Bay Area Air Quality Management District
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Advisory Council Meeting
Wednesday, October 30, 2024

**APPROVED MINUTES**

## CALL TO ORDER

1. **Opening Comments:** Advisory Council (Council) Chairperson Solomon called the meeting to order at 9:30 a.m.

   **Roll Call:**

   Present: Chairperson Dr. Gina Solomon; Vice Chairperson Dr. Phil Martien; and Members Professor Ann Marie Grover Carlton, Dr. Stephanie Holm, Professor Michael Kleinman, Garima Raheja, Dr. Michael Schmeltz, and Board Liaison Davina Hurt.

   Absent: None.

## CONSENT CALENDAR

2. **APPROVAL OF THE DRAFT MINUTES OF THE ADVISORY COUNCIL MEETING MINUTES OF SEPTEMBER 19, 2024**

Public Comments

No requests received.

Council Comments

None.

Council Action

Professor Kleinman made a motion, seconded by Dr. Martien, to **approve** the Draft Minutes of the Advisory Council Meeting Minutes of September 19, 2024; and the motion **carried** by the following vote of the Council:

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| AYES: | Carlton, Holm, Hurt, Kleinman, Martien, Raheja, Schmeltz, Solomon. |
| NOES: | None. |
| ABSTAIN: | None. |
| ABSENT: | None. |

## INFORMATIONAL ITEMS

### 3. OVERVIEW OF AIR DISTRICT STRATEGIC PLAN

Greg Nudd, Deputy Executive Officer of Science and Policy, gave the staff presentation *2024-2029 Strategic Plan,* including: outline; why a Strategic Plan; why focus on Environmental Justice (EJ); Plan development engagement; Plan framework; Goal 1: Achieve Impact; Goal 2: Advance EJ; Goal 3: Foster Cohesion and Inclusion; Goal 4: Be Effective, Accountable, and Customer-Oriented; Strategy 1.1: Change Approach to Air Quality and nexus to other Plan strategies; Strategy 2.11: Cumulative Impacts and nexus to other Plan strategies; Cumulative Impacts commitment 2.11.2; and next steps.

The Strategic Plan was developed through a collaborative process with community leaders, Air District employees, the Board of Directors, and Community Advisory Council (CAC) members, representatives from regulated industries, and government and non-government partners. The result was one of the most forward-thinking, ambitious strategic plans ever to be adopted by a local air district in the state - one centered on fairness, respect, diversity, equity and inclusivity. Air District staff will provide an overview of the strategies within the plan, and the nexus between the Advisory Council's work.

Public Comments

No requests received.

Council Comments

Councilmember Raheja raised concerns about wildfire exposure and asked if the Air District planned to collaborate with PG&E or the Forest Service to mitigate risks. Mr. Nudd explained that the current strategy involves securing funding for resilience centers and home filtration and noted that requirements for prescribed burns have recently been streamlined.

Vice-Chair Martien commended the Strategic Plan for clearly setting priorities, which he believed would help focus the Advisory Council's work on cumulative impacts.

Prof. Schmeltz asked whether the Air District had enough workforce capacity to support a shift from a complaint-driven enforcement model to more targeted inspections, as well as to meet the Strategic Plan’s objectives more generally. Mr. Nudd acknowledged that additional resources would likely be necessary. However, he clarified that reorienting enforcement priorities would involve using existing resources more efficiently, rather than expanding them. He further explained that many other aspects of the Strategic Plan also aim to improve efficiency, with most new funding needs centered on community partnerships and on-the-ground community work.

Board Chair Hurt emphasized the Board's dedication to prioritizing science and environmental justice, and noted that environmental justice requires extensive community engagement. She described the Strategic Plan as expansive and foundational, with long-term impacts extending beyond the next five years, and added that the Board is looking forward to hearing the Advisory Council’s assessment of its completeness from a science perspective and a community perspective.

Prof. Schmeltz drew attention to the topic of scientific integrity, and whether that should be understood as part of building community trust, citing the example of the CDC's office dedicated to improving public understanding while maintaining scientific standards. Mr. Nudd underscored that transparency is key to trust. The methods currently used to assess risk, he explained, are scientifically based, but are black-box unless one has professional expertise and familiarity with the associated tools; since it is unreasonable to expect that from community members, building trust requires transparent communication, extensive individual-level engagement, and demonstrating understanding through reflective listening, which is an ongoing effort requiring continuous improvement.

Advisory Council Chair Solomon introduced Mr. Arsenio Mataka, the new Deputy Executive Officer for Equity and Community Programs. Mr. Mataka expressed appreciation for the Council's contributions and shared his experience working with the CDC on decision-making tools like the Heat and Health Index and the Environmental Justice Index. He emphasized that public input processes are compatible with scientific rigor, and cited CalEnviroScreen as an example of building on public input without affecting the integrity of the work. He stressed that community trust is crucial, as even well-designed tools are ineffective without it.

