How a RAB Works:
The Campaign to Clean the Moffett Wetlands

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June, 2003

The growth of Restoration Advisory Boards (RABs), Site-Specific Advisory Boards (SSABs), and Community Advisory Groups is a bold experiment, not just in "public participation," but in direct democracy. These bodies give the people most affected by both contamination and cleanup activities an opportunity to understand and shape investigation, remediation, and increasingly, long-term stewardship. The Defense Departments sponsors 299 RABs throughout the United States. The Energy Department established 12 SSABs. And U.S. EPA and state regulatory agencies sponsor a growing, but uncounted number of advisory groups of various names and origin.

Communities and agencies have come together to form such boards to oversee a range of environmental activities, but by far, most are organized to monitor and influence cleanup decisions at hazardous waste sites. Compared to the public meetings and the comment-and-response process built into most cleanup programs—known unsympathetically as "decide-announce-defend"—advisory groups have been an enormous success. The public has continuing access to site information and cleanup proposals, and the responsible parties (polluters) and regulatory agencies benefit from their constructive advice.

Still, many—perhaps a majority of—advisory group members are frustrated. Month after month they attend meetings, hear briefings, and peruse lengthy documents. They offer suggestions and criticisms, but often the decision-makers ignore their input. As I explain to community members of such boards, "advisory" is their middle name. They are volunteers, with no legal authority. Legal authority belongs to appointees and staff in government agencies—though often those agencies argue over who has ultimate decision-making authority.

Undoubtedly, agencies could improve the way they organize, support, and listen to their advisory groups. But I have found, in consulting activists in scores of communities over the past dozen years, that board members can overcome their subordinate roles and get the agencies to do what they want, if they better understand how advisory boards work. That is, if community members view participation in advisory boards as merely one step in community empowerment, if they see their advice as part of broader organizing campaigns, they can not only get officials to listen. If they play their cards right, the can force the agencies to change decisions that the community doesn't like.

This has happened more than once at Moffett Field, in my community of Mountain View, California. The Technical Review Committee established by the Navy in 1990 served as the model for the SSABs recommended by the Federal Facilities Environmental Restoration Dialogue Committee in 1993, and the RAB established in 1994-5 continues to serve as an example of constructive *and* effective community involvement. Most recently, the neighbors of Moffett Field forced the Navy and its regulators to abandon incomplete cleanup plans which would have prevented the tidal restoration of the Moffett wetlands.

This report explains how our community undertook a multi-year campaign to that end, and it draws a series of lessons from our experience. Many of those lessons should prove useful elsewhere.[1]

BACKGROUND

The Moffett Cleanup

Moffett Field is a 2,200-acre federal complex near the southern end of the San Francisco Bay, adjacent to the cities of Mountain View and Sunnyvale. Originally built as a base for dirigibles in the mid-1930s, it can still be recognized by its three huge blimp hangars. Moffett Naval Air Station comprised most of the property until 1994, when the Navy transferred the airfield and other facilities to NASA's adjacent Ames Research Center. The base's military housing area was transferred first to the Air Force, and later to the Army. The complex contains at least 260 acres of wetlands, including about 150 acres of the Stormwater Retention Pond, situated between the Moffett runways and the commercial salt evaporation ponds that ring the Bay.

Contamination at Moffett Field was first reported in 1983, and in 1987 U.S. EPA added the installation to the "Superfund" National Priorities List. In 1990 the Navy, EPA, the California Department of Toxics Substances Control (DTSC), and the Bay Area Regional Water Quality Control Board signed a Federal Facilities Agreement governing the Superfund response at Moffett Field. In 1997, the state streamlined its role, assigning DTSC's responsibilities to the Water Board.

Even after official base closure in 1994, the Navy retained responsibility for cleaning up its former property. The Federal Facilities Agreement remains in force. Today the Navy counts 28 separate cleanup sites, as well as a contaminated housing area. There are at least three underground plumes of volatile organic compounds (VOCs), including a massive "regional plume" shared with several electronics industry responsible parties situated just south of Moffett. Other problems have included three old landfills, soil contamination sites, and leaking fuel tanks.

