Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109
(415) 749-5000

APPROVED MINUTES

Advisory Council Regular Meeting
9:00 a.m., Wednesday, February 10, 2010

CALL TO ORDER

Opening Comment: Chairperson Bramlett called the meeting to order at 9:00 a.m.

Roll Call: Chairperson Jeffrey Bramlett, M.S., Vice Chairperson Ken Blonski, M.S.; Secretary Stan Hayes; Council Members Jennifer Bard, Louise Bedsworth, Ph.D., Benjamin Bolles, Robert Bornstein, Ph.D., Harold Brazil, John Holtzclaw, Ph.D., Robert Huang, Ph.D., Jane Martin, Dr.Ph.H., Debbie Mytels, Kendal Oku, Dorothy Vura-Weis, M.D., M.P.H.

Absent: Kraig Kurucz, M.S., Rosanna Lerma, P.E., Gary Lucks, JD, CPEA, REA I, and Jonathan Ruel

Also Present: Chairperson Brad Wagenknecht and Director Mark Ross

Public Comment Period: There were no public comments.

Consent Calendar:

1. Approval of Minutes of the January 13, 2010 Advisory Council Meeting

Vice Chairperson Blonski provided a minor grammatical edit to the Clerk, and Chairperson Bramlett requested amendment to page 13; to remove one of the carbon capture and sequestration references listed under Meeting 3.

Advisory Council Action: Member Holtzclaw made a motion to approve the minutes of January 13, 2010, as amended; Member Bedsworth seconded the motion; unanimously carried without objection.

DISCUSSION

2. Overview: Air District Climate Protection Initiatives Overview

Deputy APCO, Jean Roggenkamp, stated the Advisory Council has been instrumental in helping the Air District Board of Directors realize that consideration of climate change should be part of the District's mission and integrated into programs, which she said is moving forward and she briefly reviewed the schedule of staff presentations.

A. Legal Authority to Regulate Greenhouse Gases (GHGs)
Brian Bunger
Counsel

District Legal Counsel, Brian Bunger, stated the District adopted a greenhouse gas (GHG) fee, which is a required use fee tied to the authority of the District and its programs. The reason the District has this fee authority is that it has the underlying regulatory authority. Pursuant to Health & Safety Code Section 39002, 4000, the District has primary responsibility for control of air pollution from all sources other than motor vehicles in the Bay Area. Since 1947, California law has provided local control over stationary source air pollution to air districts. The District is entitled to adopt standards that are stricter than otherwise embedded in State law or otherwise adopted by the California Air Resources Board, pursuant to Health & Safety Code Section 41508.

Mr. Bunger defined "air contaminant" and "air pollutant" as "any discharge, release, or other propagation into the atmosphere" including carbon and gases (Health & Safety Code Section 39013). He stated that the District has authority to require operators to provide data to allow determination of emissions, authority to require permits before a person may construct or operate a source of air contaminants, and the authority to abate nuisances.

He noted that AB32 does not pre-empt District authority. In enacting AB32, the legislature set out to give the California Air Resources Board (CARB) overall programmatic authority to determine how to deal with stationary source GHGs, but at the same time, they explicitly did not limit or expand the existing authority of any district.

B. Bay Area Regional GHG Emission Inventory
Amir Fanai
Principal Air Quality Engineer, Planning, Rules & Research Division

Principal Air Quality Engineer, Amir Fanai, provided an overview of the GHG inventory, stating that the District prepared its first regional GHG inventory in California in 2006 with a base year 2002 inventory, and updated it with a 2007 base year inventory approved in 2008. He said the inventory is consistent with other inventories for criteria pollutants and toxic inventories; it uses the same VMT estimates, industrial activities and the same economic and population growth estimates. It is used in Clean Air plans, for CEQA guidelines, GHG permit fees and for outreach and education.

Mr. Fanai noted that the GHG inventory is grouped into six sectors:
1. Industrial/Commercial
2. Residential
3. Electricity/Co-generation
4. Off-road equipment
5. Transportation
6. Agriculture/farming

GHGs included in the inventory are estimated for:
- Carbon Dioxide (CO_2) – from fossil fuels and solid waste

- Methane (CH_4) – produced during production and transport of natural gas and coal
- Nitrous Oxide (N_2O) – produced by agricultural and industrial activities
- Hydroflourocarbons (HFCs), Perfluorocarbons (PFCs), Sulfur Hexaflouride (SF_6) – very powerful GHGs and usually produced using semi-conductor manufacturing, electricity generation and transmission
- Biogenic Carbon Dioxide (Bio-CO_2) – produced from combustion of solid waste and wood products. Emissions are calculated from these, but they are not added to the inventory.

Mr. Fanai explained that measuring GHGs is done through a CO_2 equivalent emissions. The unit is reported on an annual basis, as follows:

Units: Million metric tons of CO2E {$MMTCO_2E$}

CO2 Emissions = {GHG emissions}x {Global Warming Potential (GWP)}

Global Warming Potential (GWP) – A relative index used to compare the climate impact of a greenhouse gas, relative to an equal amount of carbon dioxide (CO_2).

He noted that 91.6% of emissions are CO_2 followed by HFC, PFC, and SF_6 (4.1%), Methane (2.6%) and Nitrous Oxide (1.6%)

Mr. Fanai then presented 2007 Bay Area GHG Emissions by sector, representing the following:

Industrial/Commercial: 36.4%

Transportation: 36.4%

Electricity/co-generation (Bay Area) 8.4%

Electricity Import: 7.4%

Residential Fuel Usage: 7.1%

Off-Road Equipment: 3.0%

Agriculture/Farming: 1.2%

In comparing the State's inventory with the Bay Area's GHG inventories, he indicated that the Bay Area has about 20% of the population and 22% of emissions as compared to California. The Bay Area uses a lot of its own electricity which is must cleaner. Industrial is higher than the California average due to Bay Area refineries, and agriculture is less at 1% as compared to 6% for California.