Dr. Holm emphasized the importance of sustainability in community engagement, recommending starting with smaller, more manageable efforts to ensure long-term success. She pointed out that there are many examples of agencies and academics initiating large-scale outreach efforts they could not sustain.

Following up on the issue of prioritization and enforcement, Council Chair Solomon asked about the process for redefining inspection priorities and how the Advisory Council might be involved, noting that cumulative impacts might reasonably be included in the criteria for prioritization. Dr. Meredith Bauer, Deputy Executive Officer of Engineering and Compliance, explained that staff are in the early stages of rethinking inspection targeting, and that this will evolve along with the Advisory Council's thinking. She described the current vision as involving geographic overlays based on air quality, emissions, and exposure indicators with Overburdened Community designations and source types. Dr. Bauer also mentioned the potential inclusion of health risk data related to air toxics and other relevant data. She envisioned creating a localized map highlighting community health risks to guide inspections, that would help to minimize impacts over time. Currently, she said, staff are beginning with Overburdened Community designations and emissions-related data to identify likely high-exposure areas. Dr. Bauer also stressed the need to consider areas where inspections may not be occurring, given the limited number of inspectors. Even if the data indicate a lack of known sources, she asked, how should that negative be considered, and how will it be perceived by community?

Council Chair Solomon thanked staff and advised careful use of the term "health risk," noting that there are potential hazards to focusing on risk in the specific context of looking at overburdened communities.

<u>Council Action</u>

No action taken.

4. **NATIONAL ACADEMIES OF SCIENCE, ENGINEERING, AND MEDICINE PROJECT: STATE-OF-THE-SCIENCE AND THE FUTURE OF CUMULATIVE IMPACT ASSESSMENT**

Dr. David Holstius, Senior Advanced Projects Advisor in the Assessment, Inventory, and Modeling Division gave the staff presentation *National Academies Project on Cumulative Impact Assessment,* including outline; organizations; charge questions; process and timeline; committee; community liaisons; workshops presenters.

Public Comments

No requests received.

Council Comments

Council Chair Solomon asked Dr. Holstius about the theme of making environments more health-promoting, as in Dr. Sacoby Wilson's panel discussion on "salutogenesis." Dr. Holstius explained that salutogenesis focuses on factors contributing to health and resilience, rather than disease, and offered to bring this topic back into the foreground, noting the Advisory Council's discussions of resilience and vulnerability at previous meetings. Dr. Solomon suggested potentially returning to the matter after public comment.

Vice-Chair Dr. Martien expressed appreciation for Dr. Boyd's recorded presentation, which challenged traditional risk assessment frameworks and highlighted the need for adaptive, action-oriented models. He noted that Dr. Boyd's emphasis on the historically contingent nature of risk assessment opened up consideration of alternative approaches. Dr. Martien also praised contributions from Dr. Nicky Sheats, who advocated for a "bias for action" and avoiding unnecessary reinvention, citing New Jersey's efforts, which were previously related to the Council by Dr. Judy Cutino, as a practical model.

Council Chair Solomon highlighted the impressive roster of the National Academies committee, including Bay Area experts such as Dr. Rachel Morello-Frosch, Dr. Lauren Zeise, and Dr. Tracy Woodruff. She suggested potentially inviting them or the committee chair, Dr. Weihsueh Chiu, as guest speakers. Chair Solomon also proposed engaging community liaisons from the project to provide diverse perspectives, with Council members taking responsibility for coordinating these talks.

Recalling Dr. Holstius's summary of Dr. Bill Rish's presentation, and considering the Air District's wide-ranging jurisdiction, Prof. Schmeltz wondered whether there had been any exploration of an optimal spatial resolution for cumulative impact assessment, given that the Air District's jurisdiction could be divided into smaller, distinct subdomains. Dr. Holstius responded that Dr. Rish's point about there being no "one-size-fits-all" solution would likely apply even within the scope of the Air District, and stressed the Air District's interest in the Advisory Council's advice for crafting a flexible framework that could accommodate variation. Regarding spatial scale, Dr. Holstius reminded the Council of discussions at the last meeting, particularly in relation to CalEnviroScreen and BenMAP, and noting that appropriate spatial scales depend on the type of data: for instance, count-based rates of asthma-related hospitalizations lose reliability at the block level, while other forms of evidence, such as community-based testimony, can yield valuable insights at that same level. He suggested exploring metrics that may be better suited to different spatial bases, such as school-based metrics for targeted programs, or, recalling Dr. Janet Currie's presentation,

innovative approaches that go beyond agencies' traditional reliance on administrative data. Mr. Nudd added that staff value ways by which analyses can be simplified to drive action, even if that means sacrificing some nuance. He said that this called to mind a mix of policy methods aligned with specific interventions under consideration.

