Lending an Ear and a Voice

NASA's Plum Brook Station Community Workgroup

Given a choice between hearing the truth from a trusted friend or known local official or hearing it from the federal government, most people will probably opt to listen to the person they know.

By Michael Morgan

We're all familiar with the phrase, "It's not what you say, it's how you say it." But it may also be true that "It's not what is said, it's who says it." Given a choice between hearing the truth from a trusted friend or known local official or hearing it from the federal government, most people will probably opt to listen to the person they know. People who can independently analyze information and choose to believe (or not believe) it and then communicate that information to others can play an important role in building trust with the community, providing what is termed third-party validation.

Since 1999, the National Aeronautics and Space Administration (NASA) has sought to build and maintain that trust within Ohio's Erie and Huron Counties, as part of a comprehensive community outreach effort to support the decommissioning of a long-closed reactor facility at NASA's Plum Brook Station test facility. Plum Brook Station, a satellite facility of NASA's Glenn Research Center, is located 50 miles west of Cleveland and resides in parts of four townships—primarily in Perkins but also in Huron, Milan, and Oxford—near Sandusky in Erie County.

The reactor facility, which is the only one NASA ever built, operated from 1961 to 1973, testing the effects of radiation on materials to simulate their exposure in space. Then, agency budget cuts caused the facility to essentially be mothballed. The reactor's fuel was safely removed to a U.S. Department of Energy facility and its license with the U.S. Nuclear Regulatory Commission changed from Operating to Possess-But-Not-Operate status. In 1997, the NRC asked NASA to begin decommissioning the facility. NASA submitted a decommissioning plan in late 1999.

The Community Workgroup meets at the Huron Public Library in July 2004. Pictured at the table, left to right, are workgroup member John Blakeman, NASA Decommissioning Program Manager Keith Peecook, and workgroup members Mark Bohne and Chris Gasteier. In the background are some of the members of the public in attendance.

The NRC approved the plan in March 2002, and formal decommissioning work began immediately. However, there had been other important work that NASA had begun long before 2002, which included the development of their comprehensive Community Outreach and Involvement Plan, which emphasized strong community input.

From Skepticism to Support

Most technical experts will agree that a strong decommissioning plan requires good characterization data. In a similar manner, a strong community involvement plan also needs "data." During the summer of 1999, Sally Harrington, a public affairs specialist in Glenn's Community and Media Relations Office, began working with FOCUS Group, a Boston-area risk communication and environmental consulting firm, to identify and interview a wide variety of community stakeholders. They included current and former NASA employees, public health and safety officials, educators, environmentalists, and people residing near Plum Brook Station. The purpose was to determine the level of awareness, perception, and concern within the community regarding NASA and its reactor facility and to obtain stakeholders' input on the best ways for NASA to communicate with the community. Many of these initial interviewees expressed concern, even skepticism, at the prospect of safely decommissioning a nuclear facility but were willing to keep an open mind. One of them was the late Steve Casali, for many years Erie County's health commissioner, until shortly before his death in early 2005. "If you can convince me that the project is safe," he stated, "then I can convince others."

Many people interviewed expressed support for the formation of a panel of citizen volunteers who, in a regularly scheduled series of meetings, would receive information about the Plum Brook Reactor Facility Decommissioning Project from NASA and provide the space agency with questions, feedback, and concerns expressed by other community members with whom they had contact. NASA decided to form the panel—termed the Community Workgroup—in the fall of 1999, holding its first meeting in November as part of a week-long series of events that included a media briefing, an open house at Plum Brook Station that attracted 4300 visitors, and the first annual Community Information Session for the decommissioning project.

Casali joined the workgroup as a founding member (serving until 2004) along with 13 fellow members. NASA established member guidelines, seeking to include a broad spectrum of community leaders, with an emphasis on those in the education, public safety, health, and environmental fields. The agency also decided to avoid having any of its employees (including retirees) or elected officials as members in order to maintain the neutrality of the group. Founding members included Perkins Township resident Bill Walker, director of the Erie County Emergency Management Agency (EMA); Milan Township resident John Blakeman, a highly regarded, retired high school biology teacher and environmentalist; and Dr. Robert Speers, a long-serving professor of physics at the Bowling Green State University's Firelands College in his hometown of Huron. The latter three continue to serve on the panel. A fourth continuing member, Perkins resident and retired school superintendent Ralph Roshong, attended his first meeting in 1999 as a nearby neighbor (workgroup meetings are open to the public) and shortly thereafter joined the panel. In fact, fully half of the current 14 workgroup members have served at least five years.

THE WORKGROUP PROVED TO BE AN ESPECIALLY IMPORTANT COMMUNICATIONS VEHICLE FROM AUGUST 2003 THROUGH FEBRUARY 2005, WHEN NASA CONTRACTORS UNDERTOOK REMOVAL OF THE REACTOR'S INTERNAL COMPONENTS AND ACTUAL SEGMENTATION OF THE REACTOR TANK.

NASA drew upon existing expertise and community contacts in forming the workgroup, which has had between 12 and 16 active members during its existence and more than 30 people serving at some point in time. Blakeman, for example, was also a founding member of the Restoration Advisory Board (RAB), which provides community input to the U.S. Army Corps of Engineers on an environmental cleanup on the site of what had been a World War II TNT factory, located on land that is now Plum Brook Station. He was joined on the workgroup by the RAB's citizen cochair Mark Bohne, an engineer who served on the workgroup from 1999 to 2005, and his wife Janet, a medical researcher who served from 1999 until early 2006.

The founding members were open-minded but deter-

Members of the Community Workgroup and NASA's decommissioning team at a workgroup meeting at Perkins High School, near the Plum Brook Station.

mined to ensure that the larger community they represented had substantial input. They agreed on the goal of the workgroup, as put forth by NASA, and could speak at length on how they saw their own roles. Early on, Blakeman was equally clear on what the workgroup was not, remarking that he and fellow members "do not sit through frequent meetings to be public relations agents for NASA." But he felt it important to help explain to his neighbors and fellow environmentalists what some members of the public felt were "the mysteries behind the fence" at Plum Brook Station, which abuts several homes in the townships.

Walker said recently that he works with the community on many public safety issues and was impressed by the fact that NASA began providing him with advance notice of every shipment of low-level waste from Plum Brook Station since predecommissioning work began in 2001. Having Walker's confidence paid dividends in terms of enhancing NASA's credibility in the larger community, with the EMA director saying in early 2002 that "NASA is doing a great job of keeping (workgroup) members informed. . . . Every question I've asked has been answered." A year later, his Erie County colleague, Casali, observed that the project was safe, "based on what I've heard" at workgroup presentations. This kind of trust and third-party validation grew over time in direct proportion to the information given to the panel.

Radiological Issues and Concerns

When decommissioning began, the concerns of the workgroup and the people they represent focused largely on radiological issues and possible exposure to the community. In April 2002, to help address these questions and concerns, NASA took the workgroup members on a two-hour tour of the reactor facility. They were given dosimeters to indicate the amount of radiation to which they would be exposed and shown a variety of safeguards that NASA had put in place, including full-body monitors. Each of the personal dosimeters registered zero at the start of the tour and at the end, leading several members to proclaim, "Seeing is believing." The tour better enabled workgroup members to assure neighbors and constituents about the project's radiological safety.

The workgroup proved to be an especially important communications vehicle from August 2003 through February 2005, when NASA contractors undertook removal of the reactor's internal components and actual segmentation of the reactor tank. This sensitive work posed the greatest potential radiation exposure during the project. In addition to the many safeguards that NASA had implemented for segmentation, the agency needed to communicate to the public that the low-level radiation had no effect on public or environmental health. In September 2004, NASA provided another reactor tour for the workgroup, which had taken on new members. They included Bill Ommert, the EMA director in neighboring Huron County, who said the tour "helped me understand the project." In 2005, Ommert and Walker played important roles in helping several segments of the public to better understand the project, as NASA met some unexpected project challenges.

During the spring and summer of 2005, having completed segmentation, NASA undertook the excavation and shipment of 10 million pounds of lightly contaminated soil from the reactor facility grounds to the former Envirocare (now EnergySolutions) disposal facility in Utah. The carefully packaged soil was trucked to a rail siding near the city of Willard, in Huron County, for transportation by train to Utah. Every precaution in packaging and shipping was taken, and NASA informed Walker when the shipments were leaving Plum Brook Station. But a minor communication glitch resulted in Ommert not getting this same notice as the shipments moved into Huron County. He did, however, get calls from workers and management at a manufacturing facility adjacent to the rail siding, who had heard conflicting and inaccurate statements regarding the contents of the shipments. Ommert moved quickly to arrange meetings between the decommissioning project leadership, plant management, and Willard city officials, which, he observed, were "a matter

of bringing people together, to eliminate rumors." The shipments then continued without incident and helped to strengthen NASA's relationship with Huron County communities as well.

By the late summer of 2005, 98 percent of the radioactive inventory that existed onsite at the start of decommissioning had been safely removed. NASA was now in the midst of characterizing the remaining onsite radiation to determine what areas would require cleanup. They sampled several areas, including Pentolite Ditch, the stream into which permitted discharges of water flowed from the reactor during normal operations (from 1961 to 1973). These sampling results indicated that there were trace amounts of cesium-137 in sediment samples along the length of Pentolite Ditch, including where it empties into Plum Brook. Because Plum Brook exits NASA property about 100 feet beyond this point, the space agency decided to sample in offsite areas along the length of Plum Brook to where it meets Sandusky Bay. These October 2005 results showed above-background levels of cesium but at levels that did not pose any health concern to residents, including young children living in the area.

NASA immediately reported the findings to the NRC and the Ohio Department of Health (ODH) and locally to the Erie County EMA and the Erie County health commissioner. Almost immediately thereafter, some workgroup members, including Walker, contacted NASA to say they had heard questions from the public about what was found. NASA furnished workgroup members with information to enable them to better answer questions from neighbors and the community. In addition, NASA offered information to area media outlets at the project's annual media briefing on the morning of October 18 and again to the workgroup at its regularly scheduled quarterly meeting that evening. Information was also given to the community members who attended the project's annual Community Information Session, which immediately followed the workgroup meeting. In addition, NASA posted information on the project's Website www.grc.nasa.gov/WWW/pbrf and on its toll-free Decommissioning Information Line, which are regularly updated.

Long before the official start of decommissioning, NASA had worked closely with public health and safety agencies in Erie County, relationships enhanced by workgroup involvement. In October 2005, Health Commissioner Peter Schade (Casali's successor) said he had been informed by NASA and had maintained frequent contact, confirming that the offsite radiation levels were "just a little higher than normal background radiation" and posed no public health concern. He added NASA had been cooperative and helpful in providing information. As an emergency first responder, workgroup member Walker also pointed out that the instruments NASA employed to discover the offsite levels were much more sensitive than what his agency used, and he remarked, "If I lived on Pentolite Ditch, my family would not be leaving."

Registered Nurse Sharon Schaeffer, the Erie County epidemiologist, attended her first workgroup meeting in October 2005. "NASA does a good job of communicating information on the decommissioning project," she would say later. "But when there are health questions, it's good to have Health Department representation [on the workgroup] since we have developed a good rapport with the public." Later, workgroup members were given copies of a comprehensive sampling plan NASA developed in November 2005, which included more than 1200 offsite sediment samples taken and analyzed between November 2005 and March 2006.

NASA'S POLICY OF ANSWERING ALL QUESTIONS FROM THE COMMUNITY HAS BUILT PUBLIC TRUST IN THE PROJECT AND THE AGENCY AND MADE IT EASIER FOR WORKGROUP MEMBERS TO HELP ASSURE THEIR NEIGHBORS AND CONSTITUENTS THAT EVERY ASPECT OF THE PROJECT IS SAFE.

Two-Way Communication

In January 2006, Congresswoman Marcy Kaptur (D-Ohio), who represents the district that includes Plum Brook, held a public meeting that coincided with a scheduled workgroup meeting. It was attended by nearly all workgroup members and by representatives from NASA, the NRC, and ODH. NASA Decommissioning Program Manager Keith Peecook gave an in-depth presentation on the new sampling plan that was currently being implemented. The congresswoman expressed approval of NASA's efforts at the meeting and in an interview on local radio the next day.

During the workgroup meeting that followed, Peecook noted that the comprehensive sampling plan developed two months earlier was based largely on answering the kinds of questions that the workgroup had asked or had conveyed from others in the community. "This is the kind of two-way communication that we envisioned when the workgroup was formed," he remarked. "This (situation) tells us (the process) is working."

Blakeman responded, "I speak for myself, but I think I speak for everyone else (on the workgroup). We have been extremely impressed by NASA's forthcomingness and transparency."

In April 2006, NASA's assistant radiation safety officer, Rod Case, gave an extensive presentation on the results of the sampling program to workgroup members and also described how health physicists determine if levels of radiation pose any health concern. Results of the comprehensive sampling effort were as NASA had expected. The average reading for 1223 samples was an extremely low—almost minuscule—3 picocuries per gram. Of the 1223 samples analyzed, just 23 had a level in excess of 12–14 pCi, the onsite cleanup level for the decommissioning project. In addition, 60 percent of the samples showed no cesium levels at all.

At the April meeting, Peecook also shared plans with workgroup and community members to continue sampling in a new area, a mile farther north. He added that NASA had begun working with a local hydrogeological firm, Haag Environmental, to identify any additional areas where offsite levels might exist. The results of the spring sampling were similar to previous efforts in that they did not pose any health concern and showed but a few elevated readings in isolated areas, surrounded by areas at or near background levels. Peecook also said that NASA would conduct any offsite cleanup (as mandated by the NRC and ODH) to the same 12–14 pCi/g level as the onsite standard but was confident that only spot remediation would be necessary.

At the workgroup meeting in August 2006, members heard hydrogeologist Bob Haag give a presentation on the sampling plan, which he said would close the loop on any concerns regarding offsite levels. Haag reported that NASA's ongoing effort would sample not only sediment, but also shale, groundwater, and surface water in and around NASA wells, local area ponds, and East Sandusky Bay. He noted that any cesium found would be at extremely low levels. He also pointed out that "cesium sticks to clay (sediment)" and thus it was extremely unlikely that there was any cesium in groundwater or surface water—and that additional testing would most likely bear this out. The workgroup, known for asking a variety of questions, had none at the end of the presentation, with members indicating that they had a good handle on the issue. Days later, Haag also shared this information with the Sandusky City Commission and members of the public who attended the weekly commission meeting.

On October 18, 2006—a year after the announcement of the offsite levels—NASA held another media briefing, Community Workgroup meeting, and Community Information Session. Peecook gave a presentation at each event. The new sampling effort and its progress was part of his project update, but it was not a controversial issue. Several news accounts of decommissioning progress, based on the media briefing, gave little coverage to the offsite issue—as opposed to a year earlier, when it was the focus of every decommissioning article. Instead, the news

Workgroup member John Blakeman, a retired biology teacher at nearby Perkins High School, talks with Perkins High School students at the annual Decommissioning Community Information Session, held at NASA Plum Brook Station in October 2006.

Rich Kunath, of the NASA Plum Brook Station Management Office, gives a presentation on Plum Brook operations at the October 2006 workgroup meeting.

was largely about NASA's plan to issue a new contract in 2007 that would lead to a safe and successful completion of decommissioning by the end of 2010.

The Advantages of Openness

More than seven years after the first workgroup meeting, Bill Walker said his roles as a public safety professional and a workgroup member "have complemented each other . . . and cemented my relationship" with other NASA programs and personnel, along with the decommissioning project. In his EMA role, Walker has been able to work effectively with NASA personnel on nondecommissioning issues as well and believes his identification with the workgroup is a factor in enhancing this positive relationship.

Asked if anyone had ever suggested that he be more critical of NASA in his dual role, Walker said, "Maybe 15 years ago, if someone said 'There's something more than meets the eye at NASA,' I might be." But he noted that when NASA does have a problem "They say, 'Here's the problem and how we intend to solve it.' They show us pictures; they give us briefings." He also observed that as a public official he is frequently recognized in the community and asked all sorts of questions by neighbors and members of the public. He said this was especially true last year when the offsite levels were discovered and that his dual role was helpful in convincing people that the project was still completely safe. "I've been in this job a long time, and I'd like to believe the people don't think I'm too much of a horse's behind," he mused. "I still think that people would say, 'If Bill Walker says [the project] is safe, then it's safe.' . . . The best thing [NASA has] going is the openness" of the workgroup process.

According to Sally Harrington, the workgroup has been "an essential part of our community outreach efforts. We are grateful that so many people have lent us their ears, observations, and credibility. The workgroup has been a vehicle for not only two-way communication, but also for trust." Added Peecook, "The people on the workgroup, and those they represent, will be here long after the reactor facility is gone. The workgroup has helped enable NASA to continue to be a good neighbor, and the members make my job easier."

So what keeps citizens involved? It can't be the "pay"—pizza once a year before the annual Community Information Session and cookies at the other workgroup meetings. Blakeman said recently that NASA's policy of answering all questions from the community has built public trust in the project and the agency and made it easier for workgroup members to help assure their neighbors and constituents that every aspect of the project is safe. NASA "brought us in," he remarked. "That's why you don't hear a lot [of complaints]. Believe me, if there were problems, you'd hear about them." According to Walker, creating the workgroup and keeping it informed and engaged "is the best idea in the world." And it's an idea—and a reality—that will continue until the Plum Brook Reactor Facility Decommissioning Project's completion in 2010, with the workgroup continuing to lend an ear to NASA and a voice to the community. ■

Michael Morgan is a senior communications associate with FOCUS Group, Risk Communication and Environmental Management Consultants, based in Medford, Mass. For additional information on the Community Workgroup, contact Sally Harrington at Sally.V.Harrington@nasa.gov.