Mr. Fanai presented a breakdown of the industrial/commercial sector emissions, stating that highest are oil refineries, which produce 40.7%. Natural gas boilers/heaters used by industries and commercial buildings produce 32.8%, and refrigerants/natural gas distribution produces 12.6% of emissions.

He presented a breakdown of the transportation sector emissions, stating that highest are cars/light duty trucks at 76.2%, medium/heavy duty trucks at 9.5%, aircraft at 7.5%, ships/boats at 3.8%, buses at 2.2%, motor-homes/motorcycles at 0.5% and locomotives at 0.3%. With a 10% reduction, the amount for cars and light duty trucks would be equivalent to the total off-road commercial/industrial equipment, as well as all electricity generation in the Bay Area.

Mr. Fanai presented CO_2-Equivalent Emissions by County, stating that generally, 10% of county emissions are from industrial and commercial sectors. Because of refineries, Contra Costa County emissions are highest at 32.9%. He displayed the largest emitting facilities as: Shell Martinez Refinery, Chevron Refinery, Tesoro Refinery, Valero Refinery, Delta Energy Center, ConocoPhillips Refinery, Los Medanos Energy Center, Metcalf Energy Center, Lehigh Southwest Cement and Mirant Potrero, LLC.

Trends will go up with a "business as usual" model, but by 2016 it is estimated that passenger cars and light duty trucks will reduce by 10% which will translate to a 3% reduction in overall emissions in the Bay Area. This is the equivalent to removing 300,000 to 400,000 vehicles from the roads. For 2020, the estimate increases to approximately 20%.

Ms. Roggenkamp requested moving up the presentation on Climate Protection Outreach; Item 2F.

F. Climate Protection Outreach
Lisa Fasano
Director, Communication & Outreach

Director of Communications and Outreach, Lisa Fasano, presented the District's messaging climate change through outreach and communication. She described the *Spare the Air* campaign which originally focused on transit and encouraged people to use transit. In 2008, a switch was made to encourage everyday behaviors and the District transitioned the campaign to *Spare the Air Everyday* campaign. She discussed the messaging to change behaviors to reduce GHG output, such as taking transit, biking, walking, using non-gasoline powered lawn equipment, low VOC fertilizers, reducing electricity use, and other behaviors.

The *Spare the Air Everyday* then began to focus efforts on carpooling and on transit use. The District implemented a comprehensive media campaign, advertising and focused its message specifically on encouraging carpools. Ms. Fasano noted that the District has 5 wrapped Priuses that say *Spare the Air Everyday* and *Every Ride is Worth Sharing*, encouraging carpooling. The District has wrapped some buses, has implemented signage, partnered with 511 through MTC to hold workshops with employers on how they can build a carpooling or ridesharing campaign to get them going into their work places. Additionally, the District included the climate message in media releases.

Ms. Fasano further described the 2008 adoption of the District's GHG fee which received national attention, the carbon offset fund which continues to generate interest, and discussed successes such as the Climate Summit held in 2009, a Great Race for Clean Air, and grant programs that fund projects focused on clean air messages and encouraging alternative transit behaviors.

Ms. Fasano then described the District's community outreach, education, and events held with teachers and students:

- School Curriculums:
  - -Clean Air Challenge
  - -Protect Your Climate

    - -As the World Warms
- Cool the Earth
- Resource Teams:
    - -Great Race for Clean Air Challenge
- Community Grant Program
- Climate Events

In closing, Ms. Fasano presented the various samples of artwork and products used in the clean air message and distributed reusable bags and other outreach materials to Advisory Council Members.

C. GHG Fees, AB32 Early Action Measures - Industry & "Tailoring Rule" for Title V Permits
Brian Bateman
Director, Engineering Division

Director of Engineering, Brian Bateman, said he would provide a background on climate initiatives which may affect Bay Area stationary facilities and review of the District's Climate Protection Program which includes program activities, support for local Bay Area efforts to reduce GHG emissions, and State and regional collaboration, such as AB 32 and SB 375.

Mr. Bateman indicated that prior to adoption of the District's GHG fee schedule on May 21, 2008, program activities lacked a dedicated funding source. The fee schedule was developed to recover cost and is part of the District's overall goal to achieve a greater cost recovery for stationary source programs. Regarding legal authority for fees, Mr. Bateman added that the District has authority to assess fees for sources the District regulates. He reviewed details of the GHG fee schedule and how the appropriate fee rate was calculated and established, as well as types of GHGs. He noted that biogenic carbon dioxide was determined not to be included, which are CO_2 emissions resulting from things like landfill gas, sewage digester gas and the vegetable oil component of bio-diesel. Mr. Bateman then described types of facilities subject to greenhouse gas fees, their percentages of fees, and approximate ranges of fees, noting that the current rate is set at $04.5 cents per metric ton.

He stated that AB 32 has a variety of measures slated for consideration of GHG reductions. He referred to a handout provided to members entitled, "Scoping Plan Measures Implementation Timeline" dated November 25, 2009, which incorporates a list of 72 measures included in the Scoping Plan. The first 12 measures have been approved for adoption by the CARB Board and Measure 13 was adopted in December, many additional measures will be adopