

NAP Stakeholders Workgroup Meeting:
Minutes

Date: Tuesday, August 29, 2000

Time: 1:30 to 4:30 p.m.

Site: 5th Floor Conference Room, 2020 L Street, Sacramento

No.	Name	No.	Name
1	Bode, Richard (ARB-PTSD)	17	Marty, Melanie (OEHHA)
2	Carmichael, Tim (CCA)	18	Miyashiro, Miki (ARB-PTSD)
3	Coleman, Curt (CMA)	19	Murchison, Linda (ARB-PTSD)
4	Cook, Jeff (ARB-MLD)	20	Nordheim, Mark (WSPA)
5	Donohoue, Dan (ARB-SSD)	21	Prasad, Shankar (ARB-OCH)
6	Fazeli, Bahram (CBE) – for C. Porras	22	Reheis, Catherine (WSPA)
7	Fletcher, Bob (ARB-PTSD)	23	Takemoto, Brent (ARB-OCH)
8	Forbis, Paula (EHC)	24	Terry, Lynn (ARB-EO)
9	Greene, Larry (CAPCOA)	25	Tschogl, Kathleen (ARB-OO)
10	Haber, Matt (EPA-R9)	26	Tuck, Cindy (CCEEB)
11	Hess, Peter (BAAQMD)	27	Venturini, Peter (ARB-SSD)
12	Holmes-Gen, Bonnie (ALA)	28	Walsh, Kathleen (ARB-EO)
13	Kyle, Amy D. (UCB)	29	Wallerstein, Barry (SCAQMD)
14	Leong, Eugene (ABAG)	30	Williams, Jane (CCAT) -- speaker phone
15	Lloyd, Alan (ARB-CO)	31	Witherspoon, Catherine (ARB-CO)
16	Martin, Jerry (ARB-OC)		

Introductions & Opening Remarks

The meeting started at ~1:45 p.m. Due to a workshop being held in the Board Hearing Room, the meeting was held in the 5th Floor Conference Room. Following introductions, Dr. Alan Lloyd welcomed the attendees to the NAP stakeholder meeting. He mentioned that the NAP was a key element of the Board's Community Health Program, and was delighted with the level of participation and interest to date.

Charge to the Group

Shankar Prasad followed Alan Lloyd by reiterating that implementing the NAP was a priority for the next few years, and the stakeholder group would play an important role in shaping future risk reduction strategies. A series of questions were posed to the group to consider for future discussion:

- When should cumulative impacts be the basis for decision-making?
- What factors need to be considered in cumulative impact assessments?
- Are current methods adequate for assessing cumulative impacts?
- Should cumulative impact assessment be a requirement for some permit decisions and/or review of existing permits?

- Is CEQA or another existing legal framework an efficient tool for evaluating environmental justice/equity complaints?
- Is monitoring an adequate response to a community complaint?

Shankar added that, the NAP guidelines will consist of three main components – development of tools and methods for evaluation, recommended risk reduction strategies, and legal framework analysis. It was then agreed that the participants would hold comments until after they were given an update on the NAP status.

NAP Status

Linda Murchison, in her slide presentation titled the “Barrio Logan Assessment Project” (handout provided), gave an overview of the Community Health Program presented to the Board in July (of which the NAP is a major element) and an update on the Barrio Logan Pilot Study. A number of questions were asked about preliminary indications of what sources were most important (mobile and/or stationary, contribution of diesel PM, etc.) and when the data would be available. Linda explained that the data were being analyzed by a contractor and then would be provided to the Barrio Logan Stakeholder Group (that includes EHC, the Navy, and ALA), and presented to this group at a future meeting.

