. SWANA and SWANA members have significantly contributed to the improvement of the health and safety of the workers and the performance for handling waste and disposing the waste. This is all done on a voluntary basis, which is remarkable.”

Hickman was the catalyst—both in the United States and in the world—in improving solid waste, Vasuki says.

1985

1/1

1/19

2/19

4/23

5/20

5/29

6/27

The Internet’s domain name system is created.

BORN IN THE U.S.A. BRUCE SPRINGSTEEN



Born In The U.S.A., by Bruce Springsteen, peaks at No. 9.



Mickey Mouse welcomed in China



FBI arrests John A. Walker Jr, accused of spying for the USSR.

Coca-Cola announces it is changing its secret flavor formula.

Amputee Steve Fonyo completes cross-Canada marathon after 14 months.



Route 66 (Chicago to Santa Monica), is decertified.

reer—once was in my work with the federal government in the solid waste program. Everything I did with GRCDA, I did in the federal program, but it was more hands-on. It was great working with people.”

As a hands-on manager, Hickman had a great deal of interaction with the GRCDA staff.

“I loved the staff; they were just wonderful,” he says, adding with a chuckle that he “taught” many of them how to drink scotch.

“We hired a lot of young people right out of college. The first thing I discovered is they were all eager and willing to work, but they didn’t know how to work,” he says. “When you go to college, you take a course. They give you a syllabus and tell you what they’re going to cover and in what time.

“There’s no job that has a syllabus. They may have a manual. I could throw something on a desk, but sometimes the person had no idea how to do it.”

The staff would be a mix of technical and non-technical people. Hickman enjoyed teaching them about hard work and watching some of them launch off into their own endeavors.

“I’d send the staff out to take courses that we taught because they wound up teaching some of them—at least the soft part of the course,” says Hickman. “We always used real experts with the technical side.

“They traveled with me and were all at the WASTECON show. They dealt with the members. I felt seriously that’s who we were working for: the members.”

Hickman says when he first came onboard, “the GRCDA members were always hitting on the private sector side. I felt we shouldn’t be expecting the private sector side to be picking up the tab all of the time.”

Hickman says he operated the association based on experiences he had that he did not like when he was a member of other associations.

“I thought there was a better way to do some of that stuff,” he says.

Hickman also would help pick up the costs for an employee’s education if it was apparent that by doing so, that employee would have

much to offer the association.

Case in point: Chris Voell.

“I knew his father, Tony, who was the chairman of the Hazardous Waste Committee,” Hickman says. “We got a hazardous waste grant that we needed somebody to work on. I told Tony I was looking for someone. He told me he had a son who was trying to figure out what he wanted to be when he grew up.”

Hickman interviewed and hired Chris Voell, who would become an important member of the organization.

“He grew in stature as far as his skills, and he came in one day and asked me how he could get to be the head of technical services,” says Hickman. “I told him he had to go to college and get a degree. We sent him to the University of Maryland and he stayed on. By

the time I left, he was the head of technical services.”

Though some may not agree with Hickman’s methods, Hickman says his philosophy about budgets was that they’re meant to be spent, not “worshipped.”

Chris Voell is now the national program manager—AgSTAR for the United States Environmental Protection Agency’s Climate Change Division.

Voell had spent 13 years at GRCDA/SWANA. He started on June 1, 1986, with GRCDA with a staff of three at the age of 21 and left the organization, which by then became SWANA, in April 1999 with a staff of 27.

Hickman fostered an atmosphere that helped to create positive relationships among staff and members.

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8/10

6/1

1986

1/28

2/9

2/19



Michael Jackson buys ATV Music (every Beatles song) for \$47 million.

Mid-Atlantic Chapter membership totals 90.



25th Space Shuttle (51L)-Challenger 10 explodes 73 seconds after liftoff.

Halley's Comet reaches 30th perihelion (closest approach to Sun).



USSR launches Mir space station into Earth orbit.

"The thousands of members I had the pleasure of working with and for were a true blessing," he says. "Actually liking the members you work for, and believing in the work they had been charged with completing, kept me with the organization for so long. SWANA is a shining example of how any nonprofit organization can truly change an industry for the better. I'm glad I was able to play a part in that, and wish SWANA another successful 50 years."

Hickman also credits N.C. Vasuki, former chief executive officer of the Delaware Waste Authority, as a "very dominant influence in the association in the latter half of the time I was there".

Vasuki would play a key role to the service of GRCDA for some 15 years, including a stint as its president, conceiving the idea of the Applied Research Foundation, and helping to form the Mid-Atlantic chapter.

"The beauty of this organization is that these members want to do these things because they see the value of it," notes Hickman. "They see what a chapter can do with the exchange of information. They can have an influence on state legislation. We did not come in from



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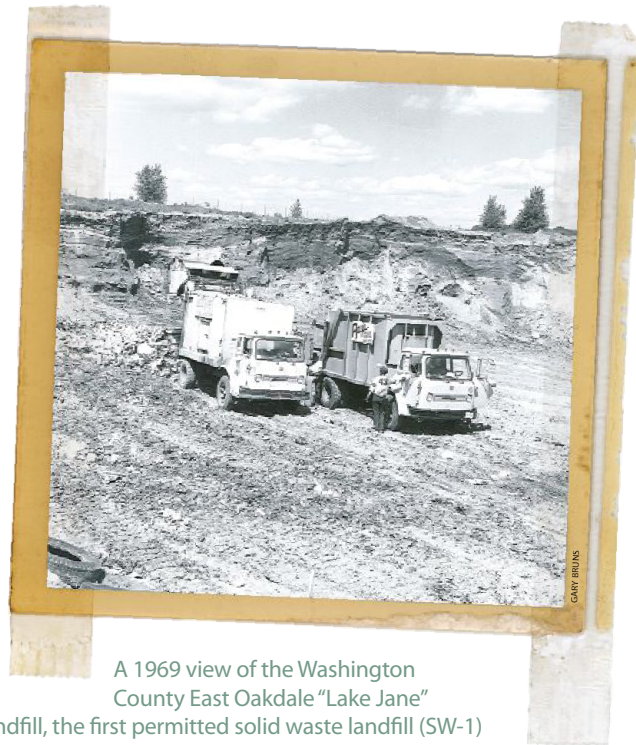
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A 1969 view of the Washington County East Oakdale "Lake Jane" landfill, the first permitted solid waste landfill (SW-1) in Minnesota. Because of groundwater contamination, the site became a superfund cleanup site and is now in the Minnesota Closed Landfill Program administered by the MPCA.

Silver Spring, MD, and try to drive legislation through their state. That was a chapter responsibility.

"The more perceptive members understood that. They can be a vital force as a chapter and they can be a vital force of 40 or 50 chapters as a united group, working for the good side of solid waste management."

Hickman points to the Florida Sunshine chapter, formed by Tim Hunt, as an example. It would become a blueprint for many GRCDA issues. At the time the chapter's formation, Florida was leading the country with more waste-to-energy plants than any other state.

The state also required lined landfills for MSW, although not yet up to future Subtitle D standards. The chapter also was an early leader in developing formal training for landfill operators until it became a regulatory requirement in 1988. Several prominent members from the public and consulting sectors wrote the Landfill Operator Short Course.

"It's just amazing that these people do these things," says Hickman. "I'm proud of them."

Under Hickman's leadership, GRCDA/SWANA also advanced throughout the years in providing more extensive technical training and governance (see timeline story elsewhere in this issue for details).

Governance included the development of an International Executive

4/26

8/14

9/01

9/08

10/09

11/25



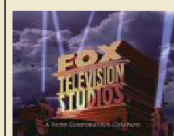
Worst nuclear disaster: Reactor at Chernobyl explodes, killing 31.

The Alaska Great Land Chapter receives its charter at the GRCDA's annual business meeting in Reno, NV.

Nintendo launches video game system in the US.



The Oprah Winfrey Show hits national television.



The Fox television network debuts.

The Iran-Contra scandal breaks.

Committee and International Board of Directors and the establishment as a 501c3 organization. Awards programs were established to recognize exemplary programs. GRCDA began advocacy efforts with respect to federal legislation.

Technical committees were formed to focus on specific industry needs. Surveys assessed members' needs; staff-developed manuals helped them execute their programs. Resources such as a technical library were developed and made available to the membership.

Chapters would join to host regional symposia.

Hickman says most of the credit for GRCDA/SWANA's accomplishments during his time of leadership from 1978 to 1996 goes to the staff.

"It couldn't have been done without those folks and the willingness of people to stay with it as a volunteer and to do what was right," he says. "There are a lot of people like that out there if you can just find them. It's the most fabulous job to have—the executive director of a really good association.

"I could have done anything I wanted. But they place trust in

you and you place trust in them and you're a steward to them. Just like I thought I was a steward when I was with the federal program. They had a great impact on me and I hope I had some impact on a few people myself. I think I have."

In 1996, Hickman passed the baton to John Skinner, who became SWANA's next executive director and CEO.

In 1996, Skinner, the CEO designate, stated at the International Board's annual meeting that he viewed creating unity in the association as his chief job through providing leadership, inspiration, and trust with democracy and transparency. He said there would be no hidden agendas; he'd continually upgrade the quality of management systems, develop and lead a staff that is innovative, be quality- and service-oriented, and engender member respect as well as support the International Board.

Before taking over the helm of SWANA, Skinner was the president of the International Solid Waste Association, with his term ending in October 1996. He served as past president for two years.

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1/12



Britain's Prince Edward resigns from his Royal Marines training.

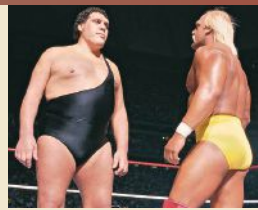
2/7

Dennis Conner and *Stars & Stripes* bring America's Cup back to US.

3/19

Praise The Lord leader Jim Bakker resigns after sex scandal with Jessica Hahn.

3/29



Wrestlemania III: 93,173 watch Hulk Hogan beat Andre the Giant.

5/29



The *Monitor*, Civil War warship, is discovered by a deep-sea robot.

8/13

The Michigan Great Lakes Chapter receives its charter at the GRCDA's annual business meeting in St. Paul, MN.

On the foundation laid by Hickman, the Skinner years were launched with the establishment of the Grant H. Flint International Scholarships Awards program to promote education and professional development.

Another major program established in 1996 to benefit young people was the SWANA Lanny and Kay Hickman Internship Program. The funds were established in 1998 to honor Lanny and Kay, who retired as meetings director, for their many years of service to the association and the field of solid waste management.

The program provides an opportunity for selected college and university students to integrate classroom skills with a supervised work experience including but not limited to investigative and analytical research, writing brief documents, and the development of technical reports.

Chapters would continue to join the fold. In the year Skinner took the helm, Kentucky, Nevada, and Arkansas were approved as provisional chapters. The International Board and Executive Committee evaluation process was being considered. Technical policies were being consolidated. The technical division chapter liaisons were being put in place for first time.

The Senior Executive Seminar was held for the first time in 1997 and has continued as a successful event. Another program of note is the Executive Committee's Strategic Planning/E-Business Strategy. Its goal is to provide a series of member benefits online through online training courses, online E-Sessions (web seminars), an online membership directory, an E-library, an online jobs directory, a professional services directory, online registration for SWANA events, online membership application and renewal, online balloting, online marketing, online services for chapters, online technical division forums, and online policy development and governance.

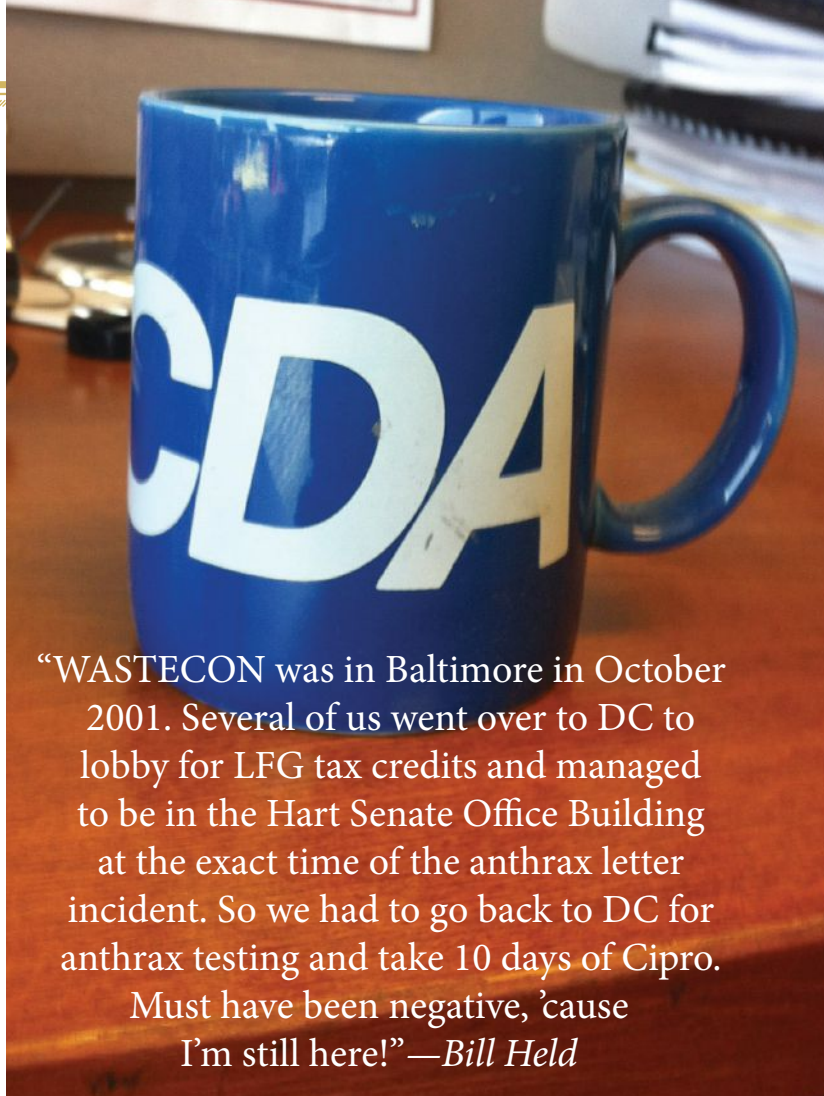
Training courses would come to take a more significant role and over time would be offered through a variety of electronic media.

The SWANA Applied Research Foundation (ARF) was founded in 2001 to fulfill SWANA's mission of "advancing the practice of economically and environmentally sound MSW management" by conducting collectively funded and defined applied research projects that address pressing solid waste issues identified by its subscribers.

ARF, headed by Jeremy O'Brien, is funded by member jurisdictions and other organizations through an annual subscription fee that amounts to a little more than a "penny per ton" of the solid waste collected or managed annually through their systems.

Through ARF research, SWANA members would learn several "on-the-spot" lessons in solid waste management as a result of Hurricane Katrina and the earthquake that devastated Haiti.

In 2005, ARF released the report, *Hurricane Katrina Disaster Debris Management: Lessons Learned from State and Local Governments*, immediately following the hurricane. ARF compiled a report detailing effective local government disaster debris management procedures and



"WASTECON was in Baltimore in October 2001. Several of us went over to DC to lobby for LFG tax credits and managed to be in the Hart Senate Office Building at the exact time of the anthrax letter incident. So we had to go back to DC for anthrax testing and take 10 days of Cipro. Must have been negative, 'cause I'm still here!" —Bill Held

policies. The report was provided free of charge to the City of New Orleans and the State of Louisiana.


Five years later, ARF published *Municipal Solid Waste Collection Needs in Port-au-Prince, Haiti*. Following the earthquake in Haiti in January 2010, ARF formed a SWANA Haiti Response Team to assist the local solid waste collection agency in Port-au-Prince in responding to the dire MSW and disaster debris management problems resulting from the quake.

After the turn of the century, SWANA focused many of its efforts on legislative advocacy in such areas as federal tax credits for the utilization of landfill gas in the final comprehensive energy bill.

During the first decade of the 21st century, SWANA drastically changed its method of communicating information to members by incorporating the new eLibrary and eSessions into the fold.

In 2007, SWANA created a Body of Knowledge (BOK) to identify the critical skills and knowledge required for managers operating in specific disciplines.

10/1



Six killed by an earthquake measuring 6.1 in L.A.

10/19

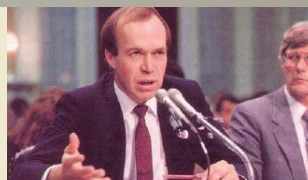
"Black Monday": Dow Jones down 508.32 points, 4½ times the previous record.



1988

The articles of incorporation are signed for the Iowa Society of Solid Waste Operations Chapter of the GRCDA.

4/25



NASA scientist James Hansen warns Congress of the dangers of global warming.

6/04

7/3



US Shoots down Iranian Airliner.

The first BOK developed was that for the Manager of Landfill Operations (MOLO).

In 2010, all exams were edited to include metric measurements, a Canadian-specific metric version was completed for MOLO, and a Spanish version of the MOLO exam for US and metric was completed.

Chapter partnering is another program with ongoing improvements. The program's intent is to offer training opportunities at the regional/local level, build visibility for SWANA and chapters, increase membership, certify more solid waste professionals, and generate revenue for the chapter. SWANA and the chapters participate in a revenue sharing partnership. SWANA sells training materials at a reduced price negotiated each year.

Contract training is an offshoot of the chapter partnering and was rebranded in 2011 as SWANA Training@Work. The program's intent is to expand training beyond SWANA training centers at major conferences and symposia, build visibility for SWANA and chapters, increase membership, certify more solid waste professionals, and generate revenue.

SWANA Training@Work has two options: in-house training and on-site training.

SWANA began offering certification courses via webinar in 2011 with MOLO, Recycling and Composting.

Over the years, SWANA has had partnerships and joint certifications with several industry associations. The US Composting Council is a joint sponsor of the managing composting programs exam.

The North American Hazardous Materials Association is a joint sponsor of the HHW/CESQG collection facility course and exam. The Construction Materials Recycling Association is a joint sponsor of the managing construction and demolition materials course and exam.