Despite ongoing disagreements over liability with neighboring responsible parties, the Navy's cleanup program has generally been effective and systematic. It initially focused on source areas and potential health threats, such as the two groundwater contamination plumes recognized at the time and the two identified landfills. In 1993 it began a Site-Wide Ecological Assessment (SWEA). That two-phase study detected and measured contaminants in the sediment of the Stormwater Pond and the nearby, smaller Eastern Diked Marsh.

A Model for Public Participation

The 1986 Superfund Amendments that established the Defense Environmental Restoration Program required the formation of Technical Review Committees (TRCs), where practicable, at major Defense Department cleanup projects. The Navy took this requirement seriously, but most bases—as the law required—only brought in one or two people to represent the local community. At Moffett Naval Air Station, base commander Capt. Stephen T. Quigley

sought out local activists, creating a much broader forum, when he established the Moffett TRC in 1990.

At initial TRC meetings, the Navy convinced community members that it was taking its cleanup responsibilities seriously. It provided detailed data on the state of the groundwater contamination plumes. It presented a slide show demonstrating how it removed (plugged) an old agricultural well that might have served as a vertical conduit for VOC migration. Still, community members expressed dismay that the Federal Facilities Agreement contained a three-year gap, with no project milestones in that time-span. Soon, however, the Navy and the regulators negotiated an amendment dividing the base into several operable units and requiring the completion of studies during that three-year period.

Soon after that change, at the national dialogue that evolved into the Federal Facilities Environmental Restoration Dialogue Committee, the Defense Department chose to highlight Moffett Field as an example of how it worked with local communities. As the dialogue's representative from the Moffett area, I had to admit: The Navy was listening. Moffett's expanded TRC quickly became the national model for public participation. FFERDC, in its 1993 Interim Report, recommended the formation of Site-Specific Advisory Boards at contaminated federal facilities. In 1994, the Defense Department directed the formation of a variation on the SSAB, the Restoration Advisory Board, at pilot sites and closing bases. Within a few years, most Defense facilities with major cleanup activities had RABs in place.

Meanwhile, in 1993, the Silicon Valley Toxics Coalition (SVTC) requested and received Technical Assistance Grants from U.S. EPA for both the Moffett Field site and a collection of three "Superfund" sites south of Moffett, known officially at the MEW Study Area. (MEW stands for three main streets that define the area.) SVTC hired a technical advisor, Peter Strauss, and it formed a Community Advisory Board to direct his work. SVTC went beyond its activist membership to recruit representatives of the two city governments, Mountain View and Sunnyvale, as well as other local residents.

In late 1994 the Navy—under the leadership of Base Environmental Coordinator Steve Chao—converted the Moffett TRC into a RAB. It shifted meetings into the community and held them in the evening, rather than during the day. Over fifty community members joined, including several participants from SVTC's Community Advisory Board. Fortunately, attrition soon brought the group down to a manageable size. The Moffett RAB continued the constructive, amicable dialogue begun by the TRC, and it regularly reviewed the Navy's studies and cleanup proposals for the various Moffett sites and operable units.

For example, in 1995, the Navy proposed to cap the two landfills that made up Operable Unit 1, and it selected as its preferred alternative the less expensive of two capping strategies. However, one RAB member, who had been involved in the oversight of Mountain View's municipal landfill, questioned why the Navy would be able to install a less sturdy cover than the city had put into place. As a result, the parties on the RAB came up with a compromise, a new alternative with a stronger cap than the Navy proposed but significantly less expensive than the other option. When the proposal came to a public meeting in January, 1996, the RAB co-chair chaired the meeting, and RAB members spoke in favor. Before the remedy was formally approved, the Navy discovered that one of the landfills was much smaller than originally believed. It informally asked RAB members about possible consolidation of waste at the larger

site, and community members agreed. Following another public meeting and comment period, the new remedy was approved in early 1997. When it appeared that the Navy might not have the funds to construct the remedy in a timely fashion, RAB members and local officials wrote Congress supporting the Navy's plan.

Saving the Bay

By the time the Navy turned its attention to contamination in the Moffett Field wetlands, Bay Area communities had a long history of concern about the future of the Bay environment. In fact, the San Francisco Bay Area is defined by the San Francisco Bay, and for several decades, many of the region's residents have taken that seriously. By the 1960s, the Bay had lost one third of the area it occupied when Europeans first ventured into northern California, and 80 percent the area's tidal marshes had been diked and/or filled. Much of downtown San Francisco, most of the Foster City bedroom community, and the runways of Hamilton Field, Moffett Field, and the San Francisco International Airport had all been built on the Bay. Evaporation ponds for salt production, first constructed in 1850, covered 26,000 acres at the southern end of the Bay.

Conservationists, led by the Save the San Francisco Bay Association, campaigned for the protection and restoration of the Bay and its ecosystem. In 1965, the state established the Bay Conservation and Development Commission to regulate development on or near the Bay. In 1972, Congress established the Southern San Francisco Bay Wildlife Refuge. This refuge, which continues to add public and private properties to its acreage, now bears the name of retired San Jose Congressman Don Edwards.

In 1992, just across Stevens Creek from the Stormwater Pond, the City of Mountain View created the Stevens Creek Tidal Marsh—as legal mitigation for other projects. Nearby, it undertook restoration of the Charleston Slough in the mid-1990s. Meanwhile, environmental activists proposed that the Wildlife Refuge acquire and restore much of the massive salt-pond complex. In 1999 scientists and activists—supported by numerous federal and state agencies—called for a continuous corridor of tidal marsh in the Mountain View area in the regional *Baylands Ecosystem Habitat Goals Report.*

However, Moffett Field's Stormwater Retention Pond stands out as a weak link in that belt. Since it was diked off in the 1950s, it has served as a seasonal wetland, capturing run-off from the Moffett complex. In the winter it offers migrating birds open water, but it lacks the vitality of the tidal wetlands it replaced. In 1991, the Fish and Wildlife Service identified the Moffett wetlands, as well as the salt ponds and other South Bay properties, as potential additions to the Refuge. However, unlike the salt ponds, it wouldn't require a massive cash infusion to acquire the property, because it is already owned by U.S. taxpayers.

Base Closure

Residents of adjacent communities started paying close attention to Moffett property in 1990, when the Navy first proposed to close the Naval Air Station. A number of us formed the New Moffett Committee, calling for the construction of a residential community at the south side of the base, full cleanup, and the opening of Bay Access. In 1991, the Base Closure Commission

and Congress approved the closure, but instead of transferring the property to non-federal ownership, the Navy turned the bulk of the base over the NASA, which for decades has operated the Ames Research Center within the confines of the larger Moffett complex. In response, Florence LaRiviere, leader of efforts of expand the Bay Refuge, proposed in a newspaper column that Moffett's historic wetlands be restored to tidal marsh.

The Navy hauled down its flag in 1994. As other federal airfield users gradually left the installation, NASA looked for other users to share the costs of runway operations. In late 1995, NASA proposed to allow several air cargo companies to run air package express operations from Moffett. Residents in nearby communities, particularly people in the Moffett flight path, organized the Alliance for a New Moffett Field to oppose the air cargo plan, as well as other proposals for bring general aviation to Moffett. Opponents won an advisory vote in Mountain View, and they elected a friendly City Council majority. NASA dropped the idea and replaced the Ames leadership.[2]

As NASA Ames and the cities of Mountain View and Sunnyvale established an Advisory Committee to consider alternative uses for the former Navy base, the Alliance for a New Moffett Field began to focus on the federally owned wetlands, which included the portions of the Moffett Stormwater Retention Pond owned originally by both NASA and the Navy. In September, 1997, Alliance held a day-long forum on the future of the Moffett wetlands, placing the future management of this property on the political map and opening lines of communications among Alliance activists, conservationists, and public officials.

THE CLEANUP PROCESS

Against this backdrop, the Navy was systematically addressing the wide range of contamination issues at Moffett Field. The SWEA and the subsequent Station-Wide Feasibility Study found significant levels of pesticides (such as DDT and DDE), heavy metals such as lead, and PCBs in the sediment of the seasonal Stormwater Retention Pond, and even higher concentrations in the Eastern Diked Marsh, a smaller wetland to the south of the pond that funnels runoff into the Pond through a culvert.

