

2007 Environmental Justice and Air Pollution Workshop

Best Practices in Collaboration. Tools and Resources

U. S. EPA Region 9 Office

San Francisco, CA

September 6 – 7, 2007

Track #2 – Tools & Resources Track

Session 1A. Setting the Stage: Community Planning Tools – Using Community Based Participatory Research (CBPR) as the Primary Model

Peggy Shepard (WE ACT for Environmental Justice) – Session Moderator

As an overview statement, it was indicated that community based participatory research (CBPR) can help with inappropriate environmental impacts. The community can work together to research, measure, and prioritize. Evidence-based campaigns do work, especially by giving research findings to the larger community, and to others to include in their agendas, e.g., New York bus fleet.

Swati Prakash (Pacific Institute)

No presentation.

Connie Tucker (Adventures Enterprises, LLC)

An overview of CBPR was provided (see slides). The presenter indicated that communities are victims of studies. To deal with this problem, EJ communities should become controllers and apply tools such as CBPR to develop solutions on which to act. CBPR involves a collaborative approach which engages, employs, invests, and involves; a foundation of collaboration is a must. The community becomes involved in the research that is needed and in determining the final product; the community should get together with those doing the research to provide grass roots input. CBPR involves applied science and community investigations; it provides a basis for documenting community problems and for problem solving. Important factors can include cumulative risk and impacts, environmental stressors, and socio-economic stressors. Vulnerability of the populace is also important and can include poverty, health issues, and poor social services. If cumulative risk and impacts are not considered, marginalized communities may face greater impacts than the general population.

The community should take the lead in deciding on principles. Too often, CBPR involves ivory-tower, government and university analyses; it needs community participation (see the example handout). If it isn't initiated by the community, then it is not CBPR! Also, funding should include academics that are supported for work and consultancy. However, communities should work with individuals, not institutions.

Steve Crawford (Passamaquoddy Tribe at Pleasant Point)

A protocol was developed for a tribal and community assessment of multimedia impacts of pollutants on the tribal ancestral grounds in Maine. The Passamaquoddy Tribe have

lived on these grounds and maintained their language for 12,000 years. Their average life span is 53 years and 62% are unemployed. The intent of the study was to identify air toxics that might affect health, measure targeted pollutants in sustenance food consumption, and perform a risk impact based on food consumption. Emissions inventories and air quality models were to be used in estimating the impact of air toxics on the reservation. Mercury, tissue concentration, and concentrations in sustenance foods were measured. However, fish sampling in the toxics monitoring program failed quality control criteria and had to be redone with EPA funding. A fish consumption survey was also conducted; it was found that there was no danger due to people not eating fish, as a result of other causes. The goal of these continuing studies is to improve health and vitality of the tribe.

Maria Moya (Environmental Health Coalition)

The EHC believes that guidance should come from the community. They are concerned with waste, lead, and air issues that include San Diego, Barrio Logan. They conducted a health survey in the Logan area and National City concerning asthma-related issues. Ship building and a power plant are pollution issues. The effort was to get the community involved through (1) a Promotora Program and training, (2) restarting the planning process and taking part in community planning, and (3) giving testimony at city council meetings. Community actions involved community based research (getting information from health departments can be difficult and may necessitate a grassroots survey), taking air samples (a “bucket brigade” with some financial support can be effective), a bilingual program, and outreach to schools. The burden of proof is on the community. Victories include activities related to truck routes and chrome plating.

Questions / Answers / Discussion

Health surveys should include information on cancers, other diseases, and learning disabilities in children. Help from technical experts in interpreting the data and putting together a professional report is needed. EMAP, AIRMOD, and HYSPLIT are some of the tools that are being used. EPA has the expertise, but resources may be a problem for communities. EPA Region 9 has a resource for doing assessments and can provide access to technical tools and data bases. Also EJ advocates at universities (e.g., Berkley, USC) can be checked. Statisticians are needed to design surveys and to be recognized; scientists should be on board before the study begins.

EJ communities are all around, but not all areas are thought to be at risk, even though they may actually be so. Don't just consider hot spots. Also, getting agency attention is a challenge, e.g., two power plants are to be built in Hayward, but there is no agency there to address potential problems. Community organizing requires hard work; it involves organizing residents, briefing elected officials and getting to the media. The burden of proof is on the community, so it is helpful to get the air agency to provide monitoring. Bucket brigades can work, but funding may be an issue.

It is necessary for the community to arm itself with knowledge and to get evidence together, including pictures and air monitoring, and if possible to identify the source of pollution. The community should be brought together about health risks, especially if a

specific chemical can be identified. A survey can help which should include how families are impacted (e.g., cancers, reduced learning among children (ADD, etc.) at the school board level, public health, indoor air, etc.) Other supporting tools that can be used include health fairs, meetings with government officials, media coverage, school participation, a community newsletter, press, ads on busses and shelters. Other things to consider are pesticide notification to public, training for other CBPR, and read out to partners.

Once CBPR is completed, a way must be found to share the result with the community. Results should be disseminated to every resident. In addition to a grassroots effort, CBPR must also be used to move policy-makers. These efforts can include door-to-door information transfer and meeting with elected officials. Multiple ways should be found to educate those with power to make change. Cumulative risk assessment should be included and the government and the larger community should be briefed.

Other things to consider doing include:

- Reviewing EPA guidance;
- Putting cumulative risk into legislation and learning how to use it;
- Getting a health survey and measuring health and socio-economic impacts; communities can do this and it gives them power; many communities are unique and need to go out door-to-door;
- Measuring community health with a unique number that is “Disability adjusted life year”;
- Finding health impacts and putting pressure on local agencies;
- Investigating alternative power plant energy sources and carbon sequestration; examples include three power plants that are not hooked up to alternative power, anti-flaring rules and unnecessary emergency releases;
- Learning about the permitting process and what government agencies are involved; finding out who else is involved.

All of these activities require a lot of legwork. Communities must keep pushing to get work done.

Session 1B. Setting the Stage: Community Assessment Tools – Monitoring to Get Results

Hilton Kelley (Communities In-Power & Development Association, Inc.)

CIDA is working to build a better world one community at a time. Port Arthur, TX and associated incinerators and refineries have been a focus. CIDA helps the disadvantaged by providing a helping hand and resources, training in air monitoring, facilitating a voice through voting, and has provided help to victims of Katrina/Rita. They are reaching out to those not in the loop and are fighting unjust air permits. Health-related exposure is an issue with breathing problems and the need for medications; health costs are high. Industry issues of concern include: flares at refineries due to upsets and power failures,

silica dust rained down on surrounding areas (facility was fined), and a truck spill on the roadway. People are leaving due to proximity to air pollution sources. A booklet has been prepared on pollution-free living (resource 409-984-9595). Air monitors, tied to a bucket brigade, have been used to identify toxins and results disseminated to the community. Many steps must be taken to fight for the community; education of the community is necessary.

Janet Phoenix (Coalition for Environmentally Safe Communities)

Lead contamination associated with demolition of houses was an environmental issue in East Baltimore. Demolition and clouds of dust were uncontrolled. Air monitors were used and low lead levels found; however, there was an issue of occupational versus community exposure and monitoring methods that were not designed for community use, e.g., industrial hygiene air samples. A better way to monitor, better than just dustfall, was needed; the protocol should be reviewed. A local expert was used to interpret the data; this established a basis for trust. The work was done through community representatives. Air samples stayed low. In summary, the process worked well. The project was able to rely on adequate community expertise and coordination; however there is a need to revise environmental monitoring methodologies. Unexpected consequences (dealing with rats) were noted, even though the demolition process was controlled.

April Hathcoat (Cherokee Nation Environmental Programs)

Information was presented on the Cherokee Air Toxics Project (see slides). There are 5 criteria pollutant sites and some passive monitoring. Factors that contribute to cancer rates are of concern. There is a VOC emissions study encompassing an industrial park and power plant and their relation to the tribal community, e.g., nearby playground and citizen complaints. Four of five VOCs measured are coming from the direction of the power plant. The monitoring plan is concerned with health benchmark comparisons which were exceeded, mostly due to industrial emissions. It is hoped that toxics sampling can be extended to be on a continuous basis and can be used in health risk assessment. The community is getting involved.

Goro Mitchell (Community Development Institute)

A report was presented on community-based air monitoring in East Palo Alto where there is a community perception of high ambient air quality levels; there has also been indoor air testing. Asthma is high and there is community pollution from non-community sources, e.g., interstate highways going through the community. A coalition of public/nonprofit organizations has been formed with a goal of no disbenefits in any community. Monitoring and consultation is being used for ozone and PM, also for meteorological data. However, there is a lack of resources creating challenges, so a grassroots effort is involved with local maintenance and analysis, low cost PM technology, an AQMD audit, and Internet access of monitoring results. Preliminary findings show 11 nonattainment days. The challenge is connecting with planning and economic development and coordination with regulators. In conclusion, the community has found the need for a low cost monitoring approach, to educate and mobilize community citizens, and to get youth involved.

Questions / Answers / Discussion

Information was shared on the use of 1-in-6 day canisters for monitoring 24hr averages (~\$200 per sample) of VOCs versus continuous measurements (\$30K-40K), e.g., UV sentry and UV Hound. Measurements of VOCs, NO_x, SO_x, and diesel emissions are of interest. Attributes of the “bucket brigade” were also discussed. These measurements can be challenged and the approach is not supported by some academics. However, it is an inexpensive way to get a first-test, grab sample. It is good for initial identification of air quality issues; it also provides a pathway to making the community relevant, while teaching it to understand scientific issues. Passive monitoring can be effective for SO₂, PM and NO_x. A matrix on monitoring tools that are appropriate to community needs can be helpful.

Session 2A. Taking Action: Preventing Pollution and Reducing Risks – Utilizing Voluntary Approaches

Alan Walts (EPA, Region 5) – Session Moderator

As an overview statement, it was indicated that the workshop discussion would move to topics associated with prevention of pollution, both voluntary (case studies) and regulatory (community use of existing laws).

Arnita Gadson (West Jefferson County Community Task Force)

The focus of WJCCTF is Louisville, KY (see handouts). Rubbertown is an area composed of eleven chemical companies. It is the largest source area in Kentucky with 20 percent of the emissions of air toxics and 40 percent of county pollutant emissions. Old refineries have been torn down and replaced with gasoline terminals; the impact on groundwater is unknown. The area has a long history of toxic emissions and makes a wide range of products. The surrounding population is 80,000, of which 80 percent are minorities and near poverty.

To deal with this problem a Strategic Toxic Air Reduction (STAR) program was initiated with a focus on regulations for reducing toxic emissions. Modeling was conducted for 37 chemicals with an expectation that it would take 5 years to reduce emissions to a level that allows health goals to be met. Odors, from a chemical company and a power plant, are also an issue. Industry people can tell the origin of an odor by descriptions generated by odor surveys. An odor code was developed and the air pollution control district could be called with complaints. It was also noted that ozone and PM_{2.5} issues are being addressed, and that research on synergistic effects is being considered.

Resources were obtained by going to the politicians and requesting \$300K that supported a laboratory, a chemist, and analyses of monitored information. Eighteen chemicals were found to be above health standards. The mayor said to have the problem fixed and this resulted in the STAR program. A lesson learned is that it is necessary to get to the “right person” that gets work done and handles information that goes to members of the

legislature. This resulted in \$1.5M from the State of Kentucky to continue the monitoring program and to work on environmental justice issues. Other environmental problems include (1) water quality (e.g., pumping water into the Ohio river, ground water, fish in park lakes, etc.), and (2) land quality and dump sites. There has been good interaction with the media with stories on environmental issues now frequently on the first page. Health assessments and environmental lawsuits are also used as tools.

Cecil Corbin-Mark (WE ACT for Environmental Justice)

The focus of this discussion was on the Rosa Parks School Bus Campaign which is based on the principle of individual rights to a standard of living for health and well being where people live, work, go to school, etc. Many children that are 4 years old and younger have asthma. A contributing factor to the health of children is diesel fueled buses, especially air inside these buses which can impact health and lung disease. A program was established to reach out to parents and to bus drivers so as to document the level of pollutants on buses by measuring air levels before and after the placement of filters (children were not on the buses). The scope includes Harlem and related areas and the goal is to reduce exposure. The timeline for this effort is to monitor in September 2007 and to prepare a report by January 2008; cost is estimated to be ~\$100K.

A successful program would involve the reduction of diesel emissions, including the retirement of old buses, use of the best technology for retrofit, and use of ultra low sulfur fuel. Filters can be used at the tailpipe and at the crankcase to reduce PM, CO and HC emissions. A local law can be used to address fuel, best available technology, and levels of emissions reduction; it can be implemented quickly to cover all students and there does not need to be an impact on other schools. The Department of Education also needs to be engaged in this program.

Barriers include mobilizing the community and finding resources; the company must be willing to have the buses tested. The issue of school buses idling in front of schools also needs to be addressed, as does the use of bio-diesel fuel.

Questions / Answers / Discussion

Things have changed around Rubbertown in the following ways: one company emitting the most butadiene has reduced emissions by 90 percent; environmental acceptability goals have been submitted by companies and are to be met by 2012; Louisville, Kentucky and EPA have all worked together in partnership on monitoring. For the odor patrol, complaint calls have been made to industry, the APCD, and to the city. Unfortunately, accountability is a problem since, by the time control officials arrive, the odor event may already be over. To address this problem, “trigger” monitors are being used along with odor logs, characterization of the smell, and wind roses. Getting buy-in from industry in identifying odors has been somewhat successful. Industry representatives attended meetings and eventually started dealing with issues, not just people; they are helping to identify the source of odors, especially since they frequently think that the cause is “other industries”.