In 2011/2012, SWANA established a new process for exams. A psychometrician is expected to review all exams and deliver a report on their validity and reliability. A professional item writer is expected to work with SWANA's faculty to create a new bank of questions for each exam so that they are fair, valid, reliable, and defensible. The rollout date for the new exams for MOLO, C&D, Collections and Transfer Station is WASTECON 2012.

Skinner says there are several elements of SWANA growth under his leadership of which he is proud. Primary is the continued membership growth.

"Even through the recession, our membership held and is now around 8,000 members," he says.

Another is the shift in SWANA's training delivery to include online training.

"The change in the Internet and communications in the late 1990s and early 2000 brought all of that about," he says. "In addition to our classroom training, we now provide a range of electronic training opportunities ranging from web seminars which we do on a weekly basis to full courses we're doing electronically, so that's a very significant shift."

Another aspect is continued chapter growth and the increase in chapter involvement.

"Early on, we realized we could train a lot more people if we had the chapters delivering the training where we would provide them with the training courses, give them the appropriate faculty member to teach it, and they could then teach the course locally," he says. "It's much less costly to their attendees because they don't have to travel to a remote location and stay in a hotel. We are able to deliver the training to our members through the chapters at a much more affordable cost."

Hickman's advice for SWANA's next 50 years is "don't forget the basics."


"There's a new generation that comes into solid waste just like everything else," he says. "They're going to have to be trained. If you don't want them going the wrong way, you've got to help the professionals do the job they have to do. I don't think the mission should change. How they do it, of course, does."

That is accomplished through training, education, certification, validation, and recognition, he says.

"That's what makes a professional organization," he adds. **MSW**

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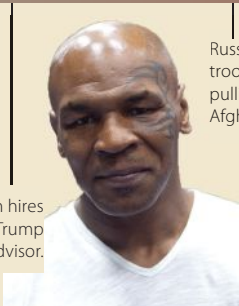
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7/11



Mike Tyson hires Donald Trump as an advisor.



8/8

Russian troops begin pulling out of Afghanistan.

8/11

Al-Qaeda forms.



8/28



Seventy killed in crash of three Italian AF fighters at air show in Germany.

10/17

Rockin Robin beats "Sensational" Sherri Martel for WWF woman's title.

12/21

Pan Am Flight 103 is bombed over Lockerbie, Scotland.



HIGHLIGHTS REMEMBERED By Lanny Hickman

There are many memories in the history I wrote for SWANA. The following come quickly to mind and seem to me as notable.

- **Going national**—Interviewing with the GRCDA Board meeting in Arizona. The board was not 100% interested in hiring an executive director, especially one who was a fed. I remember telling them that if they hired me, I was going to take the association over and make it a competitor to APWA and NSWMA. A deal was cut for half-time for me, a contract was developed, and on July 1, 1978, GRCDA opened offices at 16th and K in Washington, DC. With a little over \$14,000 in the bank, we went to work telling the people about GRCDA.
- **New ED goes to his first GRCDA Annual Seminar and Symposium**—Met with Canadians, some of whom were not too keen about having an ED, especially one with no operating experience in solid waste management. The board and executive committee stood strong on decision to hire an ED even if he was a retired fed. They viewed that as an asset.
- **Getting the newsletter, financial records, and membership records under control**—I like to reflect on the fact that a bunch of solid waste superintendents put together the foundation that allowed us to build GRCDA into SWANA. They created an association out of the trunks of their cars and had a vision of where they wanted to go. Their commitment and personal contributions created a foundation that allowed me to get the process of growth under way. When I went to work for them they gave me the checkbook and one cardboard box of records. So we essentially had to start a running business from scratch.
- **The annual meeting**—Initially, I had no responsibilities for the annual seminar and symposium. For the San Diego show, they gave me the technical program to put together as well as designing and printing the printed program. While sitting at the head table during the opening ceremonies, I was casually flipping through the program and noticed that the abbreviation for GRCDA was printed GCRDA. No one seemed to notice the error, and it told me that the initials were not as sacred as we all thought.
- **Getting help**—Eventually, the business of getting the newsletter out, traveling, and selling corporate memberships so there was money in the bank to pay me led me to recruit Kay Hickman to take care of mailings for the association. Kay set up business in our home, and eventually three of the four bedrooms were devoted to GRCDA business. Over time, she became our meetings director.
- **Taking over the show**—It took about five or six years from the time we started in 1978 before the full management of the annual meeting was taken over by staff. This helped us create technical di-

visions to help with the design of the technical program. This also led to the creation of a team of members to take a management position in the short-term and the long-term life of the annual meeting—enter Tim Hunt, Dick Townley, and Don Warren.

- **The training program**—Training had been a part of GRCDA since its inception. It was natural for us to look toward continuing training, but on a larger scale. During my federal time in the Office of Solid Waste, I eventually was responsible for our training program. The emergence of EPA resulted in the termination of that training effort. I had kept a personal library of all the training materials created in the federal solid waste program training effort. I called on Dick Eldredge, who had been in charge of the training program prior to formation of EPA; he had left the government and had his own consulting engineering firm. I wanted to start a certification program for landfill personnel. Dick, always wiser than me, suggested we survey the states to see if they would support a landfill certification program. I did not want to be the certifying agent; I wanted the states to do that and create a training market for us. The survey proved that training and certification would be supported. Out of that came the training and certification program in SWANA today. The initial creators of the MOLO course and manual were Dick Eldredge, Larry Crane, and Art Dunn, plus me. Dick and Larry were from the federal program and Art was from the Minnesota solid waste program.
- **Capturing landfill gas**—USDOE was supporting an information effort in landfill gas. We, the federal solid waste program had supported, prior to EPA, several LFG studies. This had resulted in my having a number of contacts with the group that was building the LFG industry. There was a movement starting to form an LFG Association. The group was meeting in Easton, MD, and Fred Rice suggested that a better way might be to have GRCDA support the LFG group. Fred called me, gave me the picture, and Kay and I went to Easton and I was able to persuade them to form the LFG Committee in GRCDA. DOE support disappeared in a couple of years, and we went fully self-funded for the first time at Industry Hills in maybe 1981 or 1982. My deal with the LFG group was that they would always have the financial and management support to grow the committee. The current LFG annual meeting speaks for itself how good a deal it was for both parties.
- **Growing the staff**—One of my greatest pleasures was growing a staff to serve the membership. The foundation that grew the staff was an understanding that we were not the owners of the association, but stewards to take care of it for the members. I will always remember Lori Swain and Chris Voell as early on the payroll;

1989

2/22

First Spanish commercial on network TV (Pepsi-Cola-CBS Grammy Award)

2/24

Exxon Valdez spills millions of gallons of oil along Alaskan coastline.

3/24

150-million-year-old fossil egg (oldest dinosaur embryo) found

4/26

Lucille Ball dies.

6/4

China crushes revolt in Tiananmen Square.



Clay Ervine, who gave our technical program a good beginning; Brad Roberge, who charted the direction for WASTECON; Kathy Lane, who kept me organized and continues to serve SWANA; Cathy Wilde, who has always been essential to the administration of SWANA; Charlotte Frola, who got our research program under way; and Kay Hickman, who put that personal touch into all of the meetings she planned and managed.

■ **The name change**—Perhaps the second most critical decision made by the membership during my time as the ED was to change the name of the association. I will confess that I worked hard to get the EC and IB to consider making the name change. Cold and logical arguments took a long time to overcome the emotional ties that the old guard had for the name and initials of the Governmental Refuse Collection and Disposal Association (GRCDA). These were the same people who agreed to move the office from downtown DC to Silver Spring, to embrace a training-and-certification program, to create technical divisions, etc. Eventually, the process began with the EC assigned the responsibility of selecting names for the IB and, eventually, the membership to consider. A number of names were sorted out by the EC and the finalists were the Association of Solid Waste Management Professionals (ASWMP) and the Solid Waste Association of North America (SWANA). In a conference call of the EC (officers, and Seminar Chair Tim Hunt and Trade Show Chair Dick Townley) it was clear to me that ASWMP had the majority of support by the EC members. A discussion of the acronyms followed and SWANA was easily identified as SWA-NA. Then when we were considering the acronym for ASWMP Dick Townley said quite clearly it would be pronounced “ass wipe.” SWANA won the day.

■ **A marketing director and naming the annual meeting**—SWANA/GRCDA has always been blessed with devoted members and leaders. However, the fact of most members being employed by local governments made it difficult, sometimes, to get the leadership to think in terms of the private sector. Such was the case in getting the EC and eventually the IB to think about hiring a marketing director with her/his compensation to be composed of a base salary plus a bonus based on the sales of space in the annual equipment show. Staff prevailed, and we established a sales staff and marketing director. We had always suffered with a very long name for the annual meeting and we had no brand. Not long after Brad Roberge came aboard as our marketing director, he started badgering me that we needed to brand our meeting just like APWA and NSWMA and we needed something better for a name of the annual show than Annual Symposium and Technical Meeting or Annual Symposium and Equipment Show. Eventually,

Brad wore me down and staff proposed we name our annual meeting WASTECON (short for Waste Convention) and it was approved fairly quickly by the EC and IB. Hiring a marketing director has paid off for the association.

■ **LFG regulations**—Selling a more logical set of LFG emission regulations to EPA set the tone for a future larger role for SWANA in representation of solid waste management interests.

■ **Waste flow control**—The Supreme Court decision making solid waste an interstate commodity brought about a major effort to protect local government’s role in solid waste management. A partnership with the National League of Cities, the National Association of Counties, and a number of solid waste authorities and districts led to the successful passage in the House of a waste control bill. It was destined to go to the floor in the Senate, and as a number of us sat in the gallery about 11 p.m. one night, one senator (Roth, [D] RI) blocked the vote. The bill died and so did our efforts with flow control. However the resilience of the field of solid waste management professionals has resulted in local governments continuing to ensure the protection of the public health of their citizens.

■ **Members who made a difference**—GRCD/SWANA has always been blessed with a large cadre of devoted and committed members. All of our presidents have left their fingerprints on the fabric of the association. Many technical chairs and members have been able to make major contributions to the field using the association as the tool to make change. As the ED for 18 years, I worked with many members, helped many members, and actively recruited future leaders for the association. An executive director of an association needs the support of her or his membership and board of directors. I recall some rancorous meetings, but every time when we were done, the association profited. A few members, however, were always there to help me do my job: Bob Lawrence early on, Dick Townley, Tim Hunt, and N.C. Vasuki through many years. Their commitment to the association to a large degree made SWANA what it is today.

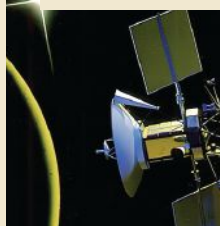
■ **Changing the GRCD/SWANA culture**—While on my watch, the association, bedded in its public sector culture, eventually began to see itself as more than what it was when it was founded. It has become a professional society representing all those who work in the field. With that transition, SWANA finally changed its restrictions on who could serve in the officer corps so that any solid waste management professional with the right stuff could serve as an officer in the association. Perhaps this is the most significant thing that happened in the first 50 years. Who knows what the next 50 years will bring?

8/14

The Oklahoma Indian Nations Chapter hosts the 27th Annual International Seminar and Equipment Show in Tulsa, OK.

8/15

US Venus probe Magellan launched from Space shuttle



10/17

Earthquake in San Francisco (6.9) cancels 3rd game of World Series, kills 67.



11/9

Berlin Wall falls.



19/1

Army Gen. Colin Powell becomes first black chairman of the Joint Chiefs of Staff.

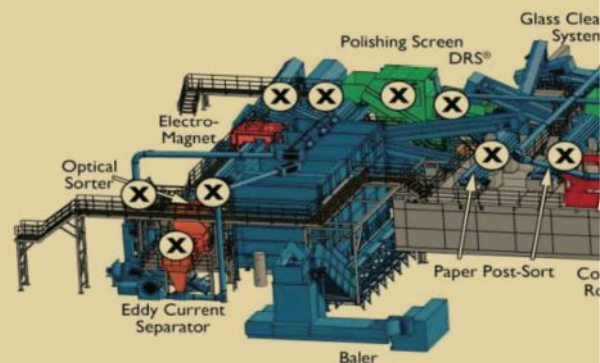
At 50 Years

SWANA Moving Forward

In 1996, in an effort to promote education and professional development, SWANA established the Grant H. Flint International Scholarship Awards Program.

The program is initiated by the chapters through their chapter scholarship committees. Eligible candidates must be natural or adopted children or grandchildren of a member (sponsor) in good standing as of May 1 of the calendar year. SWANA student members in good standing are also eligible for Category II.

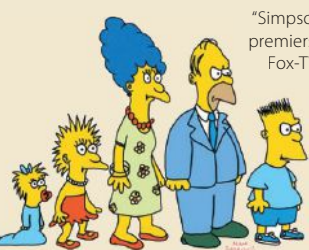
Candidates residing in a chapter area must be selected and recommended by the chapter for an International Award. The chapter scholarship committees are responsible for reviewing the applications from their chapter and selecting one representative for each scholarship category to be forwarded to the International Scholarship Committee for review.



1990

1/14

"Simpsons" premieres on Fox-TV.



1/21



John McEnroe becomes first-ever player to be expelled from the Australian Open.

1/31

World's largest (and Russia's first) McDonald's opens in Moscow.



4/25



Hubble Space Telescope is placed into orbit by shuttle Discovery.

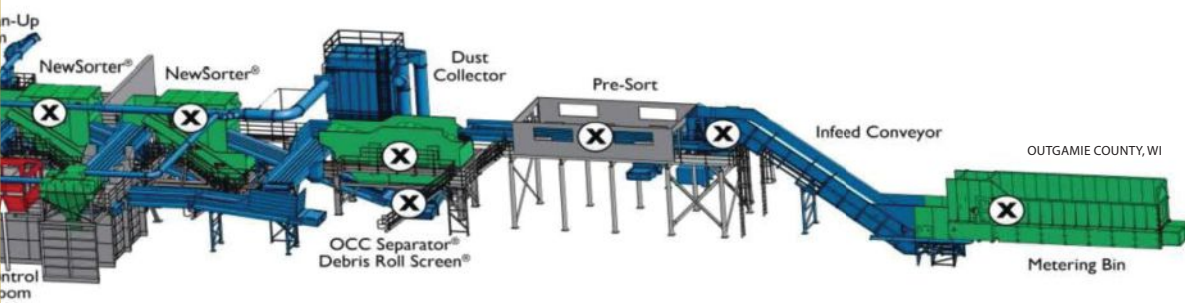
8/2

Iraq invades and occupies Kuwait; emir flees to Saudi Arabia.



8/18

The International Board of Directors votes to change the name of the organization from GRCD to SWANA.



The names and completed applications of chapter winners must be received by the SWANA scholarship committee staff administrator no later than June 1 each year in order to be considered for an award.

At-large applicants forward their applications directly to the SWANA scholarship committee staff administrator by May 1. No more than two at-large scholarship applications are accepted for each category. If more than two applications are received, the international scholarship chairperson will screen the applications.

From the inception of the program, there were different award categories. The first two categories have remained the same over the years.

Category I—Graduating high-school seniors or graduate-equivalent-certified candidates who have been accepted for enrollment in a junior college, a four-year college, or a university (any program).

Category II—Currently enrolled full-time college or university students who are entering their junior or senior undergraduate year and pursuing a degree in environmental science, engineering, or other suitable major related to the field of solid waste management.

There also have existed additional scholarship awards sponsored by several SWANA private sector members and established to recognize key people from their firms/companies. They have been managed by and have had a representative seat on the Grant H. Flint Scholarship Committee. Representa-

tatives have included such companies as SCS Engineers and Montenay.

Qualifying are full-time students who are entering or are in graduate school pursuing a degree in environmental science, engineering, or other suitable major related to the field of solid waste management. Currently, the award is The Robert P. Stearns/SCS Engineers Scholarship Award in the amount of \$5,000.

Qualifications for Categories I and II have remained unchanged throughout the years, but the criteria for selection and the amount of the awards has been adjusted over time.

Originally the Category I and II Awards were each \$1,000, with three awards given in Category One and one award given in Category Two. Currently, the committee may award up to a total of \$20,000 per fiscal year in Categories I and II, or any other amount as provided by earnings from the scholarship fund or as set aside by the international board.

If no submissions are received (or if there is a lack of qualified submissions) in one of the two categories, the International Scholarship Committee may make awards above and beyond the specified number in the other category with total cash awards not to exceed the total dollar amount of the award set aside for that year.

The scholarship policies have since been updated to adjust the scoring criteria, scheduling, fund balance perimeters, and the awards amount.

In fiscal year 2011, because the scholarship fund had dropped below the recommended \$40,000 fund level as specified in the policy, there was approval to add \$2.50 to annual membership dues beginning with fiscal year 2011 for the purpose of sustainably funding scholarships in the future.

Modifications to the policy meant \$20,000 in scholarship awards were approved for fiscal year 2010 and beyond to be paid from the scholarship reserve fund.

Another major program established in 1996 to benefit young people was the SWANA Lanny and Kay Hickman Internship Program. The funds were established in 1998 to honor Lanny, the retired executive director of SWANA and Kay, the retired meetings director, for their many tireless years of service to the association and the field of solid waste management.

The program is intended to provide an opportunity for selected college and university students to integrate classroom skills with a supervised work experience including but not limited to investigative and analytical research, writing brief documents, and the development of technical reports.

The annual internship is offered to students who are currently studying in fields associated with solid waste management or another field of study related to a specific work program as identified by the Scholarship Committee.

Candidates must have at least a 3.0 GPA on a 4.0 GPA system or international equivalent, must be entering or be in their junior,

10/30



England and France complete the "Chunnel."

11/15

President Bush signs Clean Air Act of 1990.



12/25



The first successful trial run of the system that would become the World Wide Web.

1991

1/17

Operation Desert Storm begins: US-led allies vs. Iraq.



War with Iraq ends after six weeks.

2/27

3/13

Exxon pays \$1 billion dollars in fines and cleanup of Valdez oil spill.

3/15



Four L.A. police officers are charged in the beating of Rodney King.

senior or graduate level and must be willing to commit a full semester or term to the internship program.

Candidates are recruited from the United States, Canada, and Europe, utilizing ties among SWANA's chapters, technical divisions, the International Solid Waste Association, the solid waste media community, and colleges and universities.

Students majoring in academic programs related to the specific work program for a given internship period are given first priority for internship consideration. The selection of the intern is by the Scholarship Committee with Executive Committee approval.

The Scholarship Committee develops internship projects suggested by the technical divisions, SWANA staff, SWANA members, members' organizations, or others with an identifiable need. A statement of work is established for each internship.

Once selected, interns are expected to develop over the time of their internship one or more actual outputs, such as annotated bibliographies, survey results, and reports as outlined in the selected work program that can be utilized by SWANA in carrying out its mission.

The intern is required to execute documents acknowledging SWANA as the owner of the work products resulting from the internship.

A mentor is assigned to the intern at the beginning of the project. Mentors can be SWANA members, staff, or Hickman, and will ensure a meaningful work effort for interns. Mentors are responsible for providing guidance to the intern, but not day-to-day supervision, and will evaluate the intern's final product. The mentor and the Scholarship Committee or its designees review and comment on at least one draft of the intern's work products.

At the end of the internship, the intern prepares a short report summarizing and evaluating how well the program fulfilled the commitment to the intern, as well as a summary report of the accomplishments of the work program. The Scholarship Commit-

tee provides the intern with a performance evaluation.

In 2000, the first intern selected, Hamideh Soltani-Ahamdi, worked as a full-time employee for the Delaware Solid Waste Authority, and completed her report, *A Review of Non-Methane and Volatile Organic Compounds in Municipal Solid Waste Landfill Gas*. It was presented at WASTECON 2001.

In 2001, arrangements were finalized for a second intern, Nongnard Sunthonpagasit from Thailand, to work with the Maryland Environmental Service. Her project covered the uses for crumb rubber manufactured from waste tires, with emphasis on the use of rubber in asphalt. Former SWANA Executive Director/CEO Lanny Hickman provided a synopsis of Nongnard's paper at WASTECON in 2002.

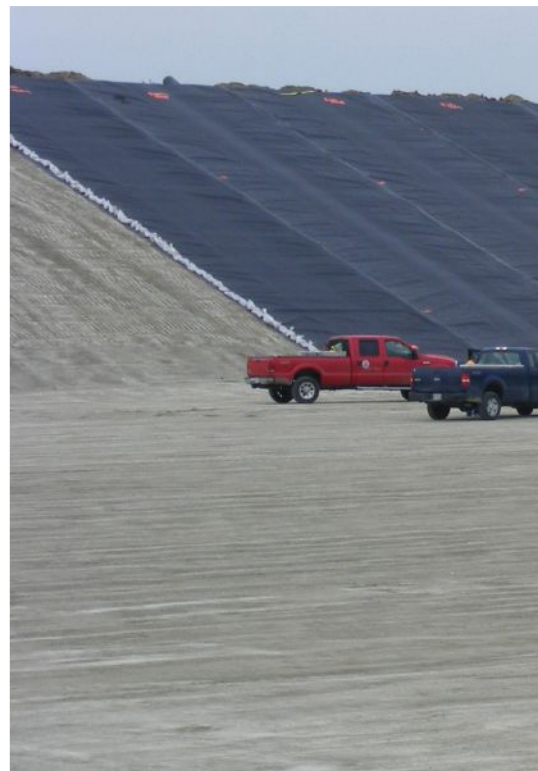
In 2002 and 2003, the fund balance in the internship fund fell below the designated level to support interns. Promotional efforts were initiated to bring in more donations to the fund with a target date of summer/fall 2004.

There were several institutions and authorities interested in hosting an intern once the fund balance reached the designated fund balance of \$50,000, plus one year operating expenses, including the Monterey Regional Waste Management District, the Los Angeles Sanitation District, the Delaware Solid Waste Authority, and Maryland Environmental Services.

In December 2003, the fund balance reached the designated goal, and the committee proceeded to obtain an arrangement for an intern for the 2005 academic year.

That intern was Tammy Martin, a senior civil engineering student at Florida Atlantic University. She began her internship in August 2005 working with the Solid Waste Authority of Palm Beach County, FL. Due to personal reasons, Martin dropped out of the internship before her project was complete, and the committee started the work of obtaining a new intern.

Because of low fund balance and an inability to find compatible partners, the Internship Program was not active from 2006 through



Texas landfills, then and now

2008, but in 2009 two new interns were selected: Samantha Garcia of San Diego, CA, and Fabien Besnard of Charlotte, NC.

Garcia was a junior and had plans to work on her master's degree over the next five years in a biology-related discipline at San Diego State University, looking toward a career in solid waste management.

Her host organization was the City of San Diego Environmental Services Department, and her internship focused on researching the designs and operations of materials recovery facilities (MRFs).

She began her internship in May 2010, but due to personal issues dropped out in December 2010. Her university and host asked that the internship be transferred to another student, Noemi Zavala. Ultimately, this partnership did not prove successful, and the internship had to be withdrawn in 2011.

Fabien Besnard was a second-year Ph.D.

5/13



Michael Jackson: *Magic & Madness* goes on sale.

5/31

Oldest bride, Minnie Munro, 102, weds Dudley Reid, 83, in Australia.

10/06



Elizabeth Taylor weds for 8th time (Larry Fortensky).

11/07

Magic Johnson announces he has HIV virus and retires from LA Lakers.



11/30

Seventeen die in a 93-cars, 11-truck accident near San Francisco during a dust storm.



12/31

12/31

SWANA membership stands at 6,216.

USSR, last day of existence



SWANA, TEXAS LONESTAR CHAPTER



Picture taken on 11-27-73
9:00 A. M. at City dump..



Picture taken on 11-27-73
9:00 A. M. at City dump..

student at the University of North Carolina-Charlotte, pursuing an advanced degree in civil and environmental engineering. His host organization was the Department of Civil and Environmental Engineering, UNC Charlotte.

Significant support to the internship was provided by the Sustainable Packaging Coalition. His internship focused on the development of a pilot foodwaste and compostable food containers (CFCs) composting program

for commercial/institutional wastestreams where CFCs are used.

The internship has proved to be a lesson in perseverance and coordination, and has been affected by the downturn in the economy and subsequent downturn in the fund balance. The committee will continue to solicit funds and look for partners in the endeavor.

The Senior Executive Seminar was held for the first time in 1997 and has continued

as a successful event. Historically, seminar attendance has been by invitation only and has included approximately 80 executive directors, CEOs, vice presidents and other high-level decision-makers from public and private sectors.

The conference provides a venue and opportunities for attendees to share experiences with other senior executives in a casual atmosphere, getting a candid look at some of the best-run solid waste systems in the world

1992

1/26



Americans with Disabilities Act goes into effect.

2/10

Jose Canseco repeatedly rams his Porsche into wife Esther's BMW.

2/13

Jeffrey Dahmer found sane and guilty of killing 15 boys.

2/15

Mike Tyson convicted of raping Desiree Washington in Indiana.

2/27



Tiger Woods, 16, becomes youngest PGA golfer in 35 years.

4/14

Court throws out Apple's lawsuit against Microsoft.



Microsoft

4/23

McDonald's opens its first fast-food restaurant in China.

and attending one of the most sought-after, invitation-only seminars in the industry.

Another program of note is the Executive Committee Strategic Planning/E-Business Strategy. The goal is to provide a series of member benefits online.

This program accomplishes its mission through online training courses, online e-sessions (web seminars), an online membership directory, an e-library, an online jobs directory, a professional services directory, online registration for SWANA events, online membership application and renewal, online balloting, online marketing, online services for chapters, online technical division forums, and online policy development and governance.

The Executive Committee's Strategic Planning/E-Business Strategy plan of action is based on input from "Brain Day" in June 2000.

At the SWANA International Board's Mid-year meeting, the SWANA Board of Directors spent a day "thinking outside the box," exploring new ideas and different ways to accomplish the association's mission.

This Brain Day resulted in identification of five key areas in which SWANA could make changes to significantly improve the association and its ability to deliver to the membership:

- **Service and value**—improve internal operations, customer (member) services, marketing and communications, delivery of products and services, and to add value to the membership by exploring other opportunities such as member discount programs and affinity programs.
- **Improvement of association awareness and image**—improve marketing, public relations, access to information, and reputation as *the* organization for solid waste.
- **Governance**—reduce and streamline procedures and structure of the board.
- **Chapters**—improve chapter and association communications, work to develop goals and objectives to mutually benefit both regional and international opportunities.
- **Membership**—identify new markets and develop a plan to attract these markets.

Based on feedback, SWANA identified three key action items for focus in fiscal year 2001.

One area was member benefits. In order to add value to membership, SWANA would develop a member affinity program to offer services and products at lucrative rates. These partnerships with organizations would be structured to provide special consideration for each SWANA member and at the same time develop a revenue stream for SWANA based on member participation. It was believed that the more member participation by SWANA members, the greater the revenues.

Areas investigated included insurance programs, a SWANA credit card, office supplies, purchasing of computer and network equipment, programs for ISO 9000 and 14000 certification, and entertainment discounts.

In addition to these areas, SWANA also investigated some Internet programs that would provide revenues to SWANA based on members' site usage. Possibilities considered included Amazon.com, BarnesandNoble.com, ongiving.com, and bizbuyer.com.

All programs were investigated through an RFP process and a choice made from among the possible suppliers. Once a decision was made to work with a particular vendor, SWANA would market these programs to its membership through newsletters, member benefit brochures, and on its website. The programs would be voluntary.

It was anticipated that this effort would not have a significant impact from a cost standpoint; staff resources would be devoted to investigating and implementing programs, with no change in the budget.

Training was another area of interest. SWANA had no plan in place to develop online training, but planned over the next year to survey members, analyze potential markets for online training formats, and devise a plan and implement online training programs.

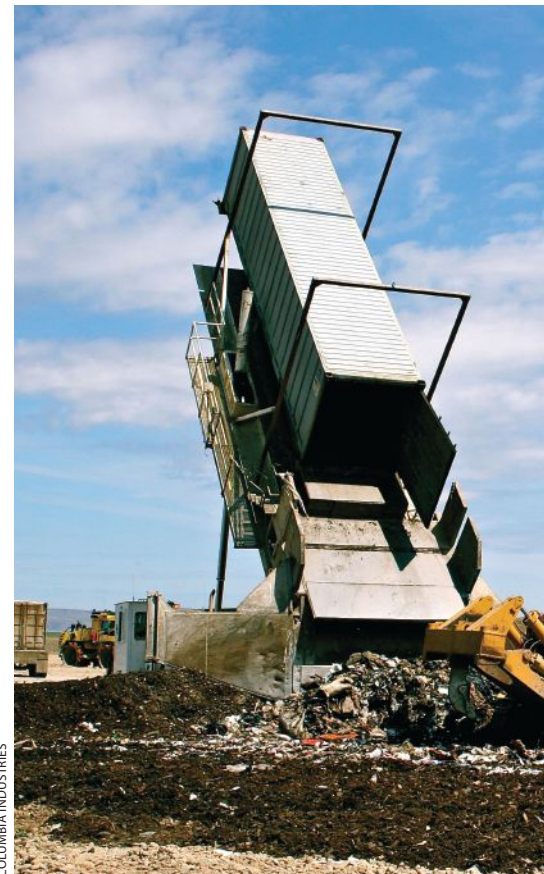
SWANA staff collected data and information and developed a strategy on how to implement an online training program and developed a budget for these actions, with a detailed plan to be presented to the Interna-

tional Board at the 2001 annual conference.

Internet and e-commerce capabilities were likewise important issues for the association at the beginning of the 21st century.

Over the course of the next year, SWANA would determine an e-commerce path that would redefine the association's future operations, reflecting issues all associations face, changing to become more responsive, and using Internet technologies to more effectively deliver the product.

Many of these changes were driven by SWANA's membership developing a "now" mentality. Through the Internet, vast amounts of information were just a few clicks away. Members wanted information conveniently, and *now!* Delivery of services, particularly publications, proceedings, manuals, and other information would be completely revised—and the competition would increase.



COLUMBIA INDUSTRIES

8/3

The 30th SWANA Annual International Seminar and Equipment Show convenes in the Tampa Convention Center, Tampa, FL.

Bill Clinton (D) wins US presidential election over President Bush (R).



11/3

The Tennessee Chapter receives its charter at SWANA's annual business meeting in Tampa, FL.

8/6

1993



Czechoslovakia separates into Czech Republic (Bohemia) and Slovakia.

1/1

Bill Clinton inaugurated as 42nd president

1/20

2/26



2nd tallest building in world, NYC World Trade Center bombed, 7 die

SWANA's advantage over competitors existed in its wealth of knowledge, but its technology needed to jump ahead to deliver that knowledge. SWANA needed to develop the electronic structure to begin to meet these instant gratification needs and maintain our status as *the* place to go when you need information. This would include significant changes in operations, by providing online capabilities to purchase all products and services, providing several electronic forms of information, and to include online and CD ROM access to proceedings, papers, publications, and training manuals.

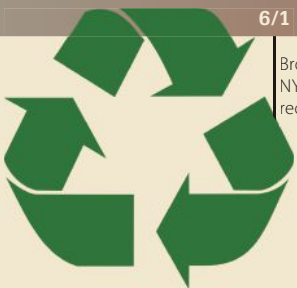
It was determined that SWANA would need a new member database application to provide more user-friendly access to information and more sophisticated capabilities to target, customize, and send information easily by e-mail, present improved reporting



JOHN TROTTI



JOHN TROTTI



6/1

Brooklyn, NY, begins recycling.

6/11



"Jurassic Park" opens, sets box office weekend record of \$502 million.

8/2

The 31st SWANA Annual International Seminar and Equipment Show convenes in the San Jose Convention Center in San Jose, CA.

8/15

Nolan Ryan, 324th & final victory: Rangers 4, Indians 1



9/2

Pearl Jam and En Vogue are big winners at 10th MTV Awards.

12/15

John Williams final appearance as conductor of Boston Pops

capabilities, and provide improved statistical and historical data.

It also was recognized that the system SWANA utilizes must be capable of integrating database, accounting, and order processing, not only in an office environment, but also over the Internet. This would involve an accurate connection between SWANA's website, its accounting system, and its database system.

SWANA also recognized that current hardcopy materials must be electronically formatted, giving SWANA the capability to sell or provide products in hard copy, CD-ROM, or online formats.

This would entail determining what products SWANA wanted to sell and implementing the appropriate formats. It also meant staff would need to develop different pricing structures to allow for the opportunity for subscription pricing on a multitude of publications.

The staff took short-term actions to become more electronically oriented.

Its members-only section of the SWANA website was operational by December of 2000. Through that application, SWANA was able to provide its members with several informational papers at no additional cost, increasing the value-added perception of the membership and incentivizing members to regularly access the site.

The staff also bolstered e-commerce capabilities by investing in opportunities to have a generic application allowing visitors to apply for membership, sign up for an event, purchase publications, and request exhibit space online.

SWANA staff continued to investigate two opportunities for partnership: one with its official publication, *MSW Management*, and another with Vertical Net's Solid Waste On-Line, which also partnered with SWANA electronically. It was anticipated this capability would be available by December 2000.

At its annual meeting in October 2000, the International Board directed the Executive Committee to determine a method for financing the E-Business Strategy up to \$300,000.

It also authorized appropriate officials

to execute all documentation necessary to negotiate, arrange, and implement the financing methods selected, and to direct the establishment of an e-business committee.

President Viny addressed the topic of how SWANA might fund the E-Business Strategy, and suggested diverting the funds marked for the first distribution to the reserve fund and orienting it to this strategy.

The International Board redirected the money from the reserves for fiscal year 2000 and 2001 to help fund the e-business strategy and prepare the fiscal year 2002 budget in the same manner.

In 2001, SWANA chapters were asked to participate in the financing of the association's e-business strategy by loaning funds to SWANA at an interest rate above the current rate for CDs. SWANA would sign a promissory note for the funds received, which would be placed in a special account to be used only for the purposes of implementing its E-Business Strategy. Loan repayment schedule would be a four-year term and interest rate of 6.75% compounded monthly.

Four chapters provided loans to help finance the SWANA E-Business Strategy, including Ohio Buckeye, \$25,000; Illinois Land of Lincoln, \$2,000; Georgia, \$20,000; and Texas Lone Star, \$10,000.

In December 2001, President Mark Bryant appealed to the chapters who had not yet indicated they would participate in the e-business loan initiative. Many more came onboard, providing commitments of more than \$250,000 to finance the E-Business Strategy, which provided more than 70% of the \$350,000 budget approved by the SWANA International Board of Directors. Additional chapter loans came from Virginia Old Dominion, \$5,000; Alabama, \$5,000; Missouri, \$5,000; New Mexico Roadrunner, \$10,000; Minnesota Land of Lakes, \$5,000; North Carolina, \$20,000; Canadian Prairie, \$5,000 Canadian dollars; British Columbia, \$5,000 Canadian dollars; Kentucky Bluegrass, \$2,000; and Arizona, \$5,000.

Other donations came from Oklahoma Indian Nations, \$5,000; Arkansas, \$3,000; Ontario, \$5,000 Canadian dollars; Southern California Founding Chapter, \$27,500; Colorado Rocky Mountain, \$5,000; Mid-Atlantic, \$2,000; Nevada Great Basin, \$8,000; New York, \$5,000; Indiana Hoosier, \$3,000; Washington Evergreen, \$7,500; Utah Beehive, \$2,500; Oregon Beaver, \$5,000; Iowa Society of Solid Waste Operations, \$5,000; South Carolina Palmetto, \$10,000; and Wisconsin Badger, \$10,000.