In 1998, the RAB reviewed the Station-Wide Feasibility Study, indicating that it wanted the cleanup to protect the Moffett ecosystem, not just public health. With the assistance of technical advisor Strauss, it challenged the Navy's proposed hazard quotient methodology for quantifying acceptable ecological risks. Following a technical debate, the Navy promised to rely upon a more protective methodology.

Round One

The real debate began in 1999. At the March RAB meeting, the Navy and the regulators announced they were raising the numbers—that is, adopting a less stringent standard—for the PCB cleanup goal in the stormwater pond sediment. Their explanation was simple. The more stringent standard, ranging around 100 parts per billion, assumed that birds such as the great blue heron would eat fish from the pond, and the PCBs from the pond would make them sick. Since the pond is cut off from the Bay, there aren't many, if any, fish in the pond, so that pathway

doesn't matter. A higher number for PCBs—470 parts per billion—they suggested, would be safe for other ecological receptors, such as the mallard duck and the black-necked stilt.

Community members knew instantly what this implied, and we protested. The Navy hoped to undertake a cleanup that would be insufficient to support tidal restoration. That is, tidal flows would not be permitted because that would introduce fish. The fish would eat food contaminated with PCBs, herons would eat the fish, and the herons would get sick. Since it's Defense Department policy not to return to do more cleanup just because property use is changed, this would torpedo community efforts to turn the Moffett stormwater retention pond back into a tidal wetland. We didn't object the Navy's calculations. We opposed its assumption: that the Moffett wetland would forever remain seasonal.

Armed with a full understanding of the emerging remedial proposal, activists on the RAB placed the issue on the board agenda more than once. With some of the regulators arguing even more strongly than the Navy for a seasonal wetland-based cleanup, we recognized the need to reinforce our cordial advice with serious organizing. The Toxics Coalition and the Alliance for a New Moffett Field, both of which had members on the RAB, brought in allies from several groups, including Save the Bay, the local Audubon Society chapter, and Peninsula Conservation Foundation/Bay Area Action (now known as Acterra). We placed columns and news stories in local papers, winning editorial support from the weekly Mountain View *Voice*, and we even organized a tour of the Moffett wetlands, along the Stevens Creek levee, in July, 2001.

Sure enough, when the Navy, with the support of the regulators from EPA and the Regional Water Board, submitted a proposed cleanup plan for public comment in July, 2001, it proposed the less stringent cleanup goals. Instead of including the proposal in the station-wide process, it proposed a plan for a newly defined site, Site 25—the Stormwater Retention Pond and the Eastern Diked Marsh. More significant, it proposed to protect fish-eating birds through the imposition of institutional controls. Usually such land use restrictions are used to limit certain kinds of development. In this case, however, the controls would simply prevent tidal flows.

We were prepared. We had built consensus in the community. The organizations in our coalition urged their members to write letters opposing the proposal for limited cleanup. Our Congresswoman, Anna Eshoo, wrote one of a series of letters backing tidal restoration and suitable cleanup. Outside the official public meeting, held at Mountain View's City Hall on August 16, 2001, we staged a rally. Then 24 speakers, representing themselves and a wide range of community groups, all backed the same complex position: The cleanup of the Stormwater Retention Pond should support tidal restoration. One speaker, a Navy contractor—and a genuine wetlands expert—suggested that it was ecologically sound to keep the pond seasonal.

By the time that public meeting took place, however, we had already shaken the official plan. We understood the legal basis of institutional controls, and we knew the site better than the agency representatives, all of whom were relatively new to the Moffett cleanup effort. To justify the second-class remediation strategy, the Navy would have kept fish out of the entire pond. NASA, which owns about three-quarters of the pond's surface, said it was willing to commit to the restrictions. It felt, at the time, that the dikes and levees provided the runway and buildings with optimal flood control—against a possible tidal surge. After all, portions of the runway are below sea level, and much more of the facility is below typical high tides.

I displayed the community's "ace in the hole" at the August 9, 2001 meeting of the Restoration Advisory Board. I asked the Navy's base environmental coordinator how the Navy expected to impose a land use restriction on the Midpeninsula Regional Open Space District, which owns about a quarter of the pond.