Dr. Holstius mentioned that the next National Academies workshop would feature a community roundtable, and noted that while the Selected References list had so far emphasized academic work, staff recently added a practical guide by the Union of Concerned Scientists focused on community advocacy and science. This recalled earlier discussion about balancing and integrating science and community perspectives, as well as the need to tailor approaches, since the new material spoke to communities about how to petition and advocate for change at different levels through various processes.

On the topic of appropriate geographies and spatial scales, Mr. Mataka suggested consulting Dr. Rachel Morello-Frosch, given her expertise in this area. He pointed out that the Environmental Justice Screening Methodology (EJSM), one of the first tools developed to assess cumulative environmental impacts and a precursor to CalEnviroScreen, would have confronted some of these challenges, and was operationalized at a Census block-group level. Mr. Mataka noted that traditional planning efforts do not typically align with Census tract boundaries. He also observed that many people are more accustomed to using platforms like Redfin or Zillow, which define neighborhoods differently. Rethinking the unit of geographic analysis, he suggested, could not only enhance communication but also improve the overall accessibility and utility of cumulative impacts mapping tools for end users.

Council Action

No action taken.

## 5. PRESENTATION ON CUMULATIVE IMPACT ASSESSMENT FROM DR. WILLIAM BOYD (UNIVERSITY OF CALIFORNIA LOS ANGELES)

Dr. William Boyd, University of California Los Angeles School of Law, gave the presentation *Risk Assessment and the Challenge of Cumulative Impact: Some Lessons from Regulatory History,* including: roadmap; 1958 "Delaney Clause" amending 1938 Federal Food, Drug, and Cosmetic Act; between 1958 and 1978, significant advances in detection capabilities and analytical techniques reveal vast new world of environmental hazards; expanding universe of carcinogens; Occupational Safety and Health Administration (OSHA) Generic Cancer Policy, 1977; Supreme Court Benzene Decision, 1980; 1983: National Research Council publishes Risk Assessment in the Federal Government ("The Red Book"); 1983: William Ruckelshaus returns to Environmental Protection Agency (EPA) and embraces risk assessment as way to restore public trust; risk assessment At EPA, 1980s-2010s; multiple independent reviews by the Nuclear Regulatory Commission (NRC), Government Accountability Office (GAO), and others point to major problems with practice of risk assessment; cumulative risk and the challenge of complexity; structural vulnerability and EJ; going forward: some lessons from regulatory history; and further reading.

Public Comments

Public comments were given by Elaine Lee. Ms. Lee asked, when the science and data do not agree with the complaint count, in terms of where the worst issues are, and when the people who make the complaints want to be heard, how should the two be balanced, in terms of making sure

people are heard, but also following the science and the data? This question, said Ms. Lee, was related both to Dr. Boyd's presentation and also to remarks by a previous speaker.

Council Comments

Councilmember Raheja thanked Dr. Boyd and asked whether he could recommend any research on effective hazard-based trigger approaches that have been successful for communities and acceptable to agencies. Dr. Boyd referred to the discussion of hazard-based approaches in his article "De-Risking Environmental Law" and cited Section 112 of the Clean Air Act (CAA) as a key example of effective statutory language for regulating hazardous air pollutants (HAPs). Dr. Boyd recalled that for the first 20 years under the CAA, EPA struggled with how to regulate HAPs and how to do risk assessments, achieving little progress; then in 1990 Congress delivered a list of 189 HAPs to EPA for regulation, signaling that it was undesirable for the agency to spend years analyzing risks before implementing regulations, and that while there is debate over whether Maximum Achievable Control Technology (MACT) standards are an ideal solution, Congress clearly prioritized action over extended risk assessment.. For additional examples of statutes, Dr. Boyd suggested considering the endangerment findings under the mobile source provisions, the basic standards in the NAAQS [National Ambient Air Quality Standards] program, and the "reasonable certainty of no harm" standard in the Food Quality Protection Act. He noted that although the Toxic Substances Control Act (TSCA) focuses on "unreasonable risk," its language could arguably be interpreted to address compounding hazards, although this could be considered a bit of a stretch. Many environmental statutes, Dr. Boyd concluded, include statutory language that is not tied to risk and could be compatible with hazard-based triggers for action.

Council Chair Solomon appreciated the question from Ms. Lee, noting that it prompted consideration of the various perspectives that the Council wants to incorporate. In the principles adopted by the Advisory Council at a previous meeting, Dr. Solomon remarked, the Council considered community perspectives and community input to be one of the foundational issues to be considered, and one of the data sources that should be relied on, as an approach is developed. Therefore, Dr. Solomon said, it is important to ask what should be done when these perspectives diverge, emphasizing that this certainly does happen.