There also was a \$200 donation from



1994

1/17

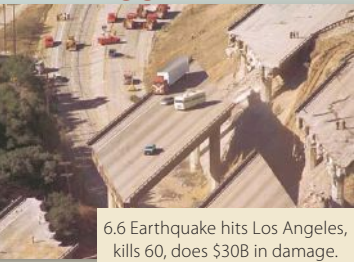
4/26

5/10

6/27

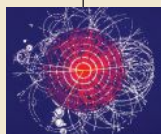
8/1

9/14



6.6 Earthquake hits Los Angeles, kills 60, does \$30B in damage.

Physicists announce first evidence of the top quark subatomic particle.



Nelson Mandela sworn in as South Africa's 1st black president

Aerosmith first major band to let fans download a full new track free on the Internet



The 32nd SWANA Annual International Seminar and Equipment Show convenes in the San Antonio Convention Center in San Antonio, TX. The president of the International Solid Waste Association, John Skinner, was the guest of SWANA.

In the wake of the players' strike, baseball owners vote to cancel rest of 1994 season.



Norton Environmental.

In the meantime, a guidance document was developed to help guide SWANA staff on the day-to-day decisions involving SWANA's Internet site.

From 2002 to 2004, many new loans had been made, and many rolled over, with some chapters providing second loans that were consolidated with their first for a total of more than \$440,000.

The successful chapter loan program was suspended in 2004 to new funds and rollover of existing loans.

When fully implemented, the SWANA e-business strategy provided SWANA members with the capability to sign up for and renew memberships online; register for symposia, conferences, and training online; sign up for exhibit space and sponsorships online; track their certification status and CEU credits online; access a members-only home page with exclusive information about solid waste management issues, including information on legislation and regulations; search and access SWANA proceedings from

PHOENIX RECYCLES

In the late 1980s, the City of Phoenix Public Works Department began putting together a five-year plan in anticipation of the needs of Arizona's growing metropolitan area. It was determined that the 27th Avenue Landfill, located at 27th Avenue and Lower Buckeye Road, would be filled to capacity by the mid-1990s.

All across the United States, local, county, and state governments were faced with much the same problem of relatively cheap landfill space that dwindled as the costs of siting and operating new landfills increased. New federal government guidelines protecting groundwater, equipment needed to reduce the dangers associated with landfill methane gas, and other necessary environmental guidelines were causing garbage collection and disposal fees to increase dramatically. To address these problems and still be efficient and effective, the City of Phoenix began looking at various solutions to the impending garbage collection and disposal problems.

The debate on a solution was varied during the 1980s. More landfills, recycling, banning wastes from landfills, and waste-to-energy plants were considered and some built in the United States. The City of Phoenix considered these options but decided upon a long-term solution that included a comprehensive solid waste management approach. This included the siting of new landfills (which will always be needed), but also an approach using the three "Rs": Reduce, Reuse, and, of course, Recycle.

In 1987, the mayor and the Phoenix city council authorized a University of Arizona study of the composition of Phoenix residential refuse. This analysis, conducted in early 1988, showed that 50% by weight and 63% by volume was recyclable.

The City of Phoenix wanted to create a recycling program that would capture as much material from the solid wastestream as possible. In addition, the City designed

Phoenix Recycles to keep costs down by using existing trucks and personnel on the same twice-a-week collection schedule. In April 1989, a pilot recycling program of 4,000 homes began in each of the eight city council districts. Another 6,000 homes were added in March 1990. Sorting for residents was simple, with all recyclables placed loosely and unbagged in a blue curbside container. The citywide participation rate was then approximately 90%.

The sorting process was conducted in a number of locations using a number of technologies. Based on the success of the program, the Public Works Department decided to move forward and in 1991 gained approval from the mayor and city council for citywide implementation of Phoenix Recycles.

This page: The City of Phoenix wanted to create a recycling program that would capture as much material from the solid wastestream as possible. At left: Javelinas stage a raid.



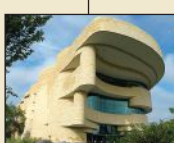
CITY OF PHOENIX, AZ

9/29



House votes to end lobbyists buying meals and entertainment for Congress.

10/29



National Museum of American Indian opens in New York.

11/4

San Francisco hosts first conference on the commercial potential of the World Wide Web.

1995



Last *Far Side* by cartoonist Gary Larson (started 1980).

1/1

America3 becomes first all-female crew to win an America's Cup race.

1/13

Steve Fossett completes first solo balloon flight across Pacific Ocean (9,600 km).

2/22



3/4



Blind teenage boy receives a "bionic eye" at a Washington hospital.

symposia and conferences online, search and access certain publications from the SWANA library; purchase publications and other materials online, and receive training and take examinations online.

In order to provide these services to members, the SWANA International Board of Directors approved a series of investments to upgrade the membership database, integrate it with the financial management and order fulfillment systems, and expand the home page to allow for members-only access and online transactions.

For its membership software package, SWANA chose Siebel Front Office, a Microsoft Partner, which had achieved seamless integration with Great Plains Dynamics, the financial management software at the time.

THE BLUE STREAK

The “Blue Streak” process, which is the association’s policy development and approval process, was approved in March 2001.

Prior to the Blue Streak, the former policy approval process was referred to as the “Blue Border” process (modeled after the “Red Border” policy development process utilized by the EPA). It went into effect in February 1989, with revisions over the years.

The old process was considered laborious, time-consuming, and therefore often ineffective, sometimes taking up to two years to develop, approve and put a policy in place.

SWANA President Steve Viny, serving 1999–2000, spearheaded the revision of the old process, stressing the importance of having a more time-effective, clear, and detailed process.

The development of the Blue Streak started in June 2000, and Paul Stoller, regional council director and Massachusetts Chapter director, was the lead on the policy development work. The new process utilizes the new e-mail technology, crucial in the time-effectiveness of the process.

The staff believed the chapters should be more aware that any member of the International Board and the Technical Divisions directors may be an “originator” of a new policy or revision of an existing policy and

that it should be noted that each chapter may initiate policy development and/or revision through the chapter director (who is a member of the International Board)—and that the Technical Divisions may do the same through their division directors.

Meanwhile, the advocacy program was strengthening:

- **2003**—SWANA supports federal tax credits for the utilization of landfill gas in the final comprehensive energy bill.
- **2004**—SWANA supports section 45 tax credits for landfill-gas-to-electricity production.
- **2005**—LFG along with other renewable resources in America’s Jobs Creation Act, H.R. 4520; SWANA supports the Integrated Waste Services Association’s (IWSA) petition for reconsideration of the Clean Air Interstate Rule (CAIR) and its petition for reconsideration of the Clean Air Mercury Rule; SWANA lobbies for the Recycling Investment Saves Energy (RISE) Act that was included in the Senate energy bill tax title.
- **2006**—Continued support of RISE.
- **2007**—SWANA encourages the Senate to include recycling in S. 2191, America’s Climate Security Act of 2007, which identifies several projects and programs—including agriculture, forestry and land-use—that qualify to provide eligible allowances to covered industries to offset a percentage of their GHG emissions. SWANA also responds to request from House Energy and Commerce Chairman Dingell on the design of a national greenhouse gas control program. SWANA lobbies for the inclusion of waste-to-energy in a national Renewable Portfolio Standards, lobbies with Renewable Energy and Efficiency Business Association for extension of Production Tax Credit, and works with the EPA to approve the Pesticide Container Recycling Rule.
- **2008**—SWANA works with the EPA to develop a greenhouse gas reporting system for solid waste operations.
- **2009**—SWANA supports credit parity for solid waste renewables, proposes specific

changes to H.R. 2454, the American Clean Energy and Security Act, and submits comments on the implementation of the Clean Railroads Act of 2008 and proposed changes to EPA’s Landfill Emissions Factors. SWANA also recommends changes to EPA’s Greenhouse Gas Reporting Program.

- **2010**—SWANA supports the Stationary Source Regulations Delay Act, S.3072, which would delay any new EPA permitting or performance standards rulemaking with respect to carbon dioxide or methane emissions from stationary sources. SWANA and NSWMA support EPA’s LMOP. Also in 2010, SWANA is given the opportunity to comment on the Climate Action Reserve (CAR) draft Organics Composting Protocol (draft Protocol). The association also offers comment on the EPA’s Call for Information: information on greenhouse gas emissions associated with bioenergy and other biogenic emissions. SWANA drastically changes its method of communicating information to members by incorporating the new eLibrary and eSessions into the fold.

KATRINA AND BEYOND

In the aftermath of Hurricane Katrina in 2005, many SWANA members expressed a desire to share the experience and lessons learned by those who have previously had to deal with the management of disaster debris with the state and local government managers now charged with removal and cleanup of the solid wastes caused by the hurricane.

An e-mail was forwarded to SWANA on September 13, 2005, from the State of Louisiana Department of Environmental Quality (DEQ) requesting assistance: “Louisiana is very interested in hearing from other state and local governments on their ‘lessons learned’ from disaster debris handling. Our need is urgent, as we have little time to waste. Specific subject areas included are: school laboratories, household hazardous materials, automobile salvage (tires, lubricating fluids, mercury switches, lead acid batteries, contaminated gasoline/diesel),

8/24



Windows 95 debuts.

9/28



Yitzhak Rabin and Yasir Arafat, sign accord to transfer West Bank.

10/25

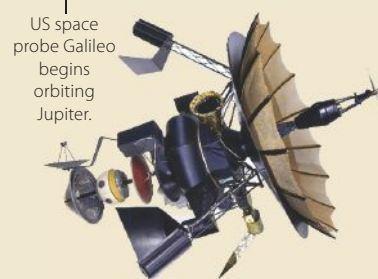
SWANA's 33rd annual international meeting, WASTECON, convenes at the Baltimore Convention Center in Baltimore, MD.



11/20

In a TV interview, Princess Di admits she cheated on Prince Charles.

12/7



US space probe Galileo begins orbiting Jupiter.

propane tanks, white goods (freon recovery, mercury thermostats), and electronic wastes.

"It looks like many communities in the New Orleans region will have to implement a building-to-building assessment and material removal before demolition. If anyone has experience with the issues surrounding abandoned vehicles and condemned buildings, please forward that, too.

"We are attempting to develop a debris removal strategy that will maximize diversion as much as possible, considering the circumstances. Concrete will be used as rip rap or ground up, tires will be chipped and ground, woodwaste will be ground where there is a grinder, etc. Any insight will be greatly appreciated."

Following the receipt of this e-mail, SWANA

sent out a request to each of its eight technical divisions requesting information.

A report was developed to respond to the Louisiana DEQ's request by summarizing the responses received from SWANA members as well as other referenced documents regarding the management of disaster debris. The document was compiled by the staff of SWANA's Applied Research Foundation.

Also, a three-page memorandum was developed by the staff of the Monterey Regional Waste Management District (MRWMD) specifically for the solid waste managers responsible for managing the disaster debris from Hurricane Katrina. The MRWMD provides regional solid waste management services to communities on the Monterey Peninsula in California. These services in-

clude the management and operation of an 1,100 tons-per-day landfill.

The memorandum provided recommendations for staging and processing areas, equipment deployment, and the handling of specific wastestreams, including C&D wastes, disaster-created MSW, HHW, school laboratory materials, automobile wastes, propane tanks, white goods, and electronic wastes.

SWANA was able to collect and donate more than \$26,000 to the American Red Cross, including sizeable donations from many chapters and those closely associated with SWANA.

One item of business in 2006 focused on improving SWANA's training program. At its midyear meeting, the International Board passed a motion to direct staff to develop



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Constance Hornig, Esq., MSW Contracts Counsel, Law Offices
- **June 21–September 6** Permeable Pavement Master Series 4 PDH / 0.4 CEU
David Hein, P.Eng., Vice President of Transportation, Applied Research Associates
- **Sept. 13 Free Webinar!** GEO-BERM Continuous Berm Machine 1 PDH / 0.1 CEU
John McCullah, CPESC #311, and Steve Caldwell, GEO-BERM

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FU_MS1208_House_Various_5p

1996

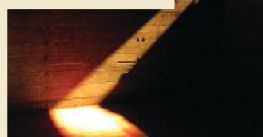
1/08



Blizzard buries eastern US, causing at least 50 deaths.

1/27

Germany celebrates its first Holocaust Remembrance Day.



1/28

Superbowl XXX: Dallas Cowboys beat Pittsburgh Steelers, 27-17.

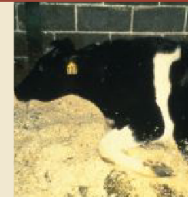
IBM's Deep Blue defeats chess champ Gary Kasparov.



2/10

3/7

First surface photos of Pluto (photographed by Hubble Space Telescope)



UK admits humans can catch CJD (mad cow disease).

3/20

8/26

John H. Skinner, Ph.D., Executive Director and CEO

THE SWANA APPLIED RESEARCH FOUNDATION

The SWANA Applied Research Foundation (ARF) was founded in 2001 and now under the leadership of its director, Jeremy O'Brien, is in its eleventh year (FY2012) of research.

The purpose of the ARF is to fulfill SWANA's mission of "advancing the practice of economically and environmentally sound MSW management" by conducting collectively funded and defined applied research projects that address pressing solid waste issues identified by the foundation's subscribers. The ARF is funded by member jurisdictions and other organizations that contribute an annual subscription fee that amounts to a little over a "penny per ton" of the solid waste collected or managed annually through their systems.

ARF subscribers belong to one or more of four research groups that direct the foundation's research activities:

- Recycling (including waste reduction and composting)
- Collection (of mixed wastes, recyclables, yardwastes, bulky wastes, and special wastes)
- Waste-to-energy (and other recovery systems)
- Disposal

HISTORY

The idea of the SWANA Applied Research Foundation was originally conceived by N.C. Vasuki, the former executive director of the Delaware Solid Waste Authority, in the early 1990s. Vasuki's vision was that each public sector organization would contribute a dollar per ton of waste managed to the foundation, which would then use these monies to fund solid waste research at selected universities.

In October 2000, a historic meeting was held at WASTECON 2000, and initial steps were taken to form a "SWANA Applied Research Foundation." At the WASTECON meeting, the following organizations committed to funding applied research on critical solid waste issues through the SWANA

Applied Research Foundation:

- Delaware Solid Waste Authority
- Central Ohio Solid Waste Authority
- Three Rivers Solid Waste Authority
- Maryland Environmental Service

As a result of this initial funding, a 24-page concept paper was prepared that provided the basis for the development of a prospectus used to solicit subscribers. After receiving and reviewing the prospectus, a total of 23 organizations subscribed to the foundation during its inaugural FY2002 research year.

The enthusiastic support of the ARF by SWANA members is illustrated in the following quotes:

"The Applied Research Foundation is the most exciting new initiative of SWANA. The collection and transfer research will fill a real management need by providing invaluable benchmarking information on solid waste collection activities."

—Derrick Bellows, manager of solid waste, City of Regina, Saskatchewan, Canada

"Good science is the heart of environmentally and fiscally responsible solid waste management. But, for those of us who toil daily with the realities of waste disposal, application of that good science is invaluable. The Applied Research Foundation is positioned to provide us with the hands-on science we need to do our job properly."

—Will Selser, manager of solid waste services, Lewis and Clark County, Montana

SUBSCRIBING ORGANIZATIONS

In FY2012, the ARF has 35 subscribers, who contributed over \$185,000 to conduct applied research. The FY2012 ARF subscribers are listed in Figure 1 and Figure 2.

ORGANIZATIONAL STRUCTURE

- **Management**—Day-to-day management of the SWANA Applied Research Foundation is provided by

Jeremy K. O'Brien, P.E., SWANA's director of applied research.

- **Governance**—The SWANA Applied Research Foundation is overseen by the SWANA Executive Committee and International Board.

- **Subscribers**—Subscribers consist of public and private organizations that are directly or indirectly involved in the provision of municipal solid waste management services.

- **Identification and definition of research topics**—Each subscription year research topics are identified for each functional group (e.g., collection, waste reduction/recycling; waste-to-energy; disposal) by the subscribers who are members of that group. Subscribers in each group serve on a "project advisory committee" during the conduct of the research.

- **Conduct of research**—The scope of work, schedule, budget and work products for each project are developed by SWANA staff and approved by the project advisory committee. The research is conducted by SWANA staff as well as expert consultants and researchers.

- **Financing**—Research projects are supported through annual subscription fees charged to subscribing member organizations. Efforts are made to solicit additional funds from other sources to leverage subscription dollars. Funds received from subscribers are held in reserve accounts with separate financial accounting for each subscriber category.

ACCOMPLISHMENTS

Since its inception, ARF subscribers have invested over \$1.5 million in solid waste applied research. As of FY2012, a total of 30 reports have been published and made available at nominal prices to SWANA members and the general public. In addition, numerous conference presentations and trade magazine articles have been prepared and published.

9/24



Clinton signs Comprehensive Nuclear-Test-Ban Treaty at the UN.

9/24

The Kentucky Chapter is granted chapter status at the SWANA annual business meeting in Portland, OR.

10/1

John Skinner takes over as executive director of SWANA.

1997



Space Shuttle Atlantis Returns to Earth, successful.

1/22

4/29

The Chemical Weapons Convention of 1993 enters into force.



42 million watch "Ellen" admit she is gay.

4/30

Highlights of ARF include the following:

- **Single Stream Recycling** (2003)—This report, prepared under the direction of the ARF's Recycling Group, provided early documentation and analysis of the emerging trend toward the conversion of manual, bin-based curbside recycling to single-stream systems utilizing automated collection vehicles and large capacity rollout containers.
- **Effectiveness of MSW Landfills in Controlling Releases of Heavy Metals to The Environment** (2003)—This report provided a much-needed scientific basis for the evaluation of options for the management of disposed products containing heavy metals, such as electronic wastes (e-wastes). The report's findings were later presented to the Environmental Coalition of the Information Technology Industries Council.
- **Hurricane Katrina Disaster Debris Management: Lessons Learned from State and Local Governments** (2005)—Immediately following Hurricane Katrina, the ARF compiled a report detailing effective local government disaster debris management procedures and policies. This report was provided free of charge to the City of New Orleans and the State of Louisiana.
- **Comparison of Air Emission from WTE and Fossil-Fueled Power Plants** (2005)—This research provided scientific documentation for the EPA statement that "WTE facilities produce power with less environmental impact than almost any other fuel." Specifically, the report documented the fact that the non-biogenic carbon-dioxide emissions from WTE facilities were less than half the emissions officially being reported on the EPA's Clean Fuels website. The EPA subsequently changed its website to reflect the ARF's finding.
- **The Benchmarking of Residential Solid Waste Collection Services: FY2008 Report** (2008)—The need to benchmark solid waste services such as solid waste collection was one of the original reasons for establishing the ARF. This

report provides solid waste managers with never-before-published data on such parameters as collection vehicle maintenance costs.

