

Bay Area Air Quality Management District
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1:00 p.m. Advisory Council Meeting
Wednesday, October 6, 2025

APPROVED MINUTES

CALL TO ORDER

1. **Opening Comments:** Advisory Council (Council) Chairperson Solomon called the meeting to order at 1:00 p.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, Dr. Garima Raheja, and Dr. Michael Schmeltz.

Absent: Board Liaison Lynda Hopkins.

INFORMATIONAL ITEMS

2. REVIEW OF RECENT ADVISORY COUNCIL MEETINGS

Dr. David Holstius, Senior Advanced Projects Advisor, gave the staff presentation *Review of Recent Advisory Council Meetings*, including: overview and purpose; March 2024: introduction and orientation; July 2024: establishing foundations; September 2024: locating potential; and October 2024: alignment and direction.

Public Comments

No requests received.

Council Comments

Reflecting on the recap of Council work presented by Dr. Holstius and on prior meeting discussions, Chair Solomon suggested that a useful distinction could be made among three types of approaches: place-based approaches, such as those emphasized earlier in the day; broader changes to scientific methods or permitting approaches that could have more general applicability; and process-oriented changes, particularly those related to community engagement, which had been highlighted by speakers and the subject of considerable

discussion. She noted that the draft workplan included examples of both the place-based and general approaches, and that pursuing them in parallel might be appropriate. While recognizing the importance of engagement and process improvements, she expressed a wish to defer that topic to Community Advisory Council (CAC) colleagues, whose expertise lies in that area, and to focus discussion on the more technical dimensions.

Introducing CAC Co-Chair Mayra Pelagio, who joined via Zoom, Chair Solomon invited reactions to the proposed framework. Vice-Chair Martien agreed that it seemed useful.

Turning to priorities, Chair Solomon recalled that previous discussions had established the need for work that is science-based, defensible, responsive to community concerns, and reasonably efficient. She invited suggestions for additional criteria.

Dr. Schmeltz indicated that it might be helpful to articulate some limitations or bounds to how the Advisory Council should be considering cumulative impacts, to support realism about what the Air District can achieve; for example, he indicated, the Air District has limits on its jurisdiction and authority. He added that there are also scientific limitations in considering cumulative impact assessments.

Dr. Raheja added that, beyond scientific and legal defensibility, the Council should consider the cultural sensitivities of proposed approaches, in relation to the different communities that comprise the Bay Area.

Chair Solomon invited comment from CAC Co-Chair Pelagio and clarified that the discussion was now turning to the draft workplan. Ms. Pelagio observed that an important question is whether CalEnviroScreen (CES) truly reflects all of the impacts that communities face. Drawing on her experience in East San Jose and input from colleagues, including other organizers, she related that CES sometimes fails to reflect the multi-layered burdens certain communities face. She expressed interest in learning more about the tools and methods being developed in other states and in exploring opportunities for collaboration to ensure CES provides adequate coverage when used to identify or analyze impacts. Chair Solomon thanked Ms. Pelagio for the comment, noting its importance in the context of the workplan and place-based approaches.

Council Action

No action taken.

ACTION ITEM

3. APPROVAL OF CUMULATIVE IMPACTS WORK PLAN

The Advisory Council reviewed and considered approving the Cumulative Impacts Work Plan developed by the Work Plan Ad Hoc Subcommittee (Martien, Carlson, Holm.) This item was presented by Vice Chair Martien.

Public Comments

Public comments were given by Charles Davidson, Hercules resident. Chair Solomon appreciated that the commenter seemed to be seeing something at the community level that the data also show, which is the fact that certain communities are much more disproportionately burdened.

Council Comments

Chair Solomon expressed appreciation for the subcommittee's work in developing the draft workplan and invited Vice-Chair Martien to present it.

Vice-Chair Martien stated that he would begin with a summary, followed by input from other subcommittee members regarding any omissions. He noted that several tables merited particular attention, as they outlined key options for the Council's consideration. Chair Solomon agreed, identifying Tables 1 and 2 and their corresponding entries in the Appendix as central to the discussion. Vice-Chair Martien requested that the workplan be displayed on screen to facilitate comments that could inform revisions for the upcoming December meeting.

Recalling the earlier presentation by Dr. Holstius, Vice-Chair Martien recollected that the subcommittee had been formed in October 2024 to develop a draft workplan from an initial outline. He described the document as a "living" framework, subject to revision as needed, and serving as a blueprint to guide the Advisory Council's development of written recommendations through the three steps identified in prior discussions: identification, assessment, and action. He reminded members that the Council's written recommendations would ultimately be delivered to the Air District's Board of Directors.

Vice-Chair Martien explained that the subcommittee aimed to make the workplan concise and accessible, with more detailed material placed in the Appendix. He then reviewed each section of its main body. The *Background*, he said, provided relevant definitions, summarized challenges associated with incorporating cumulative impacts into regulatory processes, and reviewed historical progress. It also described existing efforts to reduce cumulative impacts, some of which had been presented earlier in the day, as well as current Air District programs and their alignment with the Strategic Plan and the 2024 *Call to Action* document. The *Methods* section, he continued, outlined approaches for maintaining a collaborative and transparent process, an emphasis echoed throughout the Council's prior deliberations. The *Roles and Process* component specified how the Advisory Council was to work internally, coordinate with staff, engage community members, and collaborate with the Community Advisory Council (CAC). While aspirational in parts, he said, these descriptions set helpful expectations. The *Products and Timeline* section specified goals and deliverables. In addition to written recommendations, Vice-Chair Martien noted, it contained the key findings already developed and discussed in July 2024, as well as records of meetings and deliberations.