The Open Space District is a specialized local government jurisdiction. We vote for its board. We voted, years ago, to provide it with a fraction of our property taxes. And its mission includes the preservation and restoration of natural habitat, primarily in the hills and mountains that separate the San Francisco Bay from the Pacific Ocean, but also along the Bay itself.

It was clear at that meeting that Navy officials, new to the Moffett cleanup because of Navy reorganization, didn't realize that the Open Space District owns 54 acres of the pond. Neither did the representatives from U.S. EPA and the water board. In fact, the Navy didn't even know there was an open space district. However, if you look, even casually, at the maps showing the boundaries of Moffett's federal property and defining Site 25, there's a 50-acre difference.

Community members of the RAB, however, not only knew about the District. We knew board members, and we knew that the District had a policy favoring tidal restoration. We didn't realize that they had been kept out of the loop at Moffett—and we take partial responsibility for that oversight—but we acted quickly to bring them up to speed. Not only did the District oppose the cleanup, it indicated its unwillingness to accept the institutional controls upon which the proposed remedy rested. In fact, District officials were upset that Navy contractors had trespassed, sampling on District property without their permission.

Suffice it to say, the agencies that proposed institutional controls for the entire Pond didn't have the authority to implement it, so they went back to the drawing board.

Round Two

Unfortunately, from the community's perspective, that drawing board seemed to have a limited palette. In February, 2002, the Navy told the RAB that its revised plan, again backed preliminarily by the regulatory agencies, for Site 25 would differ little from the 2001 version. It excluded the Open Space District property, but within the federally owned portions, the Navy proposed the same strategy: limited excavation and institutional controls. The Navy promised to negotiate later with the District about addressing the sediment in its section.

On behalf of the activist coalition, I wrote a letter to high-level officials at the Navy, EPA, and the Water Board, urging them to direct their Moffett project managers to follow agency guidance. First, I asked, as provided in U.S. EPA policy,[3] that cleanup standards must be based upon reasonably anticipated future land use. I stated, "this is not the current land use. Nor is it the planned land use, as reported by the property owner—in this case NASA. Instead, it looks ahead, considering both geography and community views."

Second, I suggested that the Navy should proceed in accordance with the Defense Environmental Restoration Program Management Guidance, which requires that the armed services evaluate at least one remedial option not requiring use restrictions. I wrote, "This means that the Navy should evaluate, as an alternative response action, what it would take to make the wetlands safe for fish and fish-eating birds."

As a result of that letter, I believe, the Navy gave the RAB a back-of-the-envelope calculation of the additional costs of the fuller remediation the community was requesting. At the May 9, 2002 Restoration Advisory Board (RAB) meeting, the Navy presented a three-page document estimating the additional cost of cleaning up the NASA-owned portion of Site 25 to standards that would permit restoration of tidal flows to the wetlands.

And Navy headquarters defended the Moffett team's interpretation of the land us guidance, explaining, "NASA has indicated that Site 25 land use will not change for the foreseeable future." In relying on NASA's land use plan, it cited the guidance: "Land use assumptions at sites that are undergoing base closure may be different than at sites where a Federal agency will be maintaining control of the facility."

At the May 16, 2002 public meeting, as well as in letters to the Navy, the coalition of activists and local government again attacked the plan. We objected because it would prevent tidal restoration of the federal 150 acres. And we pointed out that the Navy had no strategy for keeping out fish if the Open Space District were to open its section to tidal flows. Technically, the issue is called hydraulic connectivity. In lay terms, since there's just one pond, there's nothing to prevent the fish from swimming over to the NASA section. Dividing it with a new dike would require permits and potentially costly construction. Furthermore, NASA would end up with less stormwater storage capacity. These obstacles needed to be thought out before the remedy was approved.

At that meeting, I charged that federal agencies had diked off the pond, contaminated it, and now didn't want to clean it up. After the meeting, a NASA staff member offered a friendly correction: The salt company, not NASA or the Navy, had built the dikes. That jogged my memory. The salt company, now part of the global agribusiness corporation, Cargill, owns the dikes. As everyone knew from frequent press reports, Cargill was negotiating to sell 16,500 acres of evaporation ponds, including those immediate north of the Stormwater Pond, to the Refuge—in a complex deal funded by state bond money and private foundations, as well as Fish and Wildlife resources.