Prof. Kleinman referenced Dr. Boyd's point that quantitative risk assessment can inhibit public participation, inviting Dr. Boyd to elaborate. Dr. Boyd explained that the history of quantitative risk assessment itself, as well as the criticisms from environmental justice advocates and frontline communities, highlights some of its limitations in this regard. He described it as a highly technocratic exercise that is extremely sophisticated and complex, and requires a deep understanding of multiple disciplines; it also demands significant time and resources. For all of those reasons, Dr. Boyd indicated, it becomes disconnected from communities and the problems that they are confronting. He suggested that cumulative impact assessment might offer a way for those communities to be at the table with regulatory agencies. However, he stressed that it should not simply add to the work of quantitative risk assessment. Dr. Boyd emphasized the importance of the Air District's efforts to engage communities in developing new approaches, and recognized that building the necessary trust takes time.

Reflecting on the history and evolution of risk assessment methodology, Dr. Martien shared that he had spent thirty years as a modeler at the Air District, though his work did not solely involve health risk assessments. He remarked that he had long perceived conflicts inherent in a process that often leads to a significant backlog and does not easily accommodate the more qualitative discussions of impact that arise when staff engage with communities. He expressed his desire to

find a balance with the best of both worlds, keeping the tools that might still be worthwhile. As an example, Dr. Martien noted that involving community members in modeling efforts for exposure assessments under the AB 617 program has seemed genuinely helpful at times. However, he pointed out that methods aimed at exclusively analyzing a single pollutant from a single source at a specific facility do not seem like the right recipe. He wondered about the potential for blending approaches and, turning to Dr. Boyd, asked for his thoughts on how to move forward. Specifically, he asked whether a purely hazard-based approach to triggers seemed feasible, given that it seemed there were many existing barriers to making such a shift immediately, and wondered whether a hybrid path were possible.

Responding to Dr. Martien, Dr. Boyd clarified that he was not advocating for discarding regulatory tools and methods developed over the years in favor of what existed before. He recalled that in the 1970s, both the Occupational Health and Safety Administration (OSHA) and the EPA were searching for simpler, more effective regulatory methods and offered that, to him, the essence of the right approach lies in a commitment to avoid becoming bogged down in analysis, and to move quickly and iterate as one learns more. He acknowledged that an adaptive approach using initial hazard-based triggers could introduce uncertainty and challenges, particularly regarding the need for predictability for the regulated community. However, he suggested that creative strategies could address this. For example, agencies might develop an index to assess chemicals that are widespread and persistent in the environment, especially when animal or human studies indicate potential hazards; such an index could be combined with exposure screens, non-chemical stressors, and other aspects of cumulative impacts to guide regulatory decisions; at that point, additional background work could help refine and move forward some kind of health-protective regulations based on available knowledge. Dr. Boyd surmised that the difficulty of this would likely vary by statute, but observed that there seemed to be more regulatory flexibility in the context of air quality than in other areas. He highlighted the EPA's requirement under the Toxic Substances Control Act (TSCA) to affirm the safety of new chemicals before they enter the market as a positive example of moving toward a hazard-based trigger for action and not requiring detailed risk and exposure assessments before regulating. Dr. Boyd admitted that while he did not have a recipe for reform, he felt that the history of risk assessment, and its record to date, warranted the exploration of alternatives. He concluded a blended approach could be appealing, as long as it avoided creating lengthy delays and imposing the burdens of those delays on communities.

Turning to the specific case of the Air District, Council Chair Solomon pointed out that the agency is not obligated to use quantitative risk assessment in the same way as some other regulatory bodies. Further, Dr. Solomon emphasized, the Air District is fundamentally focused on reducing exposure to air pollutants. She explained that risk assessment typically combines hazard, dose-response, and exposure to characterize risk, and that in some contexts, focusing solely on hazard can be highly effective—Proposition 65 being a notable example. Dr. Solomon acknowledged that focusing on exposure can be challenging due to its high variability, but she suggested that it may be the most relevant focus for the Advisory Council. She noted that exposure assessment lends itself to certain things, such as setting benchmarks and trend-based goals, that could be developed around a set of issues not overly tied to lots of risk numbers, which she agreed would be infeasible and bog things down.

Prof. Carlton raised the question of whether there was precedent or potential for applying the Good Neighbor provision and PSD (Prevention of Significant Deterioration) considerations not just spatially but also temporally. Commenting that her focus was on ambient air quality and climate, she emphasized the importance of protecting people both now and in the future, and explained that she wondered how areas with the worst air quality and additional stressors like heat might

shift over a five-year timescale. Mr. Nudd responded that this was a very interesting question, and that he would need to go back and think about the regulatory framework. He explained that when developing an attainment plan, staff typically model conditions a few years into the future, using control-strategy simulations to determine relative effectiveness. He wondered whether climate changes over a five-year timeframe would make those assessments significantly less reliable, but he agreed that the long-term sufficiency of control strategies should be considered. Mr. Nudd offered that he was not aware of any statutory prohibitions on considering this, only that it would be innovative and require Board support for additional effort needed to model scenarios well into the future.

Prof. Schmeltz referred to previous discussion of how regulatory agencies often face legal and political liabilities, which can slow them down. He emphasized that their tendency toward risk aversion is understandable. However, he expressed curiosity about how an agency like the Air District might become more flexible and nimble, even while managing these liabilities. Prof. Schmeltz then turned to recent federal developments, specifically mentioning the major questions doctrine that Dr. Boyd had discussed. He wondered whether such shifts, including implications from cases like Chevron, might influence the Air District's decision-making, given its statutory authority over air quality and its highly technical work.

Mr. Nudd responded that Dr. Boyd's presentation related to a number of practices and policies at the Air District. First, Mr. Nudd explained, Regulation 11 Rule 18 sets a targeted risk level, which depends on a facility-wide risk assessment. If the assessment reveals that the facility exceeds the trigger level, it must develop a plan to reduce risks. This idea is attractive from a regulatory perspective, Mr. Nudd explained, because the agency is not obligated to demonstrate the feasibility of specific controls. Instead, the responsibility falls on the facilities, which have a better understanding of their operations. However, Mr. Nudd continued, the analytical burden of performing those risk assessments has proven to be significant, leading to substantial delays in completing them—an outcome consistent with Dr. Boyd's predictions. Taking a step back, Mr. Nudd remarked, a hazard-based approach would look different; one would get more into the Maximum Achievable Control Technology approach that EPA has taken under their authority. He noted that this approach introduces its own set of political and regulatory challenges, particularly in defining terms like "achievable" and "feasible." Moreover, what is economically feasible for a refinery may not be for a smaller operation, such as a restaurant, even though such establishments can still produce considerable toxic emissions.

With the Council Chair's permission, Dr. Boyd elaborated on the implications of the major questions doctrine and the Loper Bright case, noting that the end of Chevron deference imposes significant constraints on how agencies like the EPA operate under their key statutes. However, he suggested that revisiting the statutory language itself might reveal more flexibility than might be assumed, and that local regulators may need to think about how to address problems by using that statutory language in new ways. With risk assessment, Dr. Boyd contended, it is clear that things are very much driven by internal EPA guidance, and that much of this has been outside the scope of statutory interpretation. He further contended that while one could claim the benzene case was a strong signal to EPA, it was really about OSHA, and it was unclear to him why EPA took it to mean that EPA also had to conduct quantitative risk assessments.

Board Chair Hurt referred back to Ms. Lee's public comment about balancing community voices with data-driven decision-making. She outlined the Air District's multi-layered approach to ensuring that community voices are heard: first, the complaint system serves as an initial layer; next, staff have a commitment to review and assess these complaints, forming a second layer;

finally, the Air District must define clear criteria and processes for communicating what is happening, creating a third layer. Even when the data indicate something different, she said, it is through this process that the public can be heard.

Board Chair Hurt expressed curiosity about how consideration of, and respect for, diverse cultures and lifestyles might fit into the methodology or conversation behind health risk assessments, and how they are different for different people and cultures. Dr. Boyd responded that it was a challenging question, and that in the context of quantitative risk assessment as it has been practiced over the last forty years, he was unaware of any efforts to include such factors—which was not to say that they had not come up in some assessments. Dr. Boyd expressed that in his view, and in terms of how EPA is articulating it, part of the goal of cumulative risk assessment was precisely to accommodate a whole set of qualitative concerns about lifestyles, the way that communities are engaging with their environments, and the larger context of non-chemical stressors. However, he had not encountered anyone with a simple and easy way to combine those with a lot of the quantitative analysis that is still operating in the background.

Councilmember Raheja praised the discussion's emphasis on having a "bias for action" and the focus on timely implementation of the Strategic Plan. She saw this as implicit in the Strategic Plan, and wondered if there might be a way for the Air District to more explicitly codify it or clearly communicate it as a core value to the public. Council Chair Solomon supported the point and suggested that the challenge is how to structure something so that the drive to action is built-in without being difficult to justify. Mr. Nudd added that feedback from groups like the Community Advisory Council and the Community Steering Committee in Richmond-North Richmond-San Pablo has made it clear that the community wants more than just statements in a Strategic Plan: they want staff to have concrete plans of what is to be done, when, and by whom. Furthermore, they want the Air District to report back, detailing what has been accomplished and explaining any unmet objectives. Establishing accountability structures to meet these expectations is a priority, Mr. Nudd explained, and in this context, he encouraged the Advisory Council to consider the appropriate level of analysis necessary for policy interventions.