Vice-Chair Martien emphasized that the workplan contained an extensive focus on permitting but also pointed to other areas for consideration within the Appendix, ensuring a record of broader topics would remain available for future exploration. Finally, he noted that the draft

workplan set the end of 2026 as the target date for delivering final recommendations to the Air District's Board of Directors.

Turning to page 6 of the draft workplan, Vice-Chair Martien highlighted the sections outlining options for assessment and action, summarized in Tables 1 and 2. He observed that the first four items in Table 1 correspond to the broader approaches previously described by Chair Solomon, in that they did not require a place-based framework or elements thereof. The remaining items, he said, appeared more directly related to place-based approaches. He noted Table 2's enumeration of potential actions to reduce cumulative impacts, with supporting details provided in the Appendix. He then referred to Table 3, which presented key steps and an accompanying timeline. Some steps, he explained, were already complete or underway. As an example, efforts to seek collaborators were advanced by his May presentation to the Community Advisory Council (CAC) and by the subsequent expression of interest from CAC members Ms. Pelagio and Mr. Ruano-Hernandez. And, on September 30, the Advisory Council subcommittee had held a joint Zoom call with them, during which both offered valuable ideas and feedback.

Vice-Chair Martien noted that Step 2 in Table 3 corresponded to the morning's meeting, and that the Council was now engaged in Step 3. Step 4, he said, was less clearly defined, but a period between the current meeting and the upcoming December 8 session was envisioned, for members to review and refine the draft workplan in light of the day's presentations and discussion. He encouraged members to bring edits or suggestions that could be shared with staff in advance, adding that the forthcoming National Academies report on cumulative impact assessment might provide helpful additional context. Finally, Vice-Chair Martien explained that Step 5 indicated a time at the December meeting for gathering ideas to support the Council's recommendations. While final recommendations were unlikely to be completed by that date, he said, it could be valuable to spend time summarize key insights and themes to pass along to the next term of the Advisory Council.

Councilmembers Dr. Holm and Councilmember Carlton expressed agreement with the discussion and thanked the members of the CAC for their constructive feedback during the September meeting with the Advisory Council subcommittee. Vice-Chair Martien asked whether it would be an appropriate time to summarize that feedback.

Chair Solomon commended the quality of the draft workplan and invited CAC Co-Chair Pelagio to offer additional remarks, recalling Ms. Pelagio's earlier observation that CalEnviroScreen (CES) does not necessarily capture all communities in the Bay Area experiencing cumulative impacts.

Ms. Pelagio noted that CAC member Mr. Kevin Ruano-Hernandez had shared several points with which she concurred. One, she said, concerned Table 2 and the topic of community benefit agreements (CBAs): ensuring that community members are contacted from the very beginning of the process is crucial, and even now, if there were a set of people to ideally be engaged, she stated that would be important. She asked whether Dr. Martien recalled anything else.

Vice-Chair Martien recounted four principal themes he recalled from the CAC's feedback. First, while the subcommittee had aimed to make the workplan accessible, CAC members indicated that it remained too technical, and that perhaps a Glossary, brief section summaries, or even a PowerPoint version could help communicate its content more broadly. Second, CAC members had recommended including specific and concrete examples to illustrate what certain proposed actions might entail. While it was challenging to do that now because the ideas were still high level, Dr. Martien continued, it was agreed that providing tangible examples would be helpful. Third, the CAC had emphasized the importance of clear timelines and accountability mechanisms. Finally, members had observed that the details of community representation were still somewhat vague and needed improvement.

Ms. Pelagio agreed that this aligned with her recollections of the September meeting.

Chair Solomon recalled the three-part framework offered earlier: place-based; general; and procedural. She emphasized her interest in general approaches that would integrate the concept of cumulative impacts throughout the permitting process. Such approaches, she observed, need not vary by location, since cumulative impacts can occur anywhere.

Referring to the CAC's earlier feedback on CalEnviroScreen (CES), Chair Solomon noted that the main issue may not lie with the tool itself but rather in the way policymakers apply it, using a "bright-line" approach that classifies areas as either in or out. The use of strict thresholds, she said, can exclude communities that experience real cumulative impacts but fall just below a cutoff. In that context, she expressed particular interest in exploring the first three items in Table 1. She highlighted the second item in Table 1, concerning the summation of non-cancer impacts across multiple target organ systems, and said she appreciated being made aware of the recent work by Dr. Keeve Nachman and colleagues on that topic. She regarded these items as potentially actionable and invited comment, encouraging members to consider them against the criteria of legal and scientific defensibility, responsiveness to community concerns, and feasibility.

Councilmember Raheja inquired about item IA-3, noting that legal challenges can arise, regardless of whether "reasonable assumptions" are believed by the Council to be justifiable or have precedent in similar work. Chair Solomon invited comment from staff, noting that she had heard extensively from many communities that emissions on startup and shutdown, or accidental releases, were not considered. This was a constant source of frustration to them, and scientifically to her as well, since such events can contribute substantially to total emissions.