We had a new argument. Even if the Navy and NASA managed to separate the Open Space District wetlands from the NASA pond, they would still have to get the Refuge management to agree to institutional controls, because they could conceivably remove, or let deteriorate, the dikes that directly keep Bay waters from the Pond.

We don't know whether it was the new argument, persistent public opposition, or the technical questions, but the agencies delayed signing the record of decision, which would have approved implementation of the proposed plan. Instead, they decided to wait until a new round of sampling was conducted. (Because the Pond floods every winter, it's easier to sample sediment in the summer.)

With at least a few months of extra organizing time, our coalition organized in response the to Navy letter that had explained that cleanup standards were based upon a NASA land use decision. We didn't accept the legal argument, but we began to focus more on NASA, urging it to reconsider its plans for the Pond. Once again, Congresswoman Eshoo wrote letters backing the community position. Moreover, in December 2002, U.S. Senator Barbara Boxer joined Eshoo in

calling upon the Navy to "adopt a full and comprehensive cleanup standard for all of Site 25…consistent with future tidal marsh usage." Without such a commitment, as one RAB member suggested, Moffett's wetlands would be an island of contamination in a sea of ecological restoration.

At the January 9, 2003 RAB meeting, NASA staff reported on the results of the latest round of sediment sampling. Contamination wasn't as bad as earlier believed, so the cost of remediating to a level that would allow tidal restoration might not be as high as feared. For that and other reasons, NASA would reconsider its flood control strategy and would study—in cooperation with the Refuge—possible restoration. Again, the Navy and the regulators had to go back to the drawing boards, because the Navy had based its remedy on NASA's use plan.

Diked Marsh Only

In February 2003, the Navy came back with a draft Record of Decision for Site 25. However, this incarnation addressed only the Eastern Diked Marsh. The Navy proposed to excavate that small section, as it originally proposed, and to wait until NASA completed its studies before dealing with the pond. Community members viewed this as a victory. The Eastern Diked Marsh, as its name suggests, is across a dike from the Stormwater Pond. It can remain a seasonal wetland while the Pond is restored. Furthermore, the Diked Marsh contains a settling basin that is designed to remove contamination from Moffett run-off, to prevent re-contamination of the Pond sediment and the Bay.

It looks like this proposal will be approved, though some regulators have suggested that they would prefer a remedy that addresses the entire Federal wetlands area. The community consensus remains clear. We would rather have the Navy focus its current effort on the Diked Marsh and wait to have the Pond cleanup done right the first time, than to hope that NASA or some other entity will pay for additional cleanup if tidal restoration is approved. A few extra years of contamination in the sediment, in a seasonal wetland providing minimal habitat, is unlikely to do much harm.

Our campaign for cleanup and restoration is far from over. We'll need to continue pushing NASA—as well as potential partners such as the Refuge—to come up with a plan that combines habitat restoration with flood control. Technically, that shouldn't be difficult. There are a number of "muted" tidal marshes in the area. But there are many options to consider, particularly since tidal restoration usually requires more than simply removing dikes and levees.

And we'll have to make sure that the Navy doesn't simply forget about the other two sections of Site 25—the federal and Open Space District sections of the Stormwater Pond. It had funds lined up to support its first two proposed remedies. In response to community pressure, it didn't use those funds, so now it has "lost" them.

But the prospects for the Moffett wetlands are brighter than ever. The fight over cleanup has made wetlands restoration a *cause celebre* in our communities. The Open Space District, the Wildlife Refuge, and NASA all seem to be working toward a sub-regional wetlands plan that will balance public access, wetlands restoration, and flood control.

THE LESSONS OF SUCCESS

The multi-year campaign to shape the cleanup of Moffett Field's wetlands illustrates how a Restoration Advisory Board, as part of a larger community campaign, can be effective. In fact, it shows how RABs, in general, can work. The following lessons of our success can help empower community activists elsewhere.