- **Benchmarking the Performance and Costs of MSW Landfills** (2008)—This report presents the first-ever compilation and analysis of performance and cost data for MSW landfills.
- **Solid Waste Manager's Guide to the Bioreactor Landfill** (2002, 2009)—The ARF has taken an active role in the provision of relevant and timely information on the emerging disposal technology referred to as the *bioreactor landfill*. The publication of two reports on this topic—in 2002 and 2009—has provided the basis for the development of a SWANA certification course on bioreactor landfills.
- **Municipal Solid Waste Collection Needs in Port-au-Prince, Haiti** (2010)—

Following the earthquake in Haiti in January 2010, the ARF formed a SWANA Haiti Response Team to assist the local solid waste collection agency in Port-au-Prince in responding to the dire MSW and disaster debris management problems resulting from the quake.

- **Landfill Disposal Rates of Waste-to-Energy Communities** (2010)—This report provides a detailed analysis of the low per capita disposal rates for communities with WTE systems which were found to be less than 50% of those reported for communities with zero-waste systems.

THE SWANA ARF FY2012 DISPOSAL GROUP

Chester County (PA) Solid Waste Authority
Delaware Solid Waste Authority
Denton, TX
Delaware County (PA) Solid Waste Authority
King County, WA
Lancaster County (PA) Solid Waste Mgmt. Authority
Los Angeles County Sanitation Districts
Metro Waste Authority (Des Moines, IA)
Mecklenburg County, NC
New River (FL) Solid Waste Association
Solid Waste Authority of Central Ohio
Solid Waste Authority of Palm Beach County
SCS Engineers
Three Rivers (SC) Solid Waste Authority
Tucson, AZ
Waste Commission of Scott County, IA
Winston-Salem, NC

THE SWANA ARF FY2012 COLLECTION GROUP

Charlotte, NC
Manteca, CA
Tucson, AZ
Whitby, ON

THE SWANA ARF FY2012 RECYCLING GROUP

Edmonton, AB
Fairfax County, VA
North Vancouver, BC
Solid Waste Agency of Northern Cook County, IL
Monterey (CA) Regional Waste Management District

THE SWANA ARF FY2012 WASTE-TO-ENERGY GROUP

CDM Smith
Gershman, Brickner and Bratton Inc.
HDR Engineering Inc.
City and County of Honolulu, HI
I-95 Landfill Owners Group
Lancaster County (PA) Solid Waste Management Authority
Northeast Maryland Waste Disposal Authority
Three Rivers Solid Waste Authority, SC
Wheelabrator Technologies Inc.

5/1



Toni Blair
elected
PM of UK

6/13



Jurors in
Oklahoma
City bombing
trial sentence
Timothy
McVeigh
to death.

7/1

UK returns
Hong Kong
to China.

10/28

The Arkansas Chapter
is entered on the rolls
at SWANA's annual
membership meeting
in Saint Louis, MO.

9/16



Apple Computer Inc. names co-founder Steve Jobs temporary CEO.

10/4

The second-largest
cash robbery
(\$17.3 million) in
US history occurs
in Charlotte, N.C.

For first time, US
movie box office
receipts pass \$6 billion

12/25



TITANIC

a sustainable five-year funding plan that would detail funding and include a capital funding program for updating and expanding SWANA training and education, which would include but not be limited to options for chapter loans, grants, course fees, and corporate contributions.

At its annual meeting, the International Board approved four recommendations from the Finance Committee.

One established the training investment fund as a separate restricted account into which revenues, including chapter training investments, will be deposited and only used to update and improve the SWANA training program in accordance with the annual program plan and budget as approved by the International board.

The second authorized chapter training investments, where SWANA chapters can loan funds, at interest rates comparable to bank certificates of deposit, to SWANA for updating and improving the SWANA training program. These funds were to be deposited into the training investment fund. The Executive Committee was authorized to establish the terms and conditions for the chapter training investments, including the interest rate, term, repayment provisions and other provisions. The chapter training investments would be separate and distinct from the chapter loans made for the e-business program. The Executive Committee is authorized to incur up to \$500,000 in debt for this purpose.

The third established training sponsorships where SWANA corporate members, exhibitors, other members and chapters can donate funds for updating and improving the SWANA training program. The funds are to be deposited into the Training Investment Fund. The International Board established the benefits, terms, and conditions for the training sponsorships, including sponsor acknowledgement and benefits, and provisions to safeguard against product endorsement and conflicts of interest.

The fourth recommendation is budget guidance, in which the International Board

directs the finance committee, in the development of the operating budgets for fiscal year 2008 and beyond, to set aside funds in the training investment fund so it is a sustainable fund capable of repaying the chapter training investments with interest when they come due, and paying for the updates and improvements of the SWANA training program in accordance with the Five-Year Strategic Plan and Annual Operating Plan.

To further support training, the International Board directed the planning committee to prepare annual training plans to upgrade and sustain the SWANA training program in accordance with the expanded SWANA training and education program submitted to the International Board in May 2006.

The training plans are developed in consultation with representatives of each of the SWANA technical divisions, a member of the finance committee, a member of the planning committee, a corporate director, and SWANA staff, and include a prioritized list of SWANA training courses to be updated.

The list identifies the schedule for upgrading the courses and proposes a revised cost estimate for each course. These plans were prepared by mid-December 2006 and incorporated into the Five-Year Strategic Plan and fiscal year 2008 program plan. The plans were also forwarded to the finance committee for development of the fiscal year 2008 and five-year budget.

In 2007, SWANA created a body of knowledge (BOK) to identify the critical skills and knowledge required for managers operating in specific disciplines. The first BOK developed was Manager of Landfill Operations (MOLO). There is now a BOK for the other eight disciplines, including bioreactor and leachate recirculation landfill, MSW collection systems, composting programs, construction-and-demolition materials, household hazardous waste/conditionally exempt small-quantity generators (HHW/CESQG), collection facility operations, MSW system management, recycling systems, and transfer station systems.

The last BOK (HHW) was finished in

2010. In 2011, SWANA began a review and update for BOK associated with scheduled course updates, once every five years. Updates have been completed for MOLO, HHW, C&D, and transfer station.

With the development of BOKs, certification exams for all courses were also updated. The process began in 2007 with MOLO and concluded in 2010 with the update of the recycling exam.

In 2009, the certification exams were branded to match the certification course branding.

In 2010, all exams were edited to include metric measurements. A Canadian-specific metric version was completed for MOLO, and a Spanish version of the MOLO exam for US and metric was completed.

In 2011–2012, SWANA established a new process for exams. A psychometrician is expected to review all exams and deliver a report on their validity and reliability. A professional item-writer is expected to work with SWANA's faculty and other Society of Mechanical Engineers members to create a new bank of questions for each exam so that they are fair, valid, reliable and defensible.

Chapter Partnering is another program with ongoing improvements. The program's intent is to offer training opportunities at the regional/local level, build visibility for SWANA and chapters, increase membership, and certify more solid waste professionals, generate revenue for the chapter.

SWANA and the chapters participate in a revenue sharing partnership. SWANA sells training materials at a reduced price negotiated each year.

Contract training is an offshoot of the Chapter Partnering and was branded in 2009 with a look and color scheme to differentiate it from the certification courses. It was re-branded in 2011 as SWANA Training@Work.

The program's intent is to expand training beyond SWANA training centers at major conferences and symposia, build visibility for SWANA and chapters, increase membership, certify more solid waste professionals, and generate revenue.

In 2009, Kessler Consulting designed new

1998

1/1

All California bars, clubs and card rooms must be smoke-free.

1/26

President Clinton says, "I did not have sexual relations with that woman, Miss Lewinsky."

1/26

Woman's Clinic in Birmingham, Alabama, bombed; 1 killed.

1/29



2/12

Intel unveils its first graphics chip i740.

2/23



Intel launches 333-MHz Pentium II chip.

covers for the certification courses and created a new brand. The manuals were still printed on a three-hole pager and housed in bulky three-ring binders. That same year, SWANA's marketing department created a new look for the onsite and home study courses, taking them from three-ring binders and clip art to professionally-produced and bound materials.

SWANA Training@Work has two options: in-house training and onsite training.

In-house courses are sold as packages through SWANASTore. Managers or supervisors can teach these user-friendly courses in one session or as modules over several days, weeks, or months. Courses offered include collection operations basics, landfill gas basics, landfill operations basics (available in

Spanish), and waste screening at MSW management facilities (available in Spanish).

Onsite courses include the nine certification courses and the four courses offered through the in-house program. The difference is SWANA Training will arrange for a SWANA faculty member to teach on a location. The courses are available on a contracted basis with incentives for new membership.

Premium packages are available that include a certification course, certification exam, a one-year SWANA membership, and a one-year Tech Division Membership. Standard packages include the certification course and exam only.

SWANA piloted the program in 2011 with success and is developing a comprehensive marketing campaign to promote

the SWANA Training@Work program targeting the private sector.

Until 2009, SWANA printed all training material in-house and maintained a large inventory of course materials, which proved to be a labor-intensive and time-consuming process. Beginning in 2009, the training department explored working with print-on-demand and fulfillment vendors to take over printing and shipping training materials.

In 2010, SWANA entered into an agreement with Omnipress, a well-known and innovative print fulfillment house that works primarily with associations. The arrangement with Omnipress allows SWANA to print and ship training materials all over the world without housing inventory. Additionally, SWANA has the capability of updating

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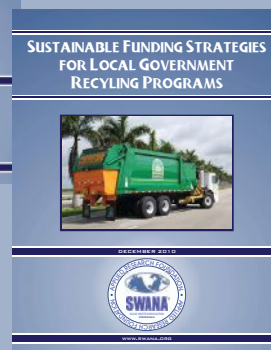
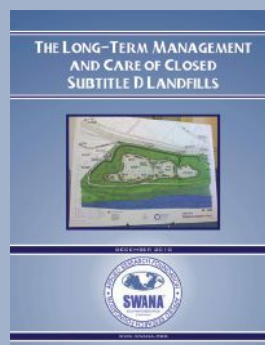
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- Mitigate risks of new technologies
- Network with public and private sector leaders
- Share your opinions and insights
- Positively contribute to your career, your organization and the solid waste industry as a whole!

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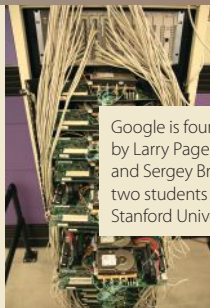
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9/7



Google is founded by Larry Page and Sergey Brin, two students at Stanford University.

11/20

The first module of the International Space Station, Zarya, is launched.



12/26

Iraq announces its intention to fire upon U.S. and British warplanes that patrol the northern and southern no-fly zones.

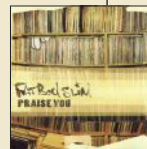
1999



The Euro currency is introduced.

1/1

Fatboy Slim (Norman Cook) achieves his third UK No. 1 single with "Praise You."



1/10

4/20



Columbine High School (Jefferson County, CO.) massacre: 13 killed, 24 injured

UPLIFTING EXPERIENCE

It was 1973. Environmental issues were beginning to take center stage, Nixon was in the White House, and the reality-based television program of choice for most of the nation was called the Watergate hearings. And in the heart of Arizona, a new method of trash collection that would revolutionize the waste industry was being built.

Waste collection today is dramatically less labor-intensive than it was 30 years ago. Prior to the existence of automated equipment, early trash trucks relied on brute force to get trash from the curb to the dump. But the physical aspect of manually lifting and dumping 7 to 10 tons of trash into a truck's hopper caused injuries.

The city of Phoenix believed there had to be a better way. "Phoenix has been pretty innovative over the years," says Joseph Franklin, deputy public works director for Field Services. "[City officials] thought service to the customer, having their own container, cleaning up the neighborhoods and being able to pick trash up in a more efficient way was really important."

So a few inspired minds put their heads together and began one of the first automated collection systems in the country. "[Officials] saw [automation] as a way to help industrial claims and to reduce labor forces," Franklin says.

Ron Jensen, Phoenix's public works director, was the driving force behind the development of the first automated collection truck system "He actually is the one who started the privatization effort here as well," Franklin says.

TINKERING WITH EQUIPMENT

Obviously, automation relies on equipment, which Franklin remembers vividly as the biggest hurdle. "I started as a me-

chanic in 1979 and worked on the stuff that the city was running. Most of the equipment was farm-machinery hydraulics and stuff built in the basement," he says. "We had a hydraulics shop that had eight or nine people working internally, building a lot of components. We built our own lifts and did those things to support ourselves because the industry wasn't mature enough."

As the equipment developed, it looked as if the early machines had unlimited potential in waste collection applications. "It was so new for the drivers, for instance, that they started driving on the other side of the truck," Franklin says of right-hand drive trucks. This changed how and what drivers could pick up. Phoenix was getting out of the front-loader business at the time and believed that automation technology could be applied to this service.

"That was the end-all, and we were going to use automation for everything. Thirty years later, we see that it doesn't fit everywhere, and it's not everybody's end result," Franklin says.

TWO SETS TO TEACH

The conversion to automated involved more than just trucks. Union employees were concerned that there would be layoffs with the new technology. "We went from three-man crews to one-man crews—that was an issue," Franklin says, "but we dealt with the unions up front." No one was laid off, but employees were transferred to work on bulk trash pickup, which was handled with pickup trucks and trailers.

Then, employees and residents required training. Residents who were used to just tossing trash into a can in their alley had to be educated on the new system. "About 30% of my collection is in alleys, so teaching [residents] to bag and

tie their trash from a health perspective and to throw it in [the container] was a big issue...making sure the kid throws it in there and not on the ground," Franklin says with a chuckle. "We still deal with those kind of things, but back then it was probably more important."

CRASH COURSE ON CARTS

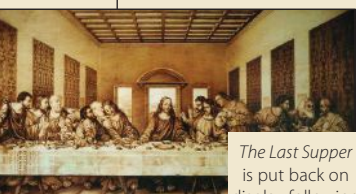
An automated truck without a cart is not very practical, so Phoenix made a point to test various manufacturers' carts in the early years. "I have some of everything," Franklin observes. "I've got about 850,000 carts in service, and we probably have one of each."

The city also was lucky that Heil Environmental Industries, Chattanooga, TN, recognized the need for a system approach. It didn't hurt that the company had facilities located right in Phoenix. "We still have some of those lime-green [Rotomold] carts in service from the 1970s that have never [been] destroyed. We lucked out because they were right here in town."

Nevertheless, compatibility between the carts and the early arm systems was an issue. "I don't think the cart industry was mature enough to work with the equipment. Somebody built a cart and the equipment tried to grab it so tight that it just smashed the carts in half," Franklin remembers.

It wasn't until the mid-1980s that automation matured to where it was no longer a piecemeal approach. "Around 1985 was really the first time that we bought trucks that were automated trucks," Franklin says. "Companies were manufacturing cylinders to better tolerances, and they realized that we were going to be doing a million cycles on this stuff—it's not like a rearloader. It was kind of a turning point where we weren't going to go back to farm machinery."

5/28



The Last Supper is put back on display following 22 years of restoration.

7/12

Lori Scozzafava,
Deputy Executive
Director

10/9



The last flight
of the SR-71

10/12

The Day
of Six
Billion: The
proclaimed
6-billionth
living human
in the world
is born.

12/7



The RIAA files
lawsuit against
the Napster on
charges of copyright
infringement.

12/31

Control of
Panama
Canal reverts
to Panama.

BEYOND AND BACK TO THE BASICS

By 1985, Phoenix automated its last area and purchased 50 or 60 trucks, according to Franklin. But the drive to push this new envelope to its maximum potential forced the city to become a test-bed for technological advances that, in hindsight, were not always what the city needed.

"At one time, we probably had the largest automated fleet in the country, and we thought we knew best," Franklin says. "We kind of drove the manufacturers down a path that I'm not so sure they wanted to go and, in retrospect, we probably shouldn't have gone. We tried to get really high-tech and build a bulletproof truck."

Now, Franklin says, the city has returned to its roots and become smarter about buying. "We got off on a tangent, and I'll agree that we shouldn't have," Franklin says. "Today, we are back to basics. It's just garbage, and we're just trying to pick cans up."

NEWS OF THE DAY

Phoenix currently services 340,000 customers with a fleet of 125 automated sideloaders. The division employs 365, with 200 solid waste operators and 30 employees involved in cart repairs and delivery. And the city pioneered the concept of managed competition and competes with the private sector to provide service in each of its six areas.

Phoenix also operates a fleet of 43 rearloaders that handle bulk trash collection and illegal dumping, and runs a fleet of 10 rolloff trucks that service city facilities and citywide cleanups. Although Phoenix is prohibited from providing full commercial collection activities, the city maintains three frontloaders to provide multifamily collection services where automated servicing is impractical.

"We do twice-a-week collection in Phoenix," Franklin says. The state of Arizona mandates twice-a-week garbage collection, but the city received a vari-

ance to provide once-per-week garbage collection and once-per-week recycling collection on a Monday-Tuesday, Thursday-Friday schedule.

Because of the need to maintain a sharp edge against the competition, equipment reliability and low cost are critical to Phoenix's success.

"I don't want a truck that can pick up cans in seven seconds but is down for two hours on the route every day getting tweaked," Franklin says. "No matter what warranty I have, it's still a problem when I've got a quarter of a million dollars tied up in a garbage truck and it's down. So in the past couple of years, Franklin notes, he's been focused on getting trucks up and running every day.

Franklin says he's somewhat surprised by automation's popularity and growth in the past 30 years. "I am amazed at some of the cities that have automated that you wouldn't have thought would have done that because of climate, the way the streets are laid out, some of those things. People have some very big hurdles to climb in automation in some eastern cities," he says. "But, you know, you see more and more people doing it, and they find ways around obstacles."

This has caused new manufacturers to enter the market with automated products. And the increased demand is pushing manufacturers to not become complacent, Franklin says. "The market adjusts to what's needed to do the job," he says.

Meantime, Franklin and his staff continually tweak their automated system to improve efficiency.

For example, the city is examining tandem collection trucks that allow the driver to fill and haul two loads without making two separate trips to the landfill.

"I am going to try to keep the collection operator on the route and move equipment to and from him," Franklin says. "The more that you can keep operators doing what they are doing, the better off we are."

Greenwaste collection is another looming program that offers Phoenix exciting possibilities, and the city is hoping to improve the marketability of its recyclables. The city also will be bringing a computerized routing system online in the coming year.

"We're going to reroute the entire city, which will be quite exciting," Franklin says.

So for all the heartaches the city of Phoenix might have experienced in the '70s as the city built its automated collection program block by block, Franklin thinks the operation's benefits continue to pay off. "It amazes me," he says, "I didn't think it would happen."

PHOENIX AT A GLANCE, 2012

Tony Miano, deputy director

Operations: Contained collection twice per week (one day garbage and one day recycling) and bulk trash collection once each quarter.

Services and Service Area: The city is approximately 550 square miles. Phoenix manages four regions, divided into 10 service areas.

Number and Types of Trucks: For contained collections, the city operates six frontloaders and 201 sideloaders. For bulk collections, the city operates 41 rearloaders. The city also recently signed a three-year contract with Dadee Manufacturing to purchase Scorpion automated sideloaders.

Number of Employees: 503

Most Interesting: The city has 50 specialists who go out every day to manage customers and operate the call center, which receives approximately 10,000 calls per month.

2000



2/13

The last original *Peanuts* comic strip appears one day after Charles M. Schulz dies.

6/1

The Patent Law Treaty (PLT) is signed.

6/13



President Kim Dae Jung of South Korea meets Kim Jong-il, leader of North Korea.

9/15

Opening ceremony of the XXVII Olympics in Sydney, Australia



11/2



The first crew arrives at the International Space Station.

11/15

Founding of Applied Research Foundation

its materials on demand.

Several courses went through updates in 2009 and 2010, including home study courses update (SWANA Training @ Home), Landfill Operations Basics (formerly TSLOP), Waste Screening at MSW Management Facilities, and Waste Screening at MSW Management Facilities (Spanish), Collection Operations Basics (formerly TCOP), Construction and Demolition Debris Management (formerly C&D Debris Primer), Landfill Operations Basics (Spanish), Landfill Gas Basics (updated by the LFG Division), On-Site Course Update (SWANA Training@Work)

Over the years, SWANA has had partnerships and joint certifications with several industry associations.

The US Composting Council is a joint sponsor of the Managing Composting Programs exam.

The North American Hazardous Materials Association NAHMMMA is a joint sponsor of the HHW/CESQG Collection Facility course and exam.

The Construction Materials Recycling Association is a joint sponsor of the Managing Construction and Demolition Materials course and exam.

SWANA training and testing centers are now part of all SWANA conferences and symposia.

SWANA began offering certification courses via webinar in 2011 with MOLO, Recycling and Composting.

In 2009, at its midyear meeting, the International Board approved the addition of one representative from each technical division to the International Board for a provisional period of three years, pending bylaws amendment and membership approval.

It was recommended that the Technical Divisions Executive Committee representative position be filled by one of the seven representatives. The Executive Committee would review and recommend International Board action at the end of the three-year provisional period.

Also, in 2009, a number of changes and

updates were approved. One was that the Technical Divisions Executive Committee Representative (TDECRC) be elected separately from the TDIBRs as established in the draft MA-3 revision.

In response to earlier comments from the International Board related both to the TDIBR and other issues, the bylaws were to be edited to state that an individual may not hold more than one position on the International Board and no International Board member may cast more than one vote on any motion, proposal, action, or other matter.

WASTECON HIGHLIGHTS 1997–2011

The 35th Annual WASTECON was held in St. Louis, MO, in October 1997. It was the first WASTECON with John Skinner as CEO. Another first: the Outstanding SWANA. Conference Attendance Record (O.S.C.A.R.) Club was formed.

The 36th Annual WASTECON was in Charlotte, NC, in October 1998. The International Solid Waste Association (ISWA) Congress was hosted by SWANA at WASTECON for the first time. Robert Ham of the University of Wisconsin–Madison was the Lawrence Lecturer. The general session was “Public Corporations and Privatization: Lessons From Around the world.”

The 37th Annual WASTECON was in Reno, NV, in October 1999. The first Training Center was held at WASTECON (Principles, Recycling, Collection, Transfer Station, Operational Issues for Landfill Managers, LFG O&M, Strategic Outsourcing, Paying for Your MSW System, Business Planning, Compost Workshop, Solid Waste Manager Workshop).

The Lawrence Lecturer was Geoffrey Eustace Blight of Witwatersrand University. The keynote address was “Garbology,” by W.L. Rathje, director of the Garbage Project at University of Arizona. The networking event was centered on “The Fabulous 50s.”

The 38th Annual WASTECON was in Cincinnati, OH, in October 2000. The conference theme was Solid Waste Management in the New Millennium. The opening session panel was “Public-Private Partnership—Perfect Match?” A networking event was held at Union Terminal. The Lawrence Lecturer was Harry A.J. Hotink of Ohio State University.

The 39th Annual WASTECON was held in Baltimore, MD, in October 2001, shortly after 9/11 and amidst the anthrax scare. The DoD held its recycling workshop at WASTECON. The C&D training course made its debut.

The keynote speaker was Marianne Lamont Horinko of the USEPA. The Lawrence Lecturer was Professor William L. Rathje of the

MY WASTECON EXPERIENCE By Tammy Hayes

This year will mark my 22nd WASTECON in a row, although it wasn't called that the first time I attended one in 1991 in Cincinnati. Back then, I guess it would have been the GRCA Annual Conference, or something to that effect. At that time I could never have conceived of what a profound impact SWANA would have, not only on my career, but also on my life.

I was marketing our solid waste services, and WASTECON was just part of that marketing effort. Over the years, as our firm grew and roles evolved, I eventually ended up as our corporate conferences manager. But I will never forget that WASTECON was my first foray into the world of trade shows and professional conferences.

As SWANA and WASTECON grew up, so did I. I've made some great business contacts over the years, but even more impor-

TAMMY HAYES



11/16

Bill Clinton becomes the first US President to visit Vietnam since the end of the Vietnam War.

American Vice President Al Gore delivers his concession speech.



12/13

2001



1/15

Wikipedia, a free Wiki content encyclopedia, goes online.

The United States loses its seat on the UN Human Rights Commission.

5/3



AbioCor self-contained artificial heart created

7/2

University of Arizona. The networking event focused on a casino theme.

The 40th Annual WASTECON was in Long Beach, CA, in October 2002. The keynote address was given by Linda Mouton-Patterson, of the California Integrated Management Board (CIWMB). The Lawrence Lecturer was Charles Williams of Waste Management. A casino theme was the focus of the networking event. The DoD held its recycling workshop at WASTECON. It was Don Warren's last WASTECON as its chairperson.

The 41st Annual WASTECON was in St. Louis, MO, in October 2003. It was Dave

Crafton's first WASTECON as its chairperson. "Blues" was the theme of the opening reception, and the networking event theme was "Sports Bar." The SWANAettes performed at the conference, and it was the last time there was a separate awards banquet. The DoD held its recycling workshop at WASTECON. The Lawrence Lecturer was Bill Wolpin of *Waste Age* magazine.

The 42nd Annual WASTECON was in Phoenix, AZ, in September 2004. The Lawrence Lecturer was Steve Passage, of Montenay (Veolia). The keynote speaker was Rocky Blier. TASWER held its training at WASTECON. The opening reception was a "Biker Night" theme, and the networking event was a '70s disco party theme. The awards luncheon included association awards.

The 43rd Annual WASTECON was held in September 2005 in Austin, TX. The keynote speaker was Bruce Jenner. The Lawrence Lecturer was Jeff Cooper of the Environmental Agency for England & Wales. The Texas Chapter Road-E-O held on September 30.

The 44th Annual WASTECON was in Charlotte, NC, in September 2006. The theme was "Accelerate Your Career." The keynote speaker was Jay Frye, owner of the Waste Management NASCAR team car. The Lawrence Lecturer was Scott Cassell of the Product Stewardship Institute. The opening reception was based on a NASCAR theme.

The SWANA North Carolina chapter hosted the North Carolina Landfill Operators and Transfer Station Operators courses.



From top: Tammy Hayes (left) on the show floor in Reno in 2007 with Deb Bush (center) and Pam Gratton (right);

Tom Parker in the IB Suite in 2007 demonstrates his tattooing skills; Bob Hauser and Don Ross dance to "YMCA" during a Wednesday night party at the Busch Gardens in Tampa in 2008.

tantly, I've made some great friends. Although WASTECON is one of the busiest conferences I attend every year because of my in-depth involvement in the organization, it's also the most fun. I look forward to seeing everyone year after year and having more than a few laughs.

While there are too many stories to pick out only one, it's always that feeling of warmth and camaraderie that stands out in my mind. SWANA attracts great people. I

encourage everyone to get more involved, and I hope you find it as professionally and personally fulfilling as I do!

Tammy Hayes is corporate conferences manager with CDM Smith.



9/11

Terrorists hijack passenger planes, crashing them into World Trade Center and the Pentagon.



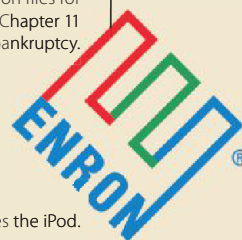
10/7



The US invasion of Afghanistan starts with an air assault and covert operations on the ground.

10/23

Enron files for Chapter 11 bankruptcy.



Apple releases the iPod.

12/2

12/6

The Canadian province of Newfoundland is renamed Newfoundland and Labrador.

The chapter also hosted the networking event at the Charlotte Motor Speedway, complete with pace car rides around the track.

The 45th Annual WASTECON was in Reno, NV, in October 2007. The keynote speakers were Scott Ginsberg, The Nametag Guy, and Sandra Cointreau of the World Bank. The Lawrence Lecturer was David Steiner of Waste Management.

Lancaster Solid Waste Management Authority (LCSWMA) sold credits through the Chicago Climate Exchange on the exhibit hall floor. That year's WASTECON introduced exhibit hall technical sessions, Breaks at Booths, the WASTECON new member orientation, and a product showcase on the exhibit floor. It also was the kickoff for the Energy-Climate-Waste Challenge of 2008. SWANA's Nevada

chapter hosted the networking event at the National Bowling Stadium.

The 46th Annual WASTECON was held in Tampa, FL, in October 2008. The conference theme was "The Energy, Climate & Solid Waste Connection." The conference introduced The Break Zone: premium exhibit space where sponsors provided lounge and refreshments for the attendees in the exhibit hall.

The general session speaker was Quiet Riot. The Lawrence Lecturer was Jean Bogner of Landfills+ Inc.. The keynote speaker was Roberta Fernandez of the Climate Project. SWANA's Florida Chapter hosted the networking event at Busch Gardens.

The 47th Annual WASTECON was held in Long Beach, CA, in September 2009. The theme was "The Power of Solid Waste." The

opening breakfast speaker was comedian Tim Clue. Keynote speaker was Tom Szaky of TerraCycle. The Lawrence Lecturer was Dr. Enzo Favoino. The Presidential Keynote Speaker was T. Boone Pickens. The founding chapter of SWANA hosted the networking event at the Queen Mary.

The 48th Annual WASTECON was in August 2010 in Boston, MA. It shared the location with the American Public Works Association's Annual Congress. The conference theme was "Strengthening the Industry." The keynote address was given by Afterburner. The Lawrence Lecturer was Water Nissen of CDM. The awards were moved to the opening brunch. The opening reception had a "Red, White, and Blues" theme. Due to the change in the meeting pattern, SWANA added pre- and post-conference bonus technical sessions. SWANA's Massachusetts chapter hosted the networking event at Fenway Park.

The 49th Annual WASTECON was held at the Opryland Hotel and Convention Center in Nashville, TN, in August 2011. The conference theme was "The Best in Solid Waste." It was the first time WASTECON was all under one roof. The keynote was "The Game Changers." The show saw the introduction of the waste conversion technology showcase and pavilion, the certification celebration banquet, Ignite WASTECON, and the elected officials track. The opening reception was based on an "Elvis Night" theme. SWANA's Tennessee chapter hosted the networking event at the Wild-horse Saloon.

In the meantime, SWANA has exhibited improved financial management. It stated restricted reserves goals established in MA-18 in June 2000, made annual contributions to reserves of \$4 per member, created detailed monthly financial reports, showed steady growth in net assets over a 10-year period, and demonstrated 10 years of clean audits. **MSW**

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2002

1/1

Euro banknotes and coins become legal tender in twelve of the European Union's member states.



1/8



President George W. Bush signs into law the No Child Left Behind Act.

1/9

Michael Jackson receives the Artist of the Century award at the American Music Awards.

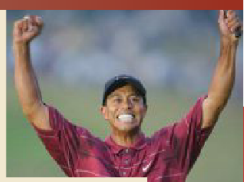


1/23



Reporter Daniel Pearl is kidnapped and murdered in Karachi, Pakistan.

4/14



Tiger Woods becomes the third golfer to win The Masters in two consecutive years.

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Looking Ahead

Poised for the Future

As the world's population increases with the potential for an increase in waste with less space in which to manage it, and as rules and regulations become tighter, SWANA is poised to support its membership with the necessary education, information, and training to stay on top of solid waste trends.

"The future is coming on, whether we want it to or not," says Anne Germain.

Germain, SWANA's vice president and president elect, is chief of engineering and technology of the Delaware Solid Waste Authority. She talks about SWANA's future challenges and how the association is poised to address them.

And while it may be an urban myth, she references a story that, the person in charge wanted to shut the US Patents Office down at one time, "because there was nothing left to invent."



2003

2/4

3/11

3/13

6/1

6/10

8/11

The Space Shuttle Columbia disintegrates on re-entry.

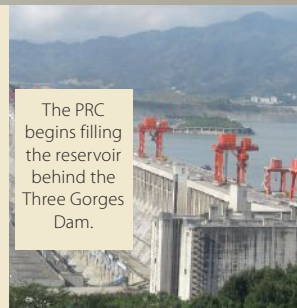


The International Criminal Court holds its inaugural session in The Hague.

350,000-year-old footprints of an upright-walking human found in Italy.



The PRC begins filling the reservoir behind the Three Gorges Dam.



The Spirit Rover is launched, beginning NASA's Mars Exploration Rover mission.



NATO takes over command of the peacekeeping force in Afghanistan.



CATERPILLAR

"It sounds like the most ridiculous thing in the world at this point, but all of us are amazed every year about something new that we've never heard of," says Germain. "Things are continuing to accelerate faster. We have to be prepared to react, accept and move on and adapt."

"Solid waste management is becoming increasingly complex and stratified," Germain adds. "We have to provide good advice and service to our members and make sure we meet their needs."

Years ago, there was very little recycling, very few waste-to-energy products, mass-burn projects, and very little composting, Germain says.

"It was all about converting from dumps to sanitary landfills and making sure we protected our groundwater," she says.

"Most of our SWANA members have pro-

tected their ground-water and the air. But in doing that, many of them have built these large landfills. People are now saying we've protected the environment in this one way, but we are putting so much material into these landfills, can we reuse it? Can we be more judicious and smart about how we manage our resources with a continuing population growth?"

SWANA is poised to help its members answer that question, says Kathy Callaghan, SWANA's associate director.

"SWANA always tries to be on the cutting edge in the

industry," says Callaghan, whose duties include supporting the Executive Committee and the 70-member International Board. She also administrates SWANA's scholarship and internship programs.

Callaghan notes that rapidly changing technology is the driver for an industry that will change more quickly in ensuing years than it has over the past 50 years.

SWANA Executive Committee member Brian Tippets believes that, in the future, most landfills will have site master plans that include ecological repatriation of the property to the landscape. "SWANA already stands out as an industry leader in promoting landfill properties as ecological resources," he says, "having begun to outline how to do this in several of its eSessions and chapter conferences. In addition, SWANA's second generation of MOLO now teaches

the use of native vegetation for landfill covers. As our industry changes to repatriate landfill properties to a healthier ecosystem, I expect to see less opposition to landfills and a legacy that returns more to our children and grandchildren."

SWANA's challenges going forward center on the need to maintain and grow its infrastructure within the tight constraints of the current economy, says Michelle Leonard, the Technical Divisions representative to the Executive Committee.

The Technical Divisions include collection and transfer, landfill management, landfill gas, planning and management, waste-to-energy, recycling and special waste, and communication, education, and marketing.

"Everyone likes their garbage to get picked up and go somewhere, but that costs a lot of money and it's not a sexy thing everybody likes to pay for," she says. "That's a real challenge for us."

"Another challenge is while we're looking at new things to do with waste, some of the existing laws and regulations may pose barriers to do things differently. We've collected it and landfilled it for so long. We do recycling. If we're talking about a real paradigm shift and going towards zero waste, the challenge will be to educate everyone and get everyone to accept that."

While some state and federal programs support energy conservation and technologies, "in many areas, they don't recognize solid waste energy conversion as part of those programs," Leonard says.

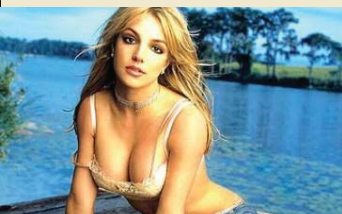
The paradigm shift towards zero waste entails not just looking at recyclables, but "doing everything we can to the wastestream before you dispose of the residuals," she says. "Zero waste is a real trend, so I think the energy from waste or new technologies that convert waste to some type of energy source are trends that are here to stay."