Greg Nudd, Deputy Executive Officer of Policy, responded that, as overall context, staff and counsel had reviewed the items and found them appropriately high-level to merit further exploration, though not specific enough to identify particular legal challenges at this stage. Regarding IA-3, he said there was more of a practical concern, since it was not work routinely done by the Air District. While it is possible to estimate what those emissions and what their impacts would be, he explained, the uncertainty range would be high. He suggested that a systematic approach might be needed for certain classes of facilities. Large facilities might merit more bespoke analysis, which might be done somewhat in advance, but could also involve iterations with industry. Whenever one is in a situation where reasonable people can

make different assumptions, Mr. Nudd continued, it can become difficult to settle the final number.

Vice-Chair Martien agreed, noting that while historical data can help characterize startup and shutdown activity at existing facilities, predicting emissions for new or modified sources without operational history is more complex. At the same time, he could see that it would probably not be zero, so that having some estimate seemed reasonable, and that it would be helpful to work with staff to see how realistic this might be.

Councilmember Holm suggested that item IA-3 might also be a logical place to incorporate Councilmember Schmeltz's earlier point regarding the likelihood that emission increases occur during periods when monitoring is limited or absent.

Dr. Schmeltz connected IA-3 to IA-1 in terms of accounting for background concentrations and exposures. He reiterated his earlier comment about the limitations of available datasets and emphasized that many types of data could inform understanding of background exposures, whether indoors or outdoors, that were related to health outcomes. He asked whether the Council intended to limit its scope to outdoor exposures or to consider a broader range. It is important, he continued, to look far and wide for various data sources that could help identify background exposures in different types of communities.

Regarding IA-1, Chair Solomon remarked that accounting for background concentrations makes strong scientific and intuitive sense. Regardless of location, she noted, no one breathes pure air except for emissions from one source; there is always an underlying background level, and this varies by community. She suggested that considerable information about this is currently offered by the Air District's monitoring network, at least for criteria pollutants and some air toxics. She concluded that it was difficult to justify why that would not be taken into consideration, and she agreed with this item being at the top of the list.

Councilmember Holm added that incorporating IA-1 into a non-place-based approach might also help address concerns raised by Ms. Pelagio regarding communities not identified by CalEnviroScreen. Chair Solomon agreed.

Vice-Chair Martien commented that the way hazard indices are developed assumes a background concentration, yet it is treated as an increment, like cancer risk.

Chair Solomon expressed less enthusiasm for item IA-4, noting that un-inventoried emission sources conceptually overlap with the idea of background concentration but may be more difficult to address in practice. This was owing in part to questions about what would count as an emission source, and the extent to which the Air District would need to find them, which might be easier in areas where more information has been developed, such as in AB617 communities, but more difficult in other places.

Councilmember Holm noted that one advantage of item IA-4 was its acknowledgment of sources that may be recognized but with uncertain details: for example, in terms of compounds that cannot yet be measured adequately.

About IA-4, Vice-Chair Martien offered that one idea had been to capture un-inventoried sources, or pollutants not considered toxic in the context of new or modified permits, but that probably are toxic. He wondered if there could be a way to account for the things that are likely indicated by more general knowledge about a sector or certain types of permits, but that nevertheless do not appear in an emission inventory. Developing this approach, he added, would likely require close consultation with Air District staff.

Councilmember Kleinman observed that many small sources fall below regulatory thresholds yet may contribute meaningfully to cumulative impacts, compounding existing regional background levels. As an example, he mentioned backyard barbecue pits: minor, unregulated emitters that could nonetheless be estimated collectively.

Vice-Chair Martien clarified that the focus of IA-4 had been somewhat different: more in terms of new permit applications, where there may be some emissions that the Air District has not estimated, but they are associated with a permitted source. He posed the question of whether past encounters with un-inventoried sources at facilities could be applied in the context of new sources, informing future estimates of likely un-inventoried emissions.

Chair Solomon remarked that she had heard two slightly different interpretations of IA-4: one addressing additional nearby sources, and another focusing on uncharacterized hazards from the same source. She suggested that clarifying this distinction in the description of IA-4 would be helpful.

Chair Solomon turned to item IA-2, noting that a new methodology described in a May 2025 publication, and an accompanying dataset of information covering the full suite of compounds assessed, appeared to offer a promising and publicly available resource. She summarized the paper's central finding: under the traditional method for developing a hazard index, only the most sensitive target organ for each compound is considered, while other organs affected by the same compound are disregarded. The new approach, by contrast, sums the toxic effects across all affected organ systems for each relevant compound.

Chair Solomon emphasized that this approach made strong scientific and intuitive sense, and that she had initially expected it to be technically challenging to implement, but the published work demonstrated that could work and was worth exploring. She described it as an important correction to a longstanding gap in risk assessment practice, observing that the researchers found substantially higher combined effects of volatile organic compounds (VOCs) compared to results derived from the traditional method. Because the new approach could be applied broadly to any site or permit, she expressed enthusiasm for pursuing this item and invited feedback from Council members.

Councilmember Holm voiced her support for the proposal. As a pediatrician, she said, she appreciated the broader scope across organ systems but noted that the method did not explicitly account for particularly sensitive receptors, such as children, who are more susceptible for behavioral, physiological, and other reasons.

Councilmember Schmeltz observed that traditional assessments rely heavily on animal models and noted that newer work increasingly employs computational toxicology. He asked

whether there were any issues that might preclude relying on such methods, given their potential to accelerate the derivation of reference concentrations.

Chair Solomon responded that the authors had used standard points of departure from the Agency for Toxic Substances and Disease Registry (ATSDR) and the U.S. EPA whenever available, along with established reference concentrations. In cases lacking such data, they applied new approach methodologies (NAMs) and predictive modeling to generate equivalent values. She acknowledged that these predictive methods are not peer-reviewed in the same manner as reference concentrations but follow standard conventions for applying interspecies and intraspecies uncertainty factors and other established procedures.

Chair Solomon clarified that the authors had used standard points of departure from the Agency for Toxic Substances and Disease Registry (ATSDR) and US EPA when available, and reference concentrations where available, but that in many cases they were using new approach methodologies (NAMs) and predictive data to generate numbers. She acknowledged this had not involved peer review in the same way that typical derivation of a reference concentration would, but that the approach was not unusual, and followed standard conventions for uncertainty factors.

Vice-Chair Martien noted the footnotes in Appendix C, on page 17, which describe the ongoing development of these NAMs to modernize risk assessment. He remarked that tracking such advances could enable the Air District to strengthen future non-cancer risk evaluations.

Before moving on to discussion of place-based approaches, Chair Solomon invited additional comments from CAC Co-Chair Pelagio. Ms. Pelagio declined but expressed appreciation for the discussion.

Vice-Chair Martien drew attention to the potential role for PM_{2.5} in non-place-based assessments. While PM_{2.5} was addressed under options for actions (Table 2), he noted, it was not addressed under options for assessments. He reminded the Council that previous iterations of the Advisory Council had examined PM_{2.5} extensively in relation to local exposure increments and associated health risks. Chair Solomon agreed that PM_{2.5} could certainly fit and be relevant.

Summarizing the discussion to that point, Chair Solomon observed broad support for further developing and operationalizing items IA-1 through IA-4, with the previously noted caveats regarding IA-4. She remarked that the items collectively address community concerns and, after considering their feasibility and scientific and legal defensibility, recommended that the Council move forward, noting apparent agreement among other Councilmembers while acknowledging that a broader discussion would still be appropriate.

The discussion then shifted to place-based approaches. Chair Solomon observed that many other states are advancing such approaches and that the Air District should consider them as well. She reiterated, however, the caveats voiced by CAC colleagues in terms of exclusively leaning into a purely place-based approach like Minnesota's or New Jersey's without complementary efforts. Either the definition of designated areas should be re-examined, she said, which would constitute a significant undertaking, or place-based methods should be viewed as a complementary component, not a sole approach. Referring to Table 2, Chair

Solomon noted that many of its elements could be implemented through a place-based approach. Vice-Chair Martien concurred.

Reflecting on the remaining items in Table 1, Chair Solomon said she was pleased that health impact assessments (IA-7) were included for completeness but noted that, given their complexity and duration, they may not be the most efficient tools for addressing the Air District's current challenges. Vice-Chair Martien agreed that their inclusion was primarily for completeness. Continuing on, Chair Solomon characterized IA-7 and IA-8 as primarily process issues, not necessarily changing the outcome per se, but important. She regarded IA-6, concerning histories of odor, flaring, accidents, histories of violations and so forth, as primarily place-based, and deserving of consideration.

Vice-Chair Martien reflected that the morning's presentations on place-based approaches had suggested some flexibility in how affected communities might self-identify. He raised the question of what a process for demonstrating community concerns could look like. As an example, he referenced CAC Co-Chair Pelagio's mention of East San Jose, where proximity to an airport results in lead emissions not captured in CalEnviroScreen, which considers lead exposures related to housing. While acknowledging concerns about open-endedness, he suggested that an approach combining CalEnviroScreen data with community self-identification could be promising, in the context of what other states were doing.

Councilmember Carlton recalled the handling, in New Jersey's approach, of "adjacent" block groups. Chair Solomon noted that the Air District includes a 1,000 foot buffer around designated tracts. Mr. Nudd stated that there are some obvious problems, where CalEnviroScreen may not provide a score in the absence of data for some components, a case in point being a particular tract in Bayview-Hunters Point. He also noted that while no one resides on Port of Oakland property, it can still be considered part of that overburdened community.

Councilmember Schmeltz agreed with Dr. Martien on the importance of a means for community input into designations. Having worked with vulnerability mapping for a long time, he noted, one of the major place-based approaches is that data collection systems have already been designed without community input, and now those systems are being used again, to identify place-based vulnerability without community input. He characterized this as a "double flaw," again emphasizing the importance of incorporating community-driven data and community-driven identification in any place-based cumulative impacts assessment.

Councilmember Holm stated that she shared the concern that communities not identified by rigid criteria should still be identified, but that putting an onus on those communities would constitute an additional burden.

Chair Solomon agreed, noting that some communities may lack the political resources or organizational capacity to raise their concerns, or may be preoccupied with other pressing stressors. As a result, they could remain unrecognized. Conversely, she observed, other communities with greater resources and greater voice might more readily draw attention to their issues: for instance, a Marin County community that has voiced concerns about woodsmoke exposure. While such a community may indeed face cumulative impacts from woodsmoke, she questioned whether it should be designated as an overburdened or

environmental justice community. This “squeaky wheel” dynamic, she said, highlights the absence of a perfect tool for identifying affected places and the tradeoffs inherent in refining such tools. She added that despite its limitations, CalEnviroScreen has proven useful for identifying many communities and making progress.