Concerning the school bus program, a retrofit report will serve to help other communities. NYCDEP did not partner on this program, although WE ACT did work with other local government agencies. Also, since the life span of fleet buses is 13 – 14 years, the program has missed a significant opportunity with the bus contract just being renewed.

Session 2B. Taking Action: Preventing Pollution and Reducing Risks – Utilizing Regulatory Approaches

Wilma Subra (Louisiana Environmental Action Network)

The focus of this discussion is on how data can be used to develop strategies (legal) for Louisiana communities; what can be used for law suits, if the agency fails to act (see handout). The toxics release inventory has shown an increase in emissions from 2004 to 2005. For ambient air, concentrations of dichloroethane need to be decreased and spike values need to be identified; spikes can be used to trigger additional canister monitors between scheduled measurements. Efforts are being made to encourage sources to act on the exceedances, upsets, etc. to reduce accidental releases and health effects; this is being done in cooperation with industry and EPA Region 6. Wind roses and mobile monitoring have been useful in determining the industrial source of pollutants.

Risk management scenarios, including planning and worst case scenarios are considered and used as a basis for potential law suits. In court cases a notice letter from the community to industry is sent; permit violations, a lack of reporting, and excess emissions are identified, as possible. Negotiation with the company is attempted; EPA and the state may conduct enforcement. The goal is for industry to operate better, thus providing a better quality of life.

Sofia Martinez (Concerned Citizens of Wagon Mound)

The emphasis for environmental activities in Wagon Mound, NM is on taking action, preventing pollution, and reducing risk. The EJ community is organizing and directing action. This involves pushing for collaboration (depending on who is in control), utilizing political, regulation, administration and litigation opportunities, and encouraging “listening sessions”. It is also helpful for local organizers to use e-mail, calls, etc. to get attendance at the listening sessions; testimony should be in the form of recommendations which have included training for EJ mid-level managers, EJ curriculum development (not embraced), and executive orders (didn’t include EJ leaders, but based on NEJAC). Legislation and lobbying are desirable since some in government agencies do not appear to be sympathetic to EJ issues and give the impression that people of color are “expendable”. Also, at times, collaboration with government agencies hasn’t been found to work; a finding of no “vulnerable” communities was concluded and many government representatives appear to be against the EJ community. There is a need to keep working at the State level.

Questions / Answers / Discussion

Citizen suits or torts are not always used, but can be very effective against violations of rules. Local governments are not always helpful. In dispute resolution, the EJ community typically agrees to lose a lot, and industry still gets a permit.

Torts can provide good results. In the case of Louisiana, federal air criteria levels were used in passing air quality standards. Also, the community is working with the planning commission to be more responsible. Some data is difficult to obtain and the community needs to know where there is a vulnerable zone. It is possible to get changes based on information, particularly for vulnerable zones. Real estate people can be responsible and the census tracts can be used to indicate vulnerability. Vulnerable zones can be determined by impacts of pollutants; this can be applied to PM-diesel and to power plants. A challenge is to put teeth into policies relative to vulnerable zones.

Things to consider in defining vulnerable zones are State-delegated programs and local programs that have land use restrictions dictating how property is used. The community can begin to address the environmental issues when changes to land use are proposed. There is a need to get the youth involved in protecting the next generation.

Session 3A. Making It Happen: Strategic Financing Options

Sheila Lewis (EPA Office of Enforcement and Compliance Assurance)

This discussion addressed federal funding sources, including who is eligible (organizations, not individuals), where to find, and how to apply (see presentation). Things to consider before applying include unique eligibility requirements, how this fits into the federal program, and capability to manage funds. “Outcomes” need to be identified quantitatively and as a measure of performance. There are websites that provide information concerning small grants, CPS, grants and debarment, including open announcements and funding opportunities. Also available is information on how to apply, completing the application, grant writing tips, and a catalogue of federal domestic assistance. Applicants are urged to hone in on grant criteria, to be detailed, and to repeat information. Award recipients must take online grant management training. The choice of topics for solicitation can be influenced by contracting the EPA program office with ideas and by submitting an unsolicited proposal.

Vernice Miller-Travis (Groundwork USA)

This discussion was concerned with philanthropic sources, e.g., Ford Foundation. An overtly political process of funding can be involved and may include: EJ grants through congressional advocacy; congressional goodwill; grants set at a congressional level with EPA controls: working on members of Congress by informing them about a grant application and seeking a letter of support. Applicants should be aware of (and obtain, as appropriate) the 501(c)(3) IRS designation of organizations for philanthropic funding.