Another industry challenge going forward is that of extreme weather events, which can

2004

1/4

Britney Spears has her surprise marriage annulled within 55 hours of tying the knot.



2/1



Janet Jackson's "wardrobe malfunction" during the halftime show of Super Bowl XXXVIII

4/1

Google introduces its Gmail product to the public.

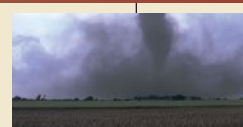


5/17



Massachusetts becomes the first US state to legalize same-sex marriage.

5/22



Hallam, NE, is wiped out by a powerful 2.5-mile-wide F4 tornado.

9/20

Nazi-hunter Simon Wiesenthal is awarded an honorary knighthood.

overwhelm a solid waste system, says Jeremy O'Brien, the director of SWANA's Applied Research Foundation.

"It's amazing to me how frequent the natural disasters are in terms of hurricanes, tornadoes, and earthquakes," O'Brien says. "We used to not plan for those, but now we're starting to plan for them."

Financing solid waste management services also is a concern moving into the future, O'Brien says.

"That's why we're focusing on those key elements of looking at our systems from an economic development perspective, making them as efficient as possible and making sure the service is a needed service," he says. "A lot of communities pick up recyclables at the curb but also have drop-off centers for them. That's duplicative. There's an opportunity to make that system more efficient."

Increasing populations also figure heavily into future planning.

"Waste per capita in the United States is still the highest in the world, probably twice that of other countries," says John Skinner, SWANA's chief executive officer and executive director. "The volumes of waste are going to be increased and the pressures that are going to be placed on communities to manage those wastes are going to increase."

O'Brien notes that as the population changes, the amounts and types of waste change, as do the per capita rates.

"When you do waste management studies, you try to first find out how much waste is being generated and relate it to the population in the service area," says O'Brien. "If there's a large portion of the population that's not documented and is illegal, then they're all generating waste, and your per capita rates look high."

With a changing population, "we need new ways of getting the message out to the different segments of the population," O'Brien notes. "Consumer habits are changing. All of that affects the waste. We have to continue to keep on top of that."

There are watersheds and airsheds. Within the solid waste sector, there is a kind of



Outagamie County WI's cogeneration facility produces both electricity and heat for the county's highway building next door.

OUTAGAMIE COUNTY, WI

"waste shed"—waste that moves among communities.

Skinner points out there is a large amount of interstate transport of waste from communities that generate it to communities that process and dispose of it.

Expect to see more of that.

"On a national basis, there is a fair amount of landfill capacity in the United States," he says. "The national average is around 25 years, but some locations have only five to seven years of capacity left."

It's difficult to site new facilities where political opposition is strong, Skinner notes.

"People are looking outside the community to other facilities that have the capacity to dispose of their wastes," he says.

What will tomorrow's trash look like, and how is the industry positioning itself to deal with it?

The topic of electronics continues to be on the radar, Germain notes.

"It started largely with CRT screens because of the mercury content in them, but most of the CRT screens went away as quickly as they became the center of attention, which is funny when you think about how everything accelerates so much," she says. "Now it's all about electronic goods and the turnover rate and how quickly they're disposed of."

Skinner predicts the industry will shift

to a greater emphasis on resource management, energy recovery and resources from waste, with product stewardship becoming more prevalent.

Allen Lynch, manager of the North Shore Recycling Program, North Vancouver, BC, says that Canada has become a leader in Extended Producer Responsibility (EPR) Programs. In British Columbia (BC) alone, there are 14 industry-managed not-for-profit EPR recycling programs covering everything from electronics and beverage containers to paint and batteries. The Canada-wide Action Plan for Extended Producer Responsibility calls for all jurisdictions to regulate and implement an EPR program for packaging and printing materials by 2015. This will have a profound effect on how municipalities across Canada handle their residential solid waste. In BC, the EPR program for packaging and printed papers will take effect on May 14, 2014 and it could be the biggest change in waste disposal since the creation of the blue box. Rather than residents paying for the recycling of these products through their taxes, the companies that produced the material for sale in the first place will be picking up the tab. It will result in annual savings for BC municipalities of \$60 million to \$100 million. Make no mistake: EPR programs are here to stay in Canada and they will increase in the US as well. The future is here in Canada.

2005

1/9

Rawhi Fattouh succeeds Yasser Arafat as head of the Palestine Liberation Organization.

1/10



A mudslide in La Conchita, CA, kills 10 people.

1/26

Condoleezza Rice becomes first African American woman Secretary of State.



2/8



Israel and Palestinians agree to cease-fire.

2/15

YouTube is launched in the US.



3/4



United Nations warns that about 90 million Africans could be infected by the HIV virus.

8/29

Katrina efforts

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Extended producer responsibility and product stewardship legislation is taking place in parts of the US, too. Producers are taking responsibility for designing products that can be more easily recycled, Skinner notes.

"If that happens on a large scale, the entire structure of waste management in North America will change drastically," he adds.

While the wastestream experiences significant impacts from consumer electronics, other products are now joining the force.

"A lot of Canadian provinces have programs for many product types," says Skinner. "It's no longer just mercury-containing products or consumer electronics that have hazardous materials in them. They're also thinking about producer responsibility for recycling of packaging and printed materials."

There also will be disposal challenges related to the switch to compact fluorescent light bulbs in 2014 as incandescent lights fade away, Germain points out.

Pharmaceuticals are another wastestream challenge.

"I don't know if we as a solid waste industry are going to take the leadership role there, or how much it's going to involve additional regulation because of the limitations that are imposed on us for segregating that material out because they are controlled substances," Germain says.

The stratification of waste continues to increase, Germain says.

"There's been some compression of that with single-stream recycling versus having to separate all of the recycling out to its individual components. I think there's stratification occurring in other areas with the composting, electronic goods, and hazardous waste," she says.

Another factor that will affect the overall worldwide dynamics of how waste is managed, are efforts to control greenhouse gases and limit global warming, says Skinner.

"That's not something that's politically popular in the US today, because of the recession and the economy, but it's a real worldwide issue. Many aspects of waste management will be affected by that," he says.

"I believe there will be a significant effort to move towards more renewable sources of energy, which we're doing on a limited scale today," Skinner adds. "In the future, international events and activities may drive that to a far greater extent."

Skinner says there could be a "whole new suite of technologies" coming online.

"Today we have three basic technologies to manage wastes: landfill, incineration with combustion, and recycling—including composting," he says. "There's a series of conversion technologies that can possibly convert waste into fuels and industrial byproducts, which are receiving a lot of attention. They're new, and there's risk in their utilization. But some of these are going to work and may change the whole management suite of technologies that are available."

SWANA's role is to stay on top of that trend, ensuring members get data on how well these technologies work or don't work so they can make better decisions about their application, Skinner says.

SWANA conducted what Skinner calls an "eye-opening" workshop last year on conversion technologies that are said to produce very high-value fuels and industrial chemicals that could change the entire economics of waste management.

"If successful, these technologies could produce products that generate revenues that are five times higher than what can be obtained today," Skinner notes. "There also are additional processing costs to be able to do that so you have to look at the overall economics. The fuel and industrial chemical approach could drastically change the economics and make these products and facilities much more economically viable. It's going to happen. It's not clear which ones are going to be successful over the long term."

Lori Scozzafava, SWANA's deputy executive director, says as SWANA notices research and interest in zero waste, conversion technology, bioreactors, utilizing landfill gas as energy, waste-based technology, waste-to-energy, and mass burning technology, "our materials, webinars, and training courses all need to be

incorporating that information so we have the content for our members to respond to changes in their communities."

Waste management technology in the near future will continue to focus on GPS and RFID, bar coding on cans and other such technologies that gain more leverage in customer billing that more closely reflects individual consumer participation, says Jim Warner, SWANA's president and the chief executive officer of the Lancaster County Solid Waste Management Authority.

"The guy who puts out 2 tons versus 1 ton can be kept track of more accurately," he adds.

Other changes occurring include the type of fuel a vehicle uses. Camera technology is allowing solid waste operations to give solid waste operators a view of what's happening behind the vehicles or at the landfill.

"Compactors are becoming very sophisticated, providing data to the driver about the compaction and gradient levels of the waste they've been working on so they can more precisely manage those systems," Scozzafava says.

The increased automation in collection vehicles is going to narrow the gap on Workers' Compensation claims and help make the industry safer for workers going forward, Scozzafava points out.

"We've already seen trends toward that," she says. "The traditional way of collecting waste was by lifting very heavy cans off of the curb manually. Not only are we doing semi-automation, where we have ways to allow mechanical lifting of the cans rather than manual lifting, but we also have very sophisticated automated ways of lifting, including drivers not even having to get out of the truck and be able to reach cans at the curb."

Waste-to-energy technology is moving past the point where politicians opposed it because of a perceived air-pollution issue not well understood, Germain says, adding that the cost per ton versus taking it to the landfill was not competitive.

"But people want to look at things holistically and divert as much material away from landfills as possible to reduce, compost, go to waste energy, and now alternative conversion

2006

1/26

Western Union discontinues use of its telegram service.



2/16



The last Mobile Army Surgical Hospital (MASH) is decommissioned the US.

2/22

Britain's biggest robbery ever—£53m (about \$92.5 million)—in Tonbridge, Kent

3/1

English-language Wikipedia reaches its one millionth article, Jordanhill Railway Station.



3/16



Scotland prohibits smoking in all substantially enclosed public places.

3/26

Java earthquake devastates Bantul and the city of Yogyakarta killing over 6,600 people.

5/27



technologies are starting to emerge," she adds.

Germain predicts that in the next decade, there will be a full-scale tested system up and operational.

"It's just a matter of developing something," she says. "There's some maturation of the recycling and composting industry starting to occur. Single-stream recycling has started to take off across the country. There's been a focus over the last few years of reducing the toxicity of the material in our wastestream."

from a demand perspective, such as consumers' awareness and concern for the environment. With prosperity comes health and environmental concerns. Both of those things will continue to drive technology to improve."

The industry is seeing sophistication in composting plants, Germain notes.

"In Canada, there's one completely under a roof because of their weather concerns," she says. "In other areas, you're trying to accelerate composting; if you just wait for nature to

been looked at as resources but we're looking at them as resources for such things as energy," Leonard says. "In some cases, we're taking in some old technology that's been around for some time in other industries and applying them to our industry. It will remain to be seen if they work. It will remain to be seen if they are economical, but I'm excited about it because I think that's the future of our industry."

SWANA also is adopting a multimedia approach, says Leonard.

"I have been in the garbage business 25 years in BC and have come across a lot of amazing stuff over the years, such as bears drinking beer at the active face, a loader trying to sail, being chased by wolves in Prince Rupert, and rescuing a bald eagle stuck way up in a cedar tree."
—Tony Sperling, P. Eng., president of Sperling Hansen Associates Inc.

Warner agrees, saying waste processing going forward will focus on the next-generation of waste energy recovery and conversion technologies.

"Hopefully we'll see something come out that works and can be developed at scale," he says. "There are a lot of companies that are professing that they have it, but nobody has really established that large commercial scale alternative energy user for trash as it is off the truck. There are a lot of people trying and a lot of smart people putting money into it—it would be great for the industry if somebody could be successful at it."

Many communities are favoring a conversion route, "so hopefully something will prevail there that, if that's their choice, they can maybe begin investing public dollars into private technologies that will also recover energy," Warner adds.

The role of technology in SWANA will depend on how it's driven, Germain says.

"Technologies on the trucks were driven by regulation," she says. "Regulation forced the industry change at a quicker pace than it would have naturally. Other changes occur

take its course and doing the normal temperatures, it takes a while. How do you speed up this natural process? How do you make it more efficient without compromising the integrity of the end product?"

Germain also is impressed by what she sees in recycling.

"The technology of the single stream has gotten so much more sophisticated than it used to be," she says. "They can separate glass by color now, but there also is a demand for the end product. As market demand grows for some of these things, you'll see that technology can occur really quickly."

Technology is helping waste operations become safer, more efficient, more effective, and more accurately keep track of revenues, Leonard says.

"Efficiency and safety are very important," she says. "There are a lot of new technologies being proposed for the processing and managing of waste getting a lot of attention. It's very exciting that we're looking at other things to do with waste.

"There are beneficial uses of portions of the wastestream that previously may not have

"What we do with our waste impacts our environment, our energy use, our water, and our air," Leonard says. "Some of the computer technologies, modeling, and control systems can help in looking at the multimedia inter-relationships between water and air so we can make more informed decisions about what options we choose. Life cycle analysis and risk assessment are aided by a lot of these technologies where we can do simulations and model various factors."

Young professionals grew up with technology, are used to it, and expect it, Leonard says.

"I also think they're the next innovators, so they look at something we've been doing for 20 or 30 years the same way and they can think of a better way to do it because of their access to and familiarity with the technologies that may have been used in some other application. They're thinking, *why don't we apply it to our industry?* It's exciting to be able to look at some of these technologies and be able to apply them to our industry."

The technological changes taking place will require employees with a different type of skill set with computers and information

2007

1/9

Apple Inc. CEO Steve Jobs announces the iPhone.



3/7

British House of Commons votes to make the upper chamber, the House of Lords, 100% elected.

5/7

The tomb of Herod the Great is discovered.

5/17

North and South Korea trains cross the 38th Parallel in a test agreed upon by both governments.

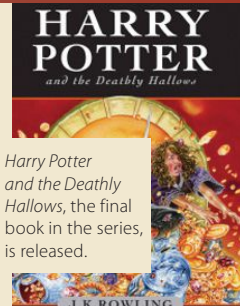
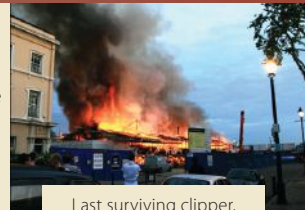
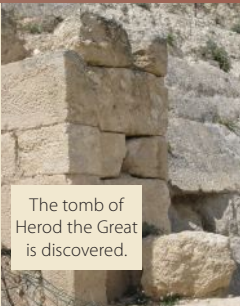
5/21

Last surviving clipper, the *Cutty Sark*, is badly damaged by fire in London.

7/21

HARRY POTTER
and the Deathly Hallows

Harry Potter and the Deathly Hallows, the final book in the series, is released.



management than that of today's employees, says Skinner.

When Skinner started at SWANA 15 years ago, all training was done in a classroom with print material.

"We still do quite a bit of that, but we're starting to do online training," he says. "Ten years from now, there may not be much classroom training with print material. It may all be online and through different vehicles. People might want training on their iPads and iPhones and have apps they use to obtain the information."

Virtual training also may be a common avenue.

"The new folks coming into the industry are advocates of that, and very well-versed and expecting that, so in order to be relevant to them, SWANA is going to have to deal with those types of issues," Skinner says.

The changing face of SWANA calls for translating services into other languages, Warner says.

"We've done that for our Manager of Landfill Operations [MOLO] program and in some collection training," he says. "We've heard from our membership that we need to start producing some materials in Spanish."

With more immigrants entering the United States and Canada, training those involved in the solid waste industry becomes more significant, Callaghan notes.

"It's a natural order of things that people who are looking for a way to support their families might become involved in the industry," she says.

"I also think one of the weaknesses the industry has to address is that our governments aren't always supporting us in the way we think they should be. A lot of times there are not enough funds to support the basic things we need for solid waste collection: keeping on the forefront of new developments and being able to train the people who handle our everyday situations."

Steve Viny sees SWANA increasing its role as a training institute.

"I see both private and public agencies that used to internalize it subcontracting it out to

SWANA," says Viny, a former SWANA president who works in the private sector as a chief executive officer of Envision Waste Services in Cleveland, OH.

There was a time when an operation may have had an IT person on the payroll, but with computer technology changing so rapidly the IT functions are becoming outsourced, he says.

"The same is true of training," he says. "There was a time when you might have a safety manager and a staff and provide all of your training in-house. With SWANA, that is something you can outsource because much of the training you might need in our industry is provided by SWANA."

"The same is true if you have people who work for you who you want to elevate their level of education," Viny says. "You could send them to take a MOLO course and get certified. Certification is going to be mandatory at some point in every state, much like you can't be a Realtor without having a real estate license. It raises the professionalism of the industry. It keeps everyone who's been in the industry sharp, and that's something that SWANA provides."

Just as entities can look to SWANA to outsource their training rather than providing it in-house, "by the same token, I think state governments that look to have certification requirements in many cases do all of their own course material and develop their own testing. I think they're finding out now the SWANA course is the state-of-the-art course and, in many cases, they're just adopting SWANA courses."

As SWANA endeavors to give its members cutting-edge information, the organization itself has the new challenge of identifying what is cutting edge, Leonard says.

"We're entering a new era on that," she says. "This transition is just beginning for SWANA and will continue for the next few years and beyond. Initially, there was a realization step and now there is an implementation step."

The industry's demographics will be different going forward.

"A lot of our current members will be reaching retirement age. We will be seeing

more younger folks entering the industry. Many of them will speak Spanish as a mother tongue, so it will be more important to provide our training courses in Spanish," Skinner says.

Younger people in the industry are bringing a different point of view, Germain says.

"They've brought a lot of changes in their approach to technology and their style of communication," she says. "They seem to prefer nonverbal communication—electronic communication takes precedence over verbal or face-to-face. At the same time, their style is dynamic and forces everybody else to change."

SWANA has instituted a young professionals group, which currently has fewer than 100 members.

"We're realizing that a lot of us are getting older and a lot of people are retiring, and we value the youth and their new ideas," says Callaghan. "They are very active and passionate. Our board members are trying to support their efforts. We realize the value they can bring to the association with respect to electronic technology is immeasurable."

"We know technology is constantly changing and there has to be a great effort to keep up with that as it affects our industry," she adds. "We won't have any problem going forward with having passionate people who really care about the industry, but keeping up with the technology is the biggest issue because it drives so many things. Having the young professional group in place and expanding will help us face a lot of the challenges we're going to have to face."

Leonard defines young professionals as people new to the industry who may have come from another industry due to a layoff.