Councilmember Raheja proposed that while the Council may not be able within the next year to define all the characteristics that make a community overburdened, it could initiate that effort and establish an iterative process. Annual updates, she suggested, could incorporate community input and evolving understandings of what it means to be overburdened, reflecting the changing conditions of the Bay Area. Such a process would provide a structured, progressive alternative to ad hoc or case-by-case determinations.

Vice-Chair Martien commented that although he found the lack of generality in place-based approaches somewhat unsatisfying, two factors weighed in their favor. First, every other state that has enacted cumulative impacts legislation has employed a place-based framework; second, how to account for all of the impacts known to be important, including non-chemical stressors, was an open question. He suggested that the Council might explore whether sufficient studies exist on differential air pollution impacts to support development of an alternative scoring system based on available population data. Even so, he said, place-based approaches offer practical value by bundling multiple known factors into a single framework, serving as an effective representational “shortcut.”

Chair Solomon offered another possibility, observing that several items in Tables 1 and 2 are inherently place-based but need not depend on a binary inclusion or exclusion under CalEnviroScreen. These included IA-6, regarding flaring and histories of accidents, which is place-based but would not necessarily need to be carried out only in certain communities; similarly, considering facility compliance history (as in IA-5) or focusing on near-source PM_{2.5} (as in AC-6) can be done anywhere; further, Rule 11-18 (AC-9) is not restricted to certain communities. Dr. Solomon suggested that certain communities could serve as starting points for such approaches, with subsequent expansion to more areas.

Councilmember Holm agreed that it would be prudent to develop recommendations combining both place-based and broader methods. The latter, she said, are less likely to overlook impacted areas, while history demonstrates that the failure to identify especially overburdened communities has contributed to current inequities. Councilmember Schmeltz concurred, adding that a “CalEnviroScreen plus” approach could provide a practical way to move forward.

Chair Solomon asked whether the Council was prepared to approve the draft workplan with the understanding that it remained a living document, open to continued refinement and expansion.

Councilmember Kleinman reflected on the potential for addressing permit renewals in overburdened communities, as referenced in AC-1, which proposed lower thresholds for Best Available Control Technology (BACT) in such areas. He observed that applying this concept to BACT determinations would be challenging but noted that, recalling the non-degradation context, renewals or modifications of existing permits present opportunities for meaningful improvement.

Councilmember Holm drew attention to Table 2, specifically regarding community benefit agreements (AC-10). She recalled that several speakers had emphasized that benefits should extend beyond the economic sphere and suggested that language to that effect should perhaps be explicitly incorporated into the workplan. Chair Solomon agreed, remarking that in her experience, planting trees in compensation for increased carcinogenic emissions did not necessarily seem like a good tradeoff. She shared her longstanding reservations about CBAs but acknowledged that, when carefully structured, they might be mutually beneficial. However, she emphasized that any such agreements must be approached thoughtfully and that it should be made clear that economic benefits alone were insufficient.

Councilmember Raheja asked whether the recommended changes were to be implemented all at once or as a series of incremental changes, and whether that structure should be reflected in the written workplan. Councilmember Holm asked if this referred to prioritizing the order of recommendations. Councilmember Raheja clarified that she was referring to prioritization in terms of development, implementation, and enforcement. Both Councilmember Holm and Chair Solomon expressed support.

Chair Solomon added that she encouraged giving high priority to several of the non-place-based items for further exploration at the next meeting, while acknowledging the continued importance of the place-based elements. She then invited Councilmembers to identify any specific items they viewed as especially high priority.

Vice-Chair Martien noted that the lists of options were intentionally broad, encompassing measures observed in other jurisdictions, such as community benefit agreements, without implying strong endorsements. He expressed support for prioritizing items as a group rather than individually.

Chair Solomon clarified that no items were being removed from consideration at this meeting; all would remain part of the workplan. However, she indicated, identifying a set of high-priority items would provide valuable guidance to staff as the work progressed.

Mr. Nudd thanked the Chair and, noting that some suggestions would change the standard risk methodology that OEHHA has developed, invited the Council to consider offering recommendations on related items that could be packaged up and taken to OEHHA. He expressed that this would constitute a helpful early deliverable from the Council.

Councilmember Schmeltz asked how the Air District intended to evaluate the outcomes of cumulative impact assessment efforts: for example, in terms of changes in permitting activity, improvements in health outcomes, or progress on process-related goals. He observed that while the overarching objective is to protect communities, specific metrics for assessing success had not yet been clearly identified. Without requiring that immediately, he suggested that it would be helpful for the Council to consider, sooner rather than later, what its initial recommendations were ultimately working toward.

Vice-Chair Martien asked whether Dr. Schmeltz was encouraging clarification of the Advisory Council's goals, or seeking comment from staff on how they would weigh the Council's recommendations.

Chair Solomon clarified that the question concerned how the Council itself might evaluate success in reducing cumulative impacts. From her perspective, there was a good deal of emissions inventory data and air quality monitoring data. She expressed a desire to see improvements over time in terms of reductions in emissions and air quality concentrations, especially in the most overburdened communities in the Bay Area. If steeper improvements were observed in those areas over time, she said, that would constitute success. Evaluating health outcomes, she added, would be more difficult due to noise in those data, suggesting that the Air District's exposure and emissions data should remain a primary focus.