It was noted that at the Ford Foundation, for example, ~200 people decide on award of grants and ~450 manage grants, illustrating the importance of fiscal management. There

is significant congressional pressure on how and who receives grants. Since the money may be the result of a political process, it is important to know who is in control of Congress. If things change during the process of executing a grant, then the program manager should be made aware of the change so that flexibility can be exercised appropriately. Applicants should be aware that managers at foundations have program objectives that have to be met. The board of the applicant organization should have a variety of skills and be reliable; it should keep a flexible funding base. Groundwork USA is one source of startup funds (e.g., \$100K) for an organization.

Bill Jarocki (Environmental Finance Center)

Environmental Finance Centers were the focus of this discussion in order to add value to previous presentations. “How to pay” issues of environmental compliance were addressed as three-party assistance for financing environmental compliance challenges; an informative Internet website was identified. There are nine centers in the EFC network with Region 9 being a good one with which to work. An annual report documents what each center does; activities can be influenced by the EJ community. The Boise State EFC works both on a micro basis with communities and on a macro basis with multi-communities. One of its programs Plan2Fund provides assistance with strategic planning. This EFC doesn’t give grants, it gives knowledge. It also provides financial analysis tools (FACE) and a directory of watershed resources which is applicable to the general environment.

Questions / Answers / Discussion

Region 9 staff will discuss how to use EFC’s in the next session. An EFC can be put into a 5 year comprehensive plan as an activity to fund. It is not entirely clear whether federal funding is in sync with needs due to limited funds; how the project is described also can influence funding sources. EJ needs more money and CARE can be a basis for EJ funding. Government agencies are courting industry and vice versa on the topic, but there is no attention to EJ with funding. An option is to become a 501(c)(3) organization and to compete in this area; applicants should be smart about how their organization is portrayed. There is need for communities to engage local and regional funders before branching out to other funding sources; get funders into the community so see the local challenges. EFCs were described well as a source of funding. Other sources of funding include attorneys general’s offices that have environmental public benefit funds, comptroller offices that have State resources, and port authorities that can provide tax exempt financing and can reduce costs for both government and industry.

Session 3A. Making It Happen: Supplemental Environmental Projects (SEPs)

Alan Zabel (EPA Region 9)

This presentation addressed “SEPs 101”. SEPs are voluntary and can be in place of a fine paid to the government. A SEP is an environmentally beneficial project that: must improve/protect/reduce risks to public health or environment; provides the violator with benefits, but benefits are primary to health or the environment; must meet narrow requirements; is addressed in a court order and is legally enforceable; and has a nexus

with the violation. A SEP is constrained to particularities of the specific case and cannot be used to subsidize compliance costs. It occurs as part of the settlement of an enforcement action and is not otherwise legally required to be performed. There are five legal guidelines: it cannot be inconsistent with statutes; EPA cannot control funds; the scope is defined in the settlement agreement; it can't be used to satisfy EPA obligations; it must advance one of the objectives of the statute. EPA monitors compliance with the SEPs.

SEP categories include: public health (e.g., health care facilities, population harmed, etc.); pollution prevention; pollution reduction; decreases of pollution amount or toxicity, environmental restoration; assessments and audits; compliance promotion and training; emergency planning and response. There are allowances for community involvement, but primarily for large SEPs. It was noted that EPA can't dictate SEPs to other agencies and that it is up to the facility to identify what SEPs it wants to pursue. Regarding accountability, it was noted that there are no "teeth" in SEPs; they are voluntary and a good will gesture. They are far from a perfect tool. A SEP provides an alternative to a penalty or punishment to deter a source. Information can be gotten from Agency websites, public notices, and FOIAs. The community can give insight to SEPs by getting involved with local emergency response and planning.

The biggest success is the example of diesel reduction as a result of a consent decree; also, there have been remedies at superfund sites. The South Bay health clinic has been nominated by Communities for a Better Environment (information available from speaker).

Richard Lew (Bay Area AQMD)

BAAQMD is a nine county agency. It has district guidelines on SEPs that are more flexible than EPA SEPs. However, the guidelines include collection of funds first, based on enforcement flexibility. It does not want SEPs (non-compliance), but would prefer compliance and prevention. District programs that were identified include: compliance and enforcement, permits, EJ and resource team, CARE program, and Grant program.

Examples of SEPs are: Contra Costa County – 2 monitoring stations and public warnings; East Palo Alto – PM monitoring and education program. It was noted that EJ groups that sued BAAQMD have been funded. The community can get involved in NEPA/CEQA to use funds for projects to benefit the community.