"Another aspect of our program is trying to attract people who may be looking for a new career and getting them involved," she says. "In some cases, they are even more eager to learn about the industry and to get involved."

These employees are infusing a strong work ethic and an ability to communicate into the industry, Leonard says.

"That's opposite of the technology—the ability to sit down and have a conversation

2008

1/1

A New Hampshire law legalizing civil unions for same-sex couples comes into effect.



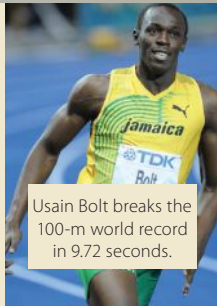
2/24

After nearly 50 years, Fidel Castro retires as the President of Cuba.



4/20

Danica Patrick wins the Indy Japan 300.



Usain Bolt breaks the 100-m world record in 9.72 seconds.

5/31

9/10

The Large Hadron Collider at CERN, is powered up in Geneva, Switzerland.



SpaceX launches the first-ever private spacecraft, the Falcon 1, into orbit.

9/28

9/29

The Dow Jones Industrial Average falls 777.68 points, the largest single-day point loss in its history.

with someone and pick up the phone and talk to people," she says. "It's not that entitlement mentality, but it's working hard and being rewarded for it and the experience of being in other industries and how work in general has changed over the years."

SWANA is involved in ongoing efforts to increase its membership, Callaghan says. SWANA has five North American regions, with a director overseeing each region.

Each of SWANA's 44 chapters has its own board, and there's a chapter director who sits on SWANA's board.

"These people go back to their chapters and their communities and talk about what we're doing, how they can become involved, and how they can take care of their community in a better way," says Callaghan. "It creates a trickle-down effort."

SWANA is in the process of working with several states, such as Idaho, to develop new chapters.

"The Massachusetts chapter that's been in existence for a very long time became the Southern New England chapter, and they brought in Connecticut and Rhode Island and are trying to get more people involved in surrounding areas," says Callaghan.

"There are problems in some areas in the Western states, where they have vast areas and not a lot of people," Callaghan adds. "That's also true in Canada, so they try to bring in different areas in order to have these meetings in locations that are more convenient."

In Canada, the Atlantic Canada chapter covers New Brunswick, Newfoundland, and Nova Scotia.

Another vast area is the Northern Lights chapter in Canada, covering Alberta, Manitoba, the Northwest Territories, and Saskatchewan.

"We're trying to outreach as far as we can in as many places as we can in North America," says Callaghan. "We rely a lot on community and grassroots efforts. We start with the conference training and try to reach our way down through that."

Look for SWANA to expand geographically. Scozzafava notes that a new Caribbean chapter

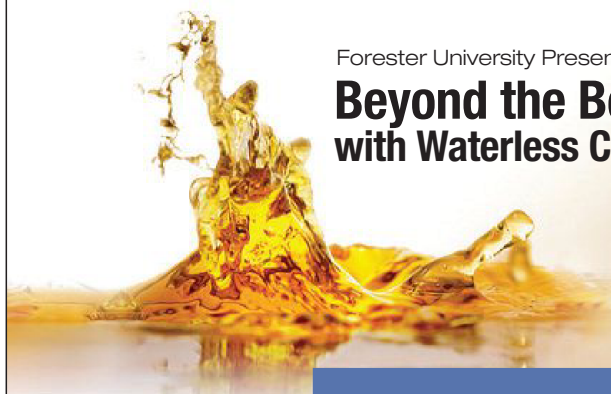
added last year in Puerto Rico won an award for the expansion of its membership.

"That is our first chapter outside of the

northern part of North America," Skinner says. "In the past, we've had discussions with folks in Mexico, but they have not come to anything

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2009

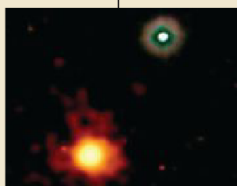
1/15



US Airways flight makes an emergency landing in the Hudson River.

4/23

Gamma-ray burst GRB 090423 identified as most distant and oldest object in the universe.



5/13

The required documents for regular chapter status for the SWANA Caribbean-Puerto Rico Chapter are approved and adopted by the Chapter Board of Directors.

5/25



North Korea tests its second nuclear device.

6/12

All television broadcasts in the US switch from analog NTSC to digital ATSC transmission.

6/22



Two Metro trains collide in Washington DC, killing nine and injuring over 80.

yet. That certainly would be something we think could happen over the longer term.”

Expanding SWANA's geographic reach has been under discussion for some time, Callaghan says.

“Years ago, we had a visitor from a country in South America talk about how they were interested in getting involved in the industry and in the association,” she says. “There are a lot of roadblocks for that kind of involvement in foreign countries. There are countries where the government is not functional and they can't seem to get ahead with basic things that affect health, like waste management. I think that's starting to change.”

Callaghan notes that the Puerto Rico chapter was the first established in a long time.

“We hope we can expand into South America and other countries,” she says. “We have membership all over the world. Most of them are considered at-large members because they don't have a chapter where they're located.”

Warner would like to see more private sector companies come into the fold.

“Right now, a lot of our private sector members tend to be those who interface more with the public sector, whether it be equipment or people who consult,” he says. “I'd like to see more of the smaller to medium independent hauler types understand more what SWANA does and that we can be of value to them.”

When the association first started from a local effort in California, it was called the Governmental Refuse Collection and Disposal Association and it was entirely a public association, Callaghan says.

“It was a big struggle over the years for the board to give the private sector a role,” she notes. “In fact, there was a limit as to how many private sector members could sit on the board and on the executive committee.”

“For a long time, we were regarded as the landfill people and the public sector people,” says Callaghan. “We've greatly expanded over the past 50 years to include the private sector, which has grown a great deal in the last few years in the industry.”

When the public/private sector wall was

broken down, there had been many long, heated discussions, Callaghan points out.

“It was a very touchy subject,” she says. “Sometimes things are tough to change. I think the effort was worthwhile, and it will continue to expand.”

That expansion of the private sector within SWANA comes as the private sector itself expands.

Callaghan notes that more private sector

companies have been established in the marketplace and are becoming integrated into the industry. “There is more opportunity economically for these companies to come into existence and to thrive. I think most people who are involved in the industry realize they are playing an important role, and it's vital to our success that we have their support and involvement.”

Callaghan says SWANA executives know

LEARNING FROM THE EXPERTS By Anne Germain

Prior to working at DSWA, I worked for St. Mary's County Department of Public Works in Maryland. At that time, I was involved in some of the county's solid waste projects. The county owned many other facilities besides solid waste facilities—marinas, roads, buildings, even an airport. So, in this small public works environment, I was the solid waste “expert” for the county, even though I was barely out of school. SWANA was an incredibly valuable resource for me. I established contacts with other people that were actual experts—those who knew what they were talking about and could provide information and insight.

Around that time, prescriptive Subtitle D liners had just become a requirement for landfills. The Mid-Atlantic SWANA Chapter hosted training on geosynthetics, led by Bob Koerner! This was a great opportunity for me to become familiar with these materials from a national expert. Up until then, the county had only clay-lined landfills. I learned more in that one day's training course than in all the research I had done.

I remember that training course also because that's the day I met Dana Muray. She was in charge of registration for the chapter and checked me in. It's hard to believe that 20 years later, Dana is still active in the chapter, serving as the chapter director to International Board. Since then, I have made hundreds of contacts through SWANA (including John Trotti, the always opinionated editor of this magazine!)—many almost as longstanding as Dana.

I can even credit SWANA for the job I have today. I heard N.C. Vasuki speak at a SWANA event and was very impressed. I admired his vision and commitment to improving solid waste management. Later, when a position opened at DSWA, I applied because I knew he was at its helm.

SWANA is as relevant to me today as it was when I was young and inexperienced. Most recently, SWANA has been working to ensure that new air regulations accurately account for air emissions from solid waste facilities. Through SWANA, solid waste facilities across the country are represented by these efforts.

Education, advocacy, networking—heck, even a job—what more can anyone ask? Thanks, SWANA!

SWANA's vice president and president elect, **Anne Germain** is chief of engineering and technology with the Delaware Solid Waste Authority.

2010

1/4



The Burj Khalifa, the world's tallest building, is officially opened.

1/12



Haiti efforts

2/7

Super Bowl XLIV: New Orleans the Saints defeat the Indianapolis Colts 31-17.

4/15



Volcanic ash from Iceland volcano leads to the closure of airspace over most of Europe.

4/20

Deepwater drilling rig explosion kills 11, initiating a massive oil discharge in the Gulf of Mexico.

5/12

The last piece of Yankee Stadium falls in the Bronx, ending two-year demolition process.

Jessica Watson becomes the youngest person to sail nonstop and unassisted around the world.

5/15



from having Steve Viny and others like him representing the private industry on the executive committee “that there is definitely an element there that we need to nurture.

“The state governments have realized there’s a definite role for them in managing their solid waste efforts,” she adds. “We have to continue to expand that and keep that in the industry.”

Some government operations are privatizing waste handling, and in some cases it’s gone the other way where government entities that have privatized operations are bringing them back in-house, Viny says.

“I personally see that as a growing trend,” he says. “The bottom line is there are only so many tons of waste that have to be managed, so it doesn’t matter whether it’s public sector or private sector when you look at the total bodies—it amounts to the amount of waste generated.”

Viny says waste volumes are decreasing and with automation increasing, he sees a reduction in the number of workers handling waste.

“Where I think you might see an increase is going to be on the administrative side,” he says. “People are really paying attention to numbers and do more with less. There was a day when you had four people on a rubbish truck and one person in the office. It’s going to start to get closer to one person on the truck and four people in the office.”

Communication going forward will leverage the popularity of social media, Warner says.

“Social media is infiltrating everywhere,” he says. “I myself now use Twitter. A year and a half ago, I didn’t know what it was.”

Just as changes in the wastestream call for strategies to manage them, changes in SWANA personnel going forward are being managed by a succession strategy, Germain says.

SWANA has a large board that oversees a relatively small staff, she points out.

“There’s always concern about transition,” she says. “We try to make sure that the bases are covered and to ensure that, in the event of a transfer of power, we’re prepared.”

Looking to the political impact of local, state and federal government on solid waste

management, Warner notes that while most local implementations have been set, be it mandating a collection or instituting recycling programs, on the federal level “it’s very hard to get things done.”

It’s the state level that deserves a watchful eye in terms of where most of industry regulation will occur, Warner says. More than 25 states have implemented electronic recovery programs in the last seven years.

SWANA chapters play a significant role in that regard, Warner says.

“SWANA national does some advocacy on more EPA regulatory issues rather than laws in Congress, but the chapters are where the rubber meets the road as far as member services and advocacy,” says Warner.

On the federal level, SWANA endeavors to focus on issues regarding renewable energy credits or investment tax credits, Warner says.

“Congress has been very slow to renew those when they’ve been sun-setting,” he points out. “It’s taken lobbying by the renewable energy industry to get extensions which have been short-term—maybe one to three years—and in fact some of the major ones are expired right now.”

Other issues that will continue to be on SWANA’s radar include the definition of renewable energy and whether waste energy gets included in any future clean energy standards, Warner says.

Germain says she believes SWANA has done a good job in the interest of the industry as political mandates emerge.

“There have been quite a number of regulations relating to renewable energy,” she says. “As an industry, we want to make sure we are considered a viable renewable energy, so we’ve advocated for that and respond to pending regulations to ensure that. We want to responsibly manage things.”

Sometimes regulators are looking only at what’s on paper without the practical understanding of how something will be implemented, Germain says.

That’s where SWANA’s input can ensure the industry’s approach or focus isn’t compromised by the regulations, she adds.

As the industry advances, there’s a recognition of the economic benefits of managing waste in the local economy, says O’Brien.

“I think New York City produces well over 10,000 tons a day of waste, and it costs them \$100 a ton to dispose of it, so every day they send \$1 million out of their economy just by disposing that waste in remote landfills,” he says. “As we move forward and there’s such a need for local economic development programs, people are going to take another look at waste-to-energy, zero-waste-based systems, and systems where the landfill can remain in the local economy.”

O’Brien points out that five years ago in the US Supreme Court case of the *United Haulers Association v. Oneida and Herkimer*, the high court ruled that local governments had the right to establish regulatory control of the waste if it was managed through public sector programs.

“That goes along with the economic development impact, so not only are we realizing the benefits of managing waste locally, but we’ve gotten a clear indication from the Supreme Court that that’s a proper role for the governments,” says O’Brien.

“Over the last 20 years, the trend has been to go toward regional landfills for disposal, so people are shipping the waste outside. I think there’s going to be a rethinking of that whole strategy.”

The emphasis on making programs more efficient and cost-effective is due to the recession and is “just good common sense to do so,” says O’Brien.

“People are going to look more towards streamlining services,” he adds. “In the last 20 years, we haven’t paid too much attention to that. If we banned the material from disposal, we would just add another collection service. Right now in my neighborhood, I’ve got four collection services: mixed waste, yardwaste, recyclables, and bulky waste on demand.”

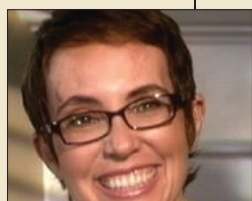
The addition of more collections has local environmental impacts, such as wear and tear on the vehicles and roads, O’Brien says, adding, “We’re going to relook at all of that.”

With municipalities providing collection

2011

1/8

Attempted assassination of Arizona congresswoman Gabrielle Giffords kills six and wounds 13.



1/15

Wikipedia, the free internet encyclopedia, turns 10 years old.



Egyptian Revolution culminates in the resignation of Hosni Mubarak.

2/11

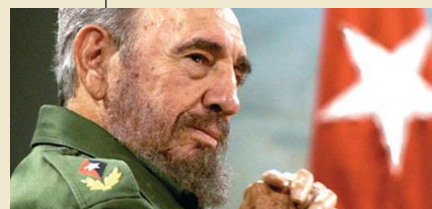
3/9



Space Shuttle Discovery makes its final landing after 39 flights.

4/19

Fidel Castro resigns from Cuba's Communist Party central committee after 45 years.



8/21

Young Professionals program

services and counties provide processing and disposal services, there sometimes isn't as much coordination as there should have been in developing those facilities, O'Brien notes.

"An efficient system requires both cities and counties to work together," he says. "You're going to see more of that as we relook at the efficiency of what we have in place now."

SWANA will continue to play a key role in fostering the guidance and development of new waste processing technologies, O'Brien notes.

"As new technologies develop, there are risks associated with them," he says. "There's a need to identify those risks and manage them in the best way possible. We're continuing to work on strengthening private/public partnerships and define the optimal roles for both the public and the private sector as new waste management. I see us actively being involved in these areas."

As Applied Research carries out its mission, "we identify the areas where SWANA can play a more active role such as in waste conversion technology, so we feature that in our conferences," O'Brien says. "The next step is to develop training sessions as we move them into the marketplace. It's a progression, and I see applied research as part of that progression."

The image of the industry is changing, even down to name changes for solid waste facilities.

Case in point is that of a site in Broward County, FL, owned by Waste Management. Once known as "Mount Trashmore," the site is now called the Monarch Hill Renewable Energy Park.

"They didn't just change the name of the facility—they also changed the entire focus of their operation," Skinner says. "I've seen landfills producing photovoltaic energy, which they tie into the energy they get from burning the landfill gas as a fuel. In some cases, I've seen wind turbines put on a landfill if the wind situation is right, and the solid waste management facility becomes a miniature environmental energy facility, which is a very significant change in philosophy from the past. You're going to see more

and more of that."

Expect to see more positive marketing of the industry, Skinner says, noting that Waste Management presents its environmental accomplishments on its truck signage and also took out ads during the Super Bowl.

"That's the first time a solid waste company has tried to present itself nationwide as an environmental service company that produces renewable energy and good services across the economy," he says. "That helps everybody in the industry."

Efforts to improve the image of the industry are widespread, Skinner says.

"The trade association that represents the private sector—the National Solid Wastes Management Association—has a program called 'Environmentalists Every Day.' They try to present all of the positive environmental actions people in the solid waste field do on a day-to-day basis, and that works to change the perception of the industry as well."

In many ways, given the rapidity with which technology and the population is changing, it's difficult to tell what the future will bring, Skinner says.

"The way we're moving into all of the new communication and electronic technologies certainly will change the organization, but what it will look like 10 years from now is very difficult to predict," he says.

It is the goal of SWANA to continue to offer value, Warner says.

"People typically have a limited amount of dollars for what type of associations they're going to participate in," he says. "SWANA continues to be about two-thirds public and one-third private. Oftentimes, the public members have much more limited options on association-type fees. We want to continue to offer tremendous value for that annual fee. They're not only getting service on the chapter level, but getting viable options for additional training, education, and improvement opportunities on the national level.

"We have to make sure we're able to continue to offer a valuable product to people in the industry and change as the industry is changing. I think we've done a really good job

of it as issues come and go. We will refocus to the new issue where people want more educational opportunities."

SWANA will have to be extremely responsive to challenges going forward, including technical developments and globalization, Germain says.

"As an industry, we don't control what comes to us. We are the recipients of whatever the waste happens to be," Germain says. "SWANA can prepare and work with the regulators to predict and project what's going to happen in the future and educate, inform and allow the communication to occur.

"As these things come along, you don't know what you're going to get, but when you attend these educational sessions—whether they're online or in person—you find out what the trends are in the future," says Germain. "You find out conversion technologies are coming, so we're going to have to learn about what they mean. These are huge investments, and you don't want to just start diving into them."

"One of the things we've been talking about over the last couple of years is that all of these conversion technology folks are directly approaching the elected officials rather than approaching the engineering staff," Germain says, adding that SWANA is taking an approach to ensure everyone understands this is happening.

"It just doesn't come down from SWANA but as a conglomeration of massive information we all have access to by consulting with each other and consulting as a whole," Germain says. "It's about education, communication, and being able to predict and protect what's coming down."

SWANA continues to be a very important and very viable organization for the industry, says Leonard.

"As the world changes, so does SWANA," she says. "We'll continue to be the leading organization involved in waste." **MSW**

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