Councilmember Holm proposed that the Council's final recommendations include a process-oriented element outlining how success could be measured and what key metrics should look like. Chair Solomon agreed.

Chair Solomon then noted that since the Council's last meeting, the Office of Environmental Health Hazard Assessment (OEHHA) had appointed a new Director, Dr. Kris Thayer. She suggested that the Council should meet with Dr. Thayer soon and possibly invite her to speak at the December meeting. Chair Solomon remarked that Dr. Thayer would bring substantial relevant expertise and that presenting her with a focused set of questions would be valuable, consistent with OEHHA's important role as a partner in making progress.

Councilmember Raheja observed that IA-8 had not been extensively discussed, and re-emphasized its importance regardless of the place-based distinction. Chair Solomon agreed, noting that while community participation was more central to the expertise of the Community Advisory Council, it remained non-negotiable and should be underscored by the Advisory Council as well.

Mr. Brian Case, Air District counsel, offered a suggestion with regard to IA-3, to create clarity in the record: the text contained in the draft workplan read "[i]nclude emissions associated with startup, shutdowns, and accidental releases." He suggested that the intent might be better reflected by "more extensively include emissions associated with startup, shutdowns, and accidental releases" since such emissions are already considered.

Ms. Leong, Director of Engineering, added that accidental releases are hard to quantify ahead of time, but that startup emissions are quantified and limited when predictable. For example, if a facility knows it will cycle a boiler five times per year, and the emissions are higher at startup, the Air District will cap the emissions at startup at a higher level, quantify them, and count them toward an annual emission limit; the same is done for refineries when they are predictable, and the Air District will try to restrict and quantify said emissions whenever it can. Ms. Leong also offered the example of a power plant's commissioning, which is somewhat longer and is a context for which separate BACT limits exist.

Vice-Chair Martien thanked staff, noting that he had not been aware of those practices and asking for suggested revisions to clarify the intent. Mr. Case restated the proposal to add "more extensively" to IA-3. Chair Solomon suggested "more completely include emissions associated with" or a similar phrasing.

Vice-Chair Martien remarked that, given the number of desired edits, it would be important for the Council to capture as many revisions as possible before the next meeting, with the

understanding that additional refinements could continue as discussion and learning progressed. Chair Solomon agreed, indicating that the purpose of voting on and approving the workplan document included recognition that it was a living document, reflecting the Council's current thinking and direction while authorizing further exploration.

Chair Solomon then recognized CAC Co-Chair Pelagio. Ms. Pelagio expressed enthusiasm for the progress made on the workplan and support for recognizing it as a living document. She asked whether there was guidance on how often such documents should be revisited, noting earlier comments about the importance of ensuring continued impact. She also inquired whether, following approval, there would be further opportunities for collaboration between the Advisory Council and the CAC in developing the identified areas and recommendations, perhaps with a timeline for revisiting the document, such as by October 2026.

Chair Solomon responded that the workplan would be revisited at the next meeting, in December 2025. By that time, she said, a revised version would reflect the day's discussion, incorporate minor corrections, and include more developed concepts for how to advance specific items that were discussed; this would support Council deliberations on feasibility of implementation, though this would also require more information from staff.

Vice-Chair Martien suggested three items for clarification in preparation for the December meeting. First, he noted that during the September meeting between the Advisory Council subcommittee and CAC members, participants had expressed a strong interest in continued collaboration. Reflecting that ongoing partnership in the *Timelines* section, he said, would be helpful. Second, he observed that while a revised version of the workplan would be presented at the December meeting, further revisions beyond that point were foreseeable. Third, he sought guidance on when the Council should think specifically about rating or prioritizing individual items, and specifically whether that discussion should occur at the December meeting or begin sooner.

Councilmember Holm recommended beginning some prioritization at the current meeting, suggesting that subsequent work would benefit from establishing focus areas early.

Chair Solomon acknowledged that beginning prioritization immediately would likely extend the meeting beyond its scheduled 3:00 p.m. adjournment but sought input from members on continuing. Seeing general agreement, she proposed to proceed no later than 3:30 or 4:00 p.m. Vice-Chair Martien suggested calling for formal approval of the workplan first and then continuing with the prioritization discussion while quorum remained. Chair Solomon agreed.

Chair Solomon clarified that the vote would be limited to Advisory Council members and invited a motion to approve the workplan with the caveats discussed: namely, that further refinements and edits would be incorporated moving into the implementation phase, and that approval at this stage signified the Council's readiness to advance the workplan toward execution.

Council Action

Dr. Kleinman made a motion, seconded by Councilmember Carlton, to **adopt** the proposed Cumulative Impacts Work Plan developed by the Work Plan Ad Hoc Subcommittee, with caveats and with the understanding that the subcommittee would recommend further refinements. and the motion **carried** by the following vote of the Council:

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

After the motion was passed, the Council prioritized (up and down) elements of the work plan for the subcommittee's further development.