Prof. Kleinman observed that efforts to clean up the air or improve the environment are closely tied to quality-of-life considerations, emphasizing the importance of not creating new problems in the process. He highlighted the diversity of social and ethnic groups in the region and used the simple example of a backyard barbecue. While neighbors downwind might object to the smoke, he said, prohibiting the activity could diminish others' quality of life. Turning to the difference between approaches grounded in assessments of risk, rather than hazard, he indicated that at the EPA level, standards are set strategically using risk assessment, where the goal is a level of exposure that is safe for most people; whereas, the Air District is working at a tactical level, where a hazard-based approach may be much more beneficial. Prof. Kleinman elaborated that, when the Air District considers different areas, and takes into account the cumulative exposures in those areas, and what is important for the populations there, it may be possible to use a hazard-based approach to develop something that is acceptable to all stakeholders and not necessarily reduce their quality of life. However, he suggested, this does not need to look the same for every community, and a mix of approaches may be necessary to maintain public health and a strong quality of life.

Building on Board Chair Hurt's comments, Prof. Schmeltz mentioned a recent series of webinars hosted by the Health Effects Institute focused on cumulative impact assessment. He specifically recalled a session involving a Canadian tribe, where the approach was described as "cumulative effects management," emphasizing an integrative process within the community. To translate that

to the Bay Area, he suggested, could come down to agency capacities, but at the same time it seemed to ask a lot of community, considering what they could expect in return. It seemed, Prof. Schmeltz remarked, that given sufficient established capacity and an ability to sustain the engagement long-term, the idea of cumulative effects management sounded promising, as a way to engage with what is important to the community. However, he pointed out that those priorities might not always center on air quality. Prof. Schmeltz wondered how to proceed if air quality were not the community's primary concern, but still a contributor to cumulative effects.

Board Chair Hurt encouraged the Council to think expansively, expressing appreciation for the consideration of potential capacity shortfalls, but emphasizing that the Council should set workforce limitations aside as matters that the Board could address or staff could balance. She indicated a desire to hear more about the cumulative effects management approach mentioned by Prof. Schmeltz: how it might be realized in the Bay Area, and what it might look like given the particulars of the Bay Area.

Returning to the discussion of cultural diversity, Councilmember Raheja suggested that some low-hanging fruit might be found in evaluating the extent to which the services and outreach offered by the Air District, including public advisories, and the complaint mechanisms discussed previously, were available in different languages. Dr. Holm added that a group at Berkeley has shown that consideration of disability, statewide, is not as good as it could be, and communications for the Deaf community should also be considered. Mr. Mataka responded that those comments were top of mind for staff, who as part of the Strategic Plan, and through items to come before the Board, were requesting support for systematically building, implementing, and restructuring consideration of civil rights, inclusive of disability and language access.

Councilmember Raheja added that people without addresses were another population potentially being left out of communications, and analyses, and wondered how that might be considered. Mr. Mataka responded by relating an example of recent outreach by staff; he explained that there is a requirement to issue a 30-day public notice within 1,000 ft but there was a project where, despite there being no permanent residential addresses within that distance, a number of unhoused individuals were known to reside nearby, effectively permanently. To reach this population, Mr. Mataka explained, staff simplified the public notice and hand-delivered or posted notices. While no unhoused people attended the noticed meeting, it created an opportunity to share more about the potential exposures borne by those sleeping or living next to the project site. Mr. Mataka explained that his team, along with Dr. Bauer's, were working to appropriately institutionalize such a practice, given that it cannot be replicated everywhere but there are clearly places where it should.

Council Action

No action taken.

**ACTION ITEM**

6. **2025 ADVISORY COUNCIL WORK PLAN**

The Council considered adopting a Workplan Outline for meetings in 2025. Dr. Martien gave introductory remarks, as he drafted the outline.

Public Comments

No requests received.

Council Comments

Board Chair Hurt expressed appreciation for the creation of focus areas, and inquired about process: whether it would involve ad-hoc committees, and whether it was up to the Advisory Council as to how to work with staff. Advisory Council Vice-Chair Dr. Martien clarified that the Advisory Council needed to decide these important questions, and that the result would be captured in a specific section of the work plan. Board Chair Hurt affirmed that all of the necessary discussions would be difficult to accommodate in the current format, and that a small committee format would likely be preferable. Drs. Martien and Solomon agreed.