1. **Learn what issues are likely to arise.** By participating in the RAB, community activists learned, years in advance, that the Navy would be proposing a remedy for the Moffett wetlands. That gave us the opportunity to research the technical and legal issues and to inform the community, instead of simply having to react to the plan during the public comment period.

2. **Build consensus and coalitions.** As the RAB repeatedly addressed the wetlands issues, the community reached a consensus. In addition, we were able to bring other organizations, such as Save the Bay and the Audubon Society chapter, that did not participate in the RAB, into an organizing coalition. United, we could easily argue that the first two proposed plans didn't pass the criterion, built into the Superfund decision-making process (the National Contingency Plan), of community acceptance.

3. **Develop credibility.** As we have done since the earliest days of the Moffett Technical Review Committee, members of the Moffett RAB have taken what we've learned by attending meetings and reading document to establish our own expertise. When reporters, officials, and members of our community come to us, we give accurate, thoughtful answers. With that reputation established, these same people lend credence to our opinions.

4. **Know the situation.** We'll never know if our organizing against the first Site 25 Proposed Plan would have carried the day, because we played a trump card, knowledge of the Open Space District's property ownership and opposition to institutional controls, to prevent approval. I'm the one who connected the dots, but I had ignored them—bicycling many times past the District sign along the edge of the pond—until another RAB member asked me the right question.

5. **Offer advice.** Even in our most militant moods, Moffett RAB members are cordial and respectful. We raise issues every step along the way, and we believe we cause the officials—who often seem to be our adversaries—to think. I believe this makes it easier to change courses once our political stars are aligned. Furthermore, should anyone argue that community opposition is unnecessarily delaying action—remedial activities that are funded and contracted—we can point back to the RAB minutes where we raised questions on the same issue, years earlier.

6. **Know the rules.** The officials who present workplans, remedies, and other proposals to RABs are carrying out policies established at higher levels within their organizations, or perhaps from other agencies. They don't always raise every pertinent issue. Sometimes, they get it wrong. (For example, at one point, I believe that we were told that the DDT in the pond sediment was exempt from Superfund rules because it's an agricultural chemical. We checked with EPA lawyers. It wasn't true.) At Moffett, we've been able to challenge local

proposals because we understand how institutional controls are supposed to work, how land use decisions influence cleanup, and how remedial alternatives should be compared.

7. Organize. In participating in the RAB and any other advisory group, we have never given up our political rights. That is, we have no direct authority. We're just advisors. If we want to appeal a decision, we have to take it to our neighbors, to the press, and up the chain of command at both the responsible party—the Navy, in the Moffett Field instance—and regulatory agencies.

8. Work the political food chain. Particularly at federal facilities, members of Congress and Senators have a great deal of influence over cleanup programs in their districts or states. Historically, however, we've found that it's sometimes difficult to get the attention of elected federal officials. In our case, at least, we've learned how to build toward that support. First we create consensus among environmental and other community groups, such as the League of Women Voters. Then we go to our city councils and other local government agencies, such as the Open Space District. We've found that is much easier to get our Congresswoman to take a stand if it reinforces the position of local elected officials. And when we go to our Senators, they check to see if our Representative is already on board.

The campaign to clean the Moffett wetlands if far from over. And the conditions at other bases with contentious cleanup issues may be vastly different. Our community is unusually empowered and educated. We have been successful in using our Restoration Advisory Board to promote community objectives, even when that means overturning the agreement of decision-making agencies. The approach we've taken at Moffett Field won't guarantee success elsewhere, but I believe, based upon my travels to communities throughout the United States, that it offers constructive lessons that should help activists everywhere.

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[1]This reports updates and builds upon an earlier report: Lenny Siegel, "Lessons from the Moffett Wetlands," CPEO, September, 2001, http://www.cpeo.org/pubs/les_mof.html.

[2]See Lenny Siegel, "Fighting City Hall and the Federal Government, and Winning: The Moffett Field Experience," CPEO, February, 1998, http://www.cpeo.org/pubs/mofle.html.

[3]("Land Use in the CERCLA Remedy Selection Process," OSWER Directive No. 9355.7-04.