After showing the location of the monitoring station in Barrio Logan/Logan Heights in an aerial photograph, questions followed about what pollutants were being monitored (about 30 gases and metals) and if seasonal variations in pollutant levels had been observed (the contractor’s analysis is not complete). Linda then discussed aspects of the enhanced inventory assessment being undertaken at Barrio Logan. The goal was to conduct a neighborhood-scale inventory of sources, estimate concentrations within the neighborhood, and compare the model output with the monitoring data. She emphasized that this was a major shift in the state’s air pollution program, as we are attempting for the first time to look at something other than regional-scale air quality. As such, developing the tools to do neighborhood-scale assessments is a critical first-step to the NAP and the Community Health Program.

Questions were asked about ARB’s definition of neighborhood-scale (it varies depending on the number of sources in the area), what measures of air quality we were concerned with (not chosen yet), the extent of the toxic monitoring effort in San Diego County (there are ARB-sites in Chula Vista and El Cajon), and whether we were ultimately interested in characterizing impacts at scales smaller than a community (in some cases, only selected individuals are directly impacted by a source).

Linda stated that ARB’s goal was to understand the nature and extent of cumulative impacts – at present, the neighborhood-scale air quality models are crude, but they have utility in helping us to better understand what people within

a community are being exposed to. Others from ARB added that we are not sure how well the models work at the neighborhood-scale, but the field experience at Barrio Logan will help us to understand how we need to proceed for community-level assessments, especially when sources in the community may have a threshold below permit conditions. A variety of questions followed about what the criteria would be for siting monitors to assess neighborhood-scale air quality (fence line exposures, in some cases), what can be done if there is no inventory for a community (work backward from inventories in which emissions are assigned to broad source categories), if an emissions inventory for Barrio Logan had been developed (data are being compiled at present), and whether there was a large concentration of AB 2588 facilities in the area.

Linda cited some examples of the problems faced by individuals in Barrio Logan like the metal-plating shop between two homes and the day-care center under the Coronado Bridge. In conducting their neighborhood surveys, they have visited over 200-facilities and had strong community participation. Questions followed about the mobile source inventory (specifically, the need for more traffic count data on surface streets) and the time frame for summarizing the study (NAP guidelines based on Barrio Logan are expected to be drafted in July 2001). The group then initiated an open discussion. To start, air quality statistics (which ones will be looked at, and whether acute exposures will be part of the analysis), relative impacts of diesel (was elemental carbon measured), and similarities to MATES II were discussed. Next came a discussion of what to do about existing problems/inequities. The following is a list of the suggestions made:

- pollution prevention should be a priority for everyone;
- explore and list the array of options available to communities – ultimately, each community may have to come up with its own solution(s);
- continue to push for better control technologies – once available, they can then be applied to existing situations;
- explore ways to better educate communities about the risks posed by unpermitted, small sources – informed decisions may not be made if people are unaware of all risks (e.g., AutoNation);
- never to lose sight of the need to address existing problems because it takes a long time to address them, and not to accept them as unsolvable and move on;
- enlist and educate local officials to implement environmentally sound land-use policies;
- consider the economic realities associated with the closure of facilities or relocating to other regions – local loss of jobs;
- expect to have to deal with NIMBY issues (e.g., LA Airport expansion);
- the relocation or closure of small-businesses is not the only problem, there are problems with big-businesses as well (e.g., Sancor refinery);
- there is a need for more extensive public education in the SoCAB;

- regulators need to disseminate information carefully (Does a dry cleaning shop really pose a greater health risk than a refinery?);
- should problems at the scale of individual facilities be investigated?

Expectations & Recommendations

The attendees were asked to express their thoughts on risk reduction strategies. The following is a list of key suggestions:

- actuate the paradigm-shift from regional-scale to neighborhood-scale in the decision-making process, including local government officials;
- explore options available to communities where problems exist;
- promote pollution prevention;
- provide assistance/incentives to businesses to operate cleanly and examine alternatives to New Source Review;
- not to embark on defining “acceptable risk” for individuals and communities, but develop ways to assess “total exposure”;
- identify what is important to empower communities to take action and to assist in defining what is acceptable and what isn't for that particular community;
- develop a “list of tools” as options for community leaders to decide what, if any, action to take on a air pollution problem – continue to work in-house and fund external research as needed;
- adopt a dual-track approach that would act quickly on obvious problems and collect data upon which the guidelines would be based;
- proactively work with the Districts to promote public participation and community education;
- educate land-use and business decision-makers about air pollution – emphasize the need to consider air quality early-on in the process;
- strive to improve the risk assessment process because it is critical to successful risk communication;
- rethink the paradigm of the toxics program – change the emphasis from technology to one based on risk;
- evaluate the capabilities of current monitoring tools -- can problems be detected when they exist;
- decide how much effort to devote to diesel issues – given all the activity at the federal, state, and local levels, should we leave it at that;
- enlist expertise in small-business operations, zoning, and land-use planning.

Note: These suggestions were made by individual working group members. The working group has not yet reached consensus on these recommendations.

Some comments were also made as to why businesses that choose to relocate for environmental reasons be required to be less-polluting thereafter (definitely,

they should not be allowed to conduct business as usual), having the Air Resources Board Members visit potential NAP and SB 25 sites with staff (being done already), holding meetings in southern California (depends on the group), and adding other members to the Stakeholders group (as appropriate).

Next Steps

Lynn Terry summarized the main discussion points and action items:

- parallel tracks are needed for near-term and for long-term solutions;
- there is value to the present risk assessment approach and work must be continued to improve upon it;
- better technical tools and methodologies need to be developed;
- better land-use planning is only part of the solution;
- a concerted effort is needed to identify data gaps;
- the cooperation and assistance of the stakeholders is needed to identify key problem(s) and to jointly come up with risk reduction strategies for consideration by the Board.

At the next meeting, the group would be updated on the modeling work being done at Barrio Logan. Several questions were raised near the end of the meeting: should we focus on identifying the primary chemicals which are the risk drivers in the next meeting; can the environmental organizations share their knowledge about what communities they are concerned with; and how soon can we expect to take action on near-term issues (6-9 months).

Next Meeting

Most of the group felt strongly about getting off to a strong start and meeting bimonthly (once every two months) instead of quarterly would be better. As such, we will look into scheduling the next meeting around the end of October.

The next meeting will be on: Wednesday, November 1, 2000
 9:30 a.m. to 12:30 p.m.
 ARB Hearing Room, Lower Level
 2020 L Street, Sacramento

Adjourn

The meeting ended at ~4:30 p.m.

Attachments: 1. Comments from Amy D. Kyle to Shankar Prasad (8/30/00)

2. List of parameters being measured at Barrio Logan

ATTACHMENT 1

Comments from Dr. Amy D. Kyle sent by email to Shankar Prasad on 8/30/00

My comments are:

1. Top-down and bottom-up process

As I think you heard from the group, moving the "action" portion of the project to equal billing with the assessment part of the project would focus attention not only on methods and approaches but also on how to start to achieve results on known priorities.

People see it in different ways.

I see it as a top-down and bottom-up approach in which the top-down of the process is to identify known priority areas and, to the extent possible, strategies to address them now. The bottom-up part of the process is to do the community-level assessments, learn what the sources of the problems are at this scale and with finer information resolution, and then add identified problems that may have implications beyond a single community to the priority list.

2. Communities aren't responsible for solving everything.

Some participants in the group, and some of the materials presented, seem to assume that, just because a problem is identified at the community level, it must be solved by the community. I really disagree with this. I would suggest that the written documents for the project not mandate the governmental level at which solutions or strategies must be developed and applied.

Diesel is a great example. The problem of diesel pollution was identified (in part) through community-level assessment. However, the solution is obviously not going to be for every neighborhood to adopt standards for diesel engines.

Control of air pollution is fundamentally a state responsibility and not a local one. No option should be foreclosed at the outset.

3. Separate the goals from your capabilities with regard to characterization

Some of the presentation at the meeting about the Barrio Logan project seemed to mix up goals and capabilities.

By this I mean that the pictures of the plating shop (or something like that) next to a house implied that finding that risks of pollution affecting the residents of that house would be achieved by the project. Let me say first that I think that is a great goal and something that is very appropriate and desirable to try to do.

However, I do not think that there is, at present, any way to achieve that detail of resolution in modeling. So, the impression from the presentation, in my interpretation, was to promise a result that probably cannot be delivered. I would recommend that you avoid doing this.

One approach would be to separate out the goals of the project (which may be to assess the risk at the household level) from what you have the capacity to achieve (which wasn't really defined.) I would recommend spending some time explaining what the various modeling approaches can achieve in terms of both spatial and temporal resolution.

4. Getting started on the big picture.

I didn't bring this up at the meeting, but it might be interesting to look at the just-released results of the EPA NATA (National Air Toxics Assessment) for California, to see what they found in terms of distribution of pollutants and also the most impacted areas. This might inform the process of identifying what we "know" now.

While I understand that CARB has some legitimate criticisms of the model used (ASPEN), the results are still more informative than no results and would be of interest to the group I believe. I discussed this briefly with Linda Murchison, who I believe said that they had run the ASPEN model using the California emissions inventory, so that might also be a useful too.

5. Take one step at a time.

This project is described as an attempt to do a cumulative risk assessment for communities. This combines two steps that are conceptually distinct. One is to account for all sources of pollution in determining the concentrations of pollutants that may be found in the neighborhood (at whatever temporal and spatial resolution is determined to be feasible.) The issues involved in doing this have to do with selecting pollutants to model or monitor, identifying sources, accounting for weather, selecting models, deciding on how to measure, etc. It is not necessary to deal with any question of whether to do risk assessment or whether it is necessary to define an "acceptable" risk in order to do this part of the assessment. I would suggest that this part be separated out as its own step, conceptually.

Then, the next step is to decide how to account for the "cumulative" risk that may come from this assessment of concentrations of pollutants. This raises another set of issues having to do with toxicity values, appropriate endpoints to combine, how to account for exposure duration, etc. These are a largely different set of issues, which I believe may be more difficult (though I hope not impossible) for the group to assess. I would suggest separating this out as a second step.

I agree with those who said that it would be valuable to do the risk assessment step (if it is done in a way that is fair and representative), but I also believe that the project will have merit even if you group cannot agree on how to do this. Just finding out the net concentrations of pollutants would be a breakthrough.

Also, the written materials make it would like a cumulative risk assessment can be done only at the neighborhood level. This is not the case. The notion of doing something at the neighborhood level is conceptually more linked to the notion of identifying all the sources and total concentrations of pollutants. This probably does need to be done at the local level. By contrast, one could do a cumulative risk assessment using regional data at the regional level as well.

6. Adequacy of pollutants included

I would add to the list of issues for the project is to review the pollutants to be included in the modeling or monitoring. Some pollutants that appear to be of concern from national modeling do not seem to be included in the CARB monitoring. I don't know what they included in the MATES monitoring. I would suggest that the group specifically address this.

7. Adequacy of detection limits

I would also add to the list of issues for the project a review of the detection limits for the methods used for any monitoring. Some pollutants have, at least in the past, had detection limits that are too high to detect all concentrations of possible health concern. I don't know if this is true for the MATES monitoring or not.

8. Technical information that I would like to have

I would like to get a copy of the full MATES study (including the data).

I would also like to have more information about the modeling approaches suggested and their strengths and weaknesses. I am interested in why CARB likes UAM better than ASPEN.

I hope this is helpful.

ATTACHMENT 2

List of Aerometric Parameters Being Measured at Barrio Logan

Criteria Pollutants (analyzer, sample method, frequency of sampling)

- ozone (API 400, UV photometry, continuous)
- nitrogen dioxide (TECO 42, gas phase chemiluminescence, continuous)
- carbon monoxide (Dasibi 3008, non-dispersive infrared photometry, continuous)
- PM10 (Andersen Hi-Vol/SSI, gravimetric analysis, continuous)
- PM2.5 (Met-One BAM, beta attenuation, continuous)

Meteorology (analyzer, sample method, frequency of sampling)

- Resultant wind speed (Met-One 010, vector summation, continuous)
- Resultant wind direction (Met-One 020, vector summation, continuous)
- Ambient temperature (Met-One 060, thermistor, continuous)

Toxic Compounds (sampler, analysis method, frequency of sampling)

- Total metals and carbonyls
 - ❖ hexavalent chromium (Xontech 920, IC UV-visible, 1-day-in-4)
 - ❖ total metals (Xontech 920, x-ray fluorescence, 1-day-in-4)
 - ◆ Al, Si, P, S, Cl, K, Ca, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As, Se, Br, Rb, Sr, Y, Zr, Mo, Cd, Sn, Sb, Ba, Hg, Pb, and U
 - ❖ formaldehyde (Xontech 920, silica-DNPH with HPLC-UV, 1-day-in-4)
 - ❖ acetaldehyde (Xontech 920, silica-DNPH with HPLC-UV, 1-day-in-4)
 - ❖ methyl ethyl ketone (Xontech 920, silica-DNPH with HPLC-UV, 1-day-in-4)
- Halogens, aromatics, butadiene, and oxygenates
 - ❖ benzene (Xontech 910, GC-PID, 1-day-in-4)
 - ❖ toluene (Xontech 910, GC-PID, 1-day-in-4)
 - ❖ ethyl-benzene (Xontech 910, GC-PID, 1-day-in-4)
 - ❖ 1,3- and 1,4-xylene (Xontech 910, GC-PID, 1-day-in-4)
 - ❖ styrene (Xontech 910, GC-PID, 1-day-in-4)
 - ❖ 1,2-xylene (Xontech 910, GC-PID, 1-day-in-4)
 - ❖ 1,4-dichlorobenzene (Xontech 910, GC-PID, 1-day-in-4)
 - ❖ 1,2-dichlorobenzene (Xontech 910, GC-PID, 1-day-in-4)
 - ❖ 1,3-butadiene (Xontech 910, GC-PID, 1-day-in-4)
 - ❖ dichloromethane [DCM] (Xontech 910, GC-ECD, 1-day-in-4)
 - ❖ chloroform (Xontech 910, GC-ECD, 1-day-in-4)
 - ❖ trichloroethane (Xontech 910, GC-ECD, 1-day-in-4)
 - ❖ carbon tetrachloride (Xontech 910, GC-ECD, 1-day-in-4)
 - ❖ trichloroethylene [TCE] (Xontech 910, GC-ECD, 1-day-in-4)
 - ❖ tetrachloroethylene [Perc] (Xontech 910, GC-ECD, 1-day-in-4)
 - ❖ MTBE (Xontech 910, GC-PID, 1-day-in-4)
- PAHs
 - ❖ benzo(b)fluoranthene (Andersen Hi-Vol/SSI, HPLC, 1-day-in-4)
 - ❖ benzo(k)fluoranthene (Andersen Hi-Vol/SSI, HPLC, 1-day-in-4)
 - ❖ benzo(a)pyrene (Andersen Hi-Vol/SSI, HPLC, 1-day-in-4)
 - ❖ dibenz(a,h)anthracene (Andersen Hi-Vol/SSI, HPLC, 1-day-in-4)
 - ❖ benzo(ghi)perylene (Andersen Hi-Vol/SSI, HPLC, 1-day-in-4)
 - ❖ indeno(1,2,3-cd)pyrene (Andersen Hi-Vol/SSI, HPLC, 1-day-in-4)