Chair Solomon commended the subcommittee for its work and transitioned the discussion to prioritization. Councilmember Holm suggested using the three-part framework proposed earlier (place-based, non-place-based, and process-oriented) as an organizing structure, and within each, coming to some agreement as to the highest-priority items. Chair Solomon concurred and recalled three criteria for prioritization: scientific and legal defensibility; responsiveness to community concerns; and feasibility. Considering these, she said, she had mentally categorized some items as receiving "three pluses," others as mixed or uncertain, and some as lower priority, and she suggested that the Council apply this process as a group.

Addressing the question of practical implementation, Mr. Nudd encouraged the Council to reflect on prioritization within the population of permitting actions. He recalled that the scope in New Jersey had been restricted to Title V facilities, and noted that Title V facilities are not necessarily the highest-risk facilities in communities from a cumulative impacts standpoint. When thinking about practical applicability, he continued, what may be practically applicable to a subset of permitting actions may not be practically applicable to the ten thousand renewals that the Air District processes every year.

CAC Co-Chair Pelagio noted that she needed to depart and thanked the Council for their time spent diving deeply into the issues. She expressed hope that collaboration between the CAC and the Advisory Council would continue through December, with opportunities for CAC members who would want to participate in prioritization. Chair Solomon thanked Ms. Pelagio for her time and emphasized the value of her contributions.

Turning to the items in Table 1, Chair Solomon began with item IA-1 ("non-zero background"), which she characterized as a "triple-plus" item, and noting the need for collaboration with OEHHA. She rated Item IA-2 ("sum of hazard indices") a double-plus, owing to its strong scientific foundation and responsiveness to community concerns, while expressing uncertainty about feasibility, particularly given its reliance on new approach methodologies and non-standard reference concentrations. For IA-3, she noted that she had originally rated it as a triple-plus, but having heard that some of it was already incorporated, she was less certain about the last plus, in terms of efficiency; given questions about bringing historical

accidental release data to bear, or additional things regarding startup and shutdown, it would need to be a follow-up conversation.

In terms of place-based options, Chair Solomon noted some scientific concerns had been raised, yet that CalEnviroScreen and other tools had been widely used for some time; at the same time, though mapping tools responded to community concerns, community concerns about the tools remained. About other stressors (IA-6), Dr. Solomon characterized the scientific foundation as mixed (“plus/minus”), noting that a case can be made for odor as a health issue, and that a history of violations should be considered relevant; it was clearly responsive to community concerns, and also seemed implementable. She regarded health impact assessment (IA-7) as “yes-yes-no”; community participation (IA-8) she regarded as a given.

Vice-Chair Martien expressed general agreement with Chair Solomon’s assessments and sought clarification on her ratings of IA-3 and IA-4. Chair Solomon responded that she had rated IA-3 as a triple-plus but wanted to learn more given the new context supplied by staff about existing practices. She stated that she had rated IA-4 as “plus-plus-question mark” owing to uncertainty about feasibility, and that it might benefit from being reworked into two ideas.

Councilmember Schmeltz remarked that, particularly in relation to IA-1, he had intended to ask during the morning’s session why Minnesota and New Jersey selected the specific indicators used in their cumulative impact assessments. He suggested that a similar question could be directed to OEHHA: namely, why certain indicators were chosen for CalEnviroScreen and whether other potential indicators relevant to background exposures might be identified and incorporated in a cumulative impact assessment.

Chair Solomon agreed that time constraints had limited such questions. She added that she would have liked to ask the Minnesota and New Jersey representatives whether they were receiving significant feedback from communities that believed they should have been included but were not. She surmised that New Jersey likely was, given its mention of community self-identification as an emerging priority.

Drawing on her experience in the development of CalEnviroScreen, Chair Solomon noted that the addition, removal, or substitution of individual indicators generally had not produced major differences to CalEnviroScreen, with overall spatial patterns remaining largely consistent. She observed that both Minnesota and New Jersey included race as an indicator in their screening tools, and that race had also been included in the original CalEnviroScreen (version 1.0) but was removed in version 1.1 for a variety of reasons, and though there had been concern about removing race for an EJ screening tool, in fact removing it did not really change the maps. Similar to what Dr. Sheats had shown in his data for New Jersey, Chair Solomon indicated, when one looked at the impacted communities, and the racial makeup of those communities, one found that they were the same EJ communities. Even though CalEnviroScreen is “race-blind,” she continued, it is still identifying communities that have suffered from decades of racism and environmental injustice.

Vice-Chair Martien agreed, noting that because CalEnviroScreen contains many correlated indicators, it is relatively insensitive to the removal of any single one. While some edge cases

do shift, he said, the overall identification of impacted areas tends to remain stable. He added that differences can emerge depending on percentile cutoffs, such as using the top 25 versus top 30 or 35 percent. Reinforcing Dr. Schmeltz's earlier point, he emphasized that community input into such threshold and indicator decisions could be an important component as the Council evaluates place-based tools.

Chair Solomon asked whether the workgroup had received the input it needed or if an assessment of Table 2 would be helpful for determining next steps.

Councilmember Holm responded that she had heard general agreement regarding the non-place-based options, with IA-1 being high priority, as well as support for expanding community representation. However, she said she was not yet certain which place-based options should be identified as the highest priorities.

Vice-Chair Martien noted that an open question was whether the Council wanted to think about PM_{2.5} in the assessment approaches, or simply in a place-based context, as an action. He pointed out that "limits on near-source PM_{2.5}" appeared via AC-6 [Table 2], but that there was no mention of PM_{2.5} in the impact assessment options [Table 1]. He asked whether the Council found this acceptable and, given the work of the previous Advisory Council, whether it would be desirable to include an assessment item focused on localized PM_{2.5} exposure, perhaps in connection with new permit applications.

Councilmember Holm asked Vice-Chair Martien whether, for an item like IA-1, PM_{2.5} should explicitly be called out as part of the prioritization as opposed to part of the process of developing priorities.

Vice-Chair Martien clarified that Tables 1 and 2 served distinct purposes, with Table 1 addressing impact assessment and Table 2 addressing actions. He asked whether the Council should include a specific recommendation on how PM_{2.5} impacts are to be assessed.

Chair Solomon responded that the Council had broken important ground on PM_{2.5}, which is a critical pollutant in the Bay Area, and reminded the group that the Council had made strongly worded recommendations to the Board and the staff about prioritizing PM_{2.5}. She emphasized that PM_{2.5} should be critical for the cumulative impacts discussion, cutting across both place-based and non-place-based approaches. Therefore, she concluded, it need not stand as a separate item in Table 1, but should be integrated into the consideration of IA-1 ("background") and related elements where its relevance is already implicit.

Chair Solomon observed that several items in Table 2 appeared more engineering-oriented than would fall within her own expertise. For instance, decisions about thresholds for applying BACT or TBACT would be better guided by engineering staff. Nonetheless, she noted that these seemed feasible for staff to implement if the Council provided recommendations along those lines.

Vice-Chair Martien noted concerns about community benefit agreements (AC-10) and asked whether the Council should note caveats, for example, clarifying that benefits should not be

limited to economic considerations. He also asked whether there were any items the Council wished to de-emphasize in a revised version for December.

Chair Solomon stated that she was not inclined to support imposing CEQA requirements specifically on communities within CalEnviroScreen-identified zones, as appeared to be suggested by AC-3. She questioned whether such an approach would ultimately be beneficial or would simply add procedural complexity, while noting that she was not a CEQA expert and expressing a desire to hear from others.

With the Chair's permission, Mr. Nudd explained that the Air District sets significance thresholds for air quality impacts in CEQA, which local governments use in determining whether a full CEQA analysis is required, though they may still approve a project that exceeds those thresholds. If the Air District were to lower thresholds in communities determined to be more vulnerable, he indicated, it might influence the land-use decisions that underly siting decisions for many industrial facilities, or at least would compel deeper consideration by local governments. Chair Solomon found this interesting and asked whether it would be most helpful for new facilities. Mr. Nudd indicated that it would.

Chair Solomon remarked that it was difficult to identify items to de-emphasize. Vice-Chair Martien agreed, saying that items could continue to be developed further unless they raised significant concerns.

Chair Solomon commented that she wished to positively emphasize AC-9, noting that Rule 11-18 had represented a significant effort to advance environmental justice goals. Although it had not yet achieved all that had been hoped, she was not ready to set it aside and encouraged renewed attention to strengthening its effectiveness. Vice-Chair Martien invited comment from Mr. Nudd, observing that the Appendix referenced ongoing rule-development efforts and progress related to Rule 11-18, and that the Council might consider recommending support for those initiatives. Mr. Nudd responded that related amendments were currently out for public comment, with the comment period closing on October 13. He explained that the current phase of this work focused on streamlining and accelerating the process to get to emission-reduction plans, with a subsequent phase expected to examine rule stringency and health protectiveness.

Councilmember Holm suggested that the Council might de-emphasize AC-4 ("enhanced public engagement"). While she supported the principle, she suggested spending less energy on AC-4 could be warranted given the extent of "notification fatigue."

Chair Solomon asked whether the lower risk thresholds mentioned in AC-8 already existed to some extent, for cancer risk. She suggested de-emphasizing AC-8, and indicated that changing the overall approach to hazard indices (as in IA-2) would be preferable to having numeric thresholds that varied by location.

Chair Solomon observed that "shifting the burden of proof" could require statutory action, and considered that it might be easier said than done. Vice-Chair Martien agreed and clarified that the current version of AC-11 had been retitled in Table 2 as "[p]rohibit select category of permits" and rewritten as "[p]rohibit some permit types in overburdened communities." This revision, he said, reflected recent discussions within the subcommittee to improve clarity.

Regarding AC-8, Vice-Chair Martien explained that the subcommittee's intent had been aimed toward the provision of additional justification to support the lower cancer-risk limit of six in one million for overburdened communities, or alternatively, whether it would be appropriate to lower the limits for acute or chronic hazard indices. He added that he would look to staff to see whether stronger support for the current risk threshold would be useful; if not, the Council could focus on evaluating lower limits for hazard indices under AC-8.

OTHER BUSINESS

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

Mr. Nudd provided a status update on various Air District permitting regulations, including the permitting backlog and the Board's desire to address the efficiency of the permitting process.

5. PUBLIC COMMENT ON NON-AGENDA MATTERS

No requests received.

6. COUNCIL MEMBER COMMENTS

None.

7. TIME AND PLACE OF NEXT MEETING

Monday, December 8, 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.

8. ADJOURNMENT

The meeting adjourned at 3:27 p.m.

/s/ Marcy Hiratzka

Marcy Hiratzka
Clerk of the Boards
Executive Office

/s/ Dr. David Holstius

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