Council Chair Solomon added that time was also limited, and suggested that the next step [after public comment] should be to start prioritizing and developing a plan for moving forward. Seeing no public commenters, Dr. Solomon invited staff to share their reactions to the proposed outline: in particular, whether there any focus areas seemed like they might especially benefit from Advisory Council guidance.

Mr. Nudd expressed support for the outline's breadth and coverage. He emphasized that an important starting point would be to discuss the appropriate levels of analysis needed for different policy applications. He suggested beginning with a framework that defines a minimum level of analysis—one that is sufficient yet actionable and aligns with the "bias for action" principle. He mentioned that the Union of Concerned Scientists (UCS) reference brought up by Dr. Holstius could be a valuable resource in this context. Additionally, Mr. Nudd recommended considering how to involve members of the Community Advisory Council (CAC) in shaping the work plan. He shared that when he briefed the Environmental Justice Action Subcommittee of the CAC, there was significant interest in participating. However, he emphasized the need to carefully consider the scope, structure, and time commitments required for their involvement. He highlighted that participants should have access to the necessary information to engage meaningfully and make informed decisions about whether they could commit to the time and effort needed.

Council Chair Solomon directed staff to turn to the Methods and Principles portion of the work plan, noted that she did not have any suggested edits, and asked for reactions from Council members. Prof. Carlton inquired whether the phrase "bias for action" was intentional. Dr. Solomon clarified that it was intended to express that when in doubt, it is better to take protective health action. Board Chair Hurt expressed reservation about the word "bias" and wondered if there were an alternative. Dr. Holm proposed "in the case of uncertainty, lean towards protection." Dr. Martien clarified that that was the intent, and that at a meeting of the National Academies group, the point was made that it was preferable to tend toward action rather than tend toward over-analysis. Still, he agreed that "bias" might not be ideal language. Dr. Solomon suggested that a sub-group could work on improving the language, noting that while it may need work, there had been general consensus in earlier discussion about the merit of the concept.

Council Chair Solomon next drew attention to the sections concerned with Roles and Process, noting that to date there had been one member volunteering for the effort. Dr. Solomon thanked Dr. Martien for taking on the work, and inquired whether any other members would be willing to participate, up to a total of three, with an understanding that the asks would be kept reasonably

limited and manageable. Dr. Holm offered to participate, noting that she had meant to self-nominate earlier. Prof. Carlton also self-nominated.

Turning to the Focus Areas in the draft work plan outline, Council Chair Solomon remarked that all the items were interesting and had been discussed previously, but the list felt overly long. Councilmember Raheja reminded the group of Dr. Martien's earlier point that 2025 is only one year, and the Advisory Council typically meets only every few months. She suggested focusing on one or two key items, potentially dividing members into two sub-committees, so that assignments could be distributed to allow for substantial work to be completed between full Council meetings, rather than attempting to cover all six focus areas superficially. She also proposed that ongoing work might be continued by the next Advisory Council.

Council Chair Solomon inquired whether Deputy Executive Officer Mataka had heard from communities about topics they might consider high priority, noting that her own experience suggested that permitting, and enforcement, might be such topics. Mr. Mataka indicated that permitting would be a no-regrets choice, and that it would be inadvisable not to include it, considering the level of interest it held for community groups. He agreed that a second focus area could be warranted.

For a second area, Mr. Nudd suggested air quality planning; he indicated that this would bring in stationary source regulations, compliance and enforcement, and incentives, and could set up a framework for those.

Council Chair Solomon suggested honing in on permitting initially, indicating that if that went well, it would be an important achievement itself; attention could then turn to what other areas the Council's framework might apply to, and build from there. Turning to other members, Chair Solomon noted expressions of support for permitting as an immediate top priority. Dr. Martien expressed verbal support.

Council Chair Solomon strongly endorsed the goal of keeping the report short and focused. Noting the importance of working with the CAC, she added that it was important to pick an issue that the CAC felt strongly about, and to focus any asks of the CAC so as to maximize benefits from the investment of the CAC's time.

Dr. Holm suggested including a note in the Appendix of the work plan to explicitly state that other focus areas considered by the Advisory Council could be addressed by future iterations of the Council. This, she explained, would clarify that prioritizing one focus area does not imply the others are unimportant but rather reflects an effort to set achievable goals while remaining mindful of future needs and contributions. Council Chair Solomon agreed with this idea and noted expressions of support from other members.

Council Chair Solomon reflected on the material considered during the present meeting: a presentation by Dr. Boyd; a summary of the National Academies project on cumulative impacts; and a discussion of the Air District's Strategic Plan and how the Advisory Council's work could play a central role in that. In terms of the Council's general approach, Dr. Solomon recalled the key concepts of hazard and exposure, noting that much of what the Air District does is about reducing the exposure of communities to air pollution. Dr. Solomon recalled hearing significant concern about getting bogged down in risk assessment, and indicated that the Council did not feel that was a path that made the most sense at this point, given that risk assessment becomes exponentially more challenging in the context of cumulative risk assessment, and that this goes

against the principle of trying to keep things streamlined, focused, and compatible with meaningful community engagement.

Dr. Solomon outlined next steps, expressing interest in revisiting developments in New Jersey to explore any useful models that could inform the Council's work. She also asked for the First Nations effort mentioned by Dr. Schmeltz to be shared with staff and added to the Selected References bibliography. Dr. Martien then recalled that Dr. Holstius had highlighted a new item in the bibliography from the Union of Concerned Scientists (UCS), and Dr. Solomon suggested assigning Council members to review that report. She also expressed hope that other members might have the opportunity to view the National Academies proceedings and inquired if Drs. Martien and Holstius had any additional recommendations from those sessions. Dr. Holstius remarked that the National Academies project will continue into 2025; he offered that staff could review and bring back any relevant developments, for example if there were discussion of permitting by community members at the upcoming roundtable.

Dr. Solomon proposed that Prof. Morello-Frosch and Dr. Zeise might be brought in for the next Advisory Council meeting, recalling the idea from previous discussion, and noting their potential for complementary presentations. Mr. Mataka offered that Prof. Paul Mohai, who has been leading development of a threshold-based model for cumulative impacts, could also be a valuable guest speaker. Recalling efforts in 2018 centered on biomonitoring in Los Angeles and California, Mr. Mataka also encouraged Dr. Solomon to consider prospects for regional screening for certain types of chemical exposures. Recalling Dr. Martien's remarks about blending approaches, Mr. Mataka said this might get at some of the answers that many community members have about chemical exposures and doses, that they are tired of guessing about. Dr. Martien suggested that, when planning for future meetings, if permitting is to constitute the work plan's main focus area, it would be advisable for potential speakers' presentations to have a strong tie to that, so as to maintain focus.

Mr. Case noted that the present item was an action item, and that he had heard a consensus toward continuing approval of the workplan. He advised that some formal action be taken through a vote, such as directing staff to bring the item back to the next meeting or approving it during the present meeting.

Dr. Martien suggested, as an action, approving the outline as a draft and having a subcommittee return, perhaps working with staff, to generate a final outline as the result of the next meeting. Mr. Case advised the group not to form a subcommittee as part of the action, and that the Board Chair could form subcommittees separately. Chair Solomon agreed that the discussion had been helpful to refine the outline, but that it made sense to continue.

Council Chair Solomon expressed some reservations about incorporating biomonitoring into the work plan, and agreed with Dr. Martien's concern that it might lead the Council off track. She shared that in her recent experience with a community study that used biomarkers of effect, the researchers' findings were smaller than anticipated, which made the results confusing. She suggested that the Council's work would benefit from focusing on methods less susceptible to noise in data.

Council Action

Dr. Holm made a motion, seconded by Prof. Carlton, to **approve** the development of an outline, which will be reviewed by a subcommittee composed of Drs. Carlton, Holm, and Martien, who will

propose a final draft of the workplan's outline at the Council's next meeting; and the motion **carried** by the following vote of the Council:

AYES: Carlton, Holm, Kleinman, Martien, Raheja, Schmeltz, Solomon.
NOES:None.
ABSTAIN: Hurt.
ABSENT: None.

**OTHER BUSINESS**

7. **REPORT OF THE EXECUTIVE OFFICER/AIR POLLUTION CONTROL OFFICER (APCO)**

On behalf of Dr. Philip M. Fine, Executive Officer/APCO, Mr. Nudd waived this report.

8. **PUBLIC COMMENT ON NON-AGENDA MATTERS**

No requests received.

9. **COUNCIL MEMBER COMMENTS**

None.

10. **TIME AND PLACE OF NEXT MEETING**

At the end of the meeting, the next meeting of the Advisory Council was to be at the Call of the Chair. After the meeting adjourned, the next meeting was scheduled for March 10, 2025, and later, to Monday, October 6, 2025, at 10:00 a.m., at 375 Beale Street, San Francisco, CA 94105. The meeting will be in-person for the Advisory Council members and members of the public will be able to either join in-person or via webcast.

11. **ADJOURNMENT**

The meeting adjourned at 12:12 p.m.

/S/ Marcy Hiratzka
Marcy Hiratzka
Clerk of the Boards
Executive Office

/S/ David Holstius
Dr. David Holstius
Sr. Advanced Projects Advisor
Assessment, Inventory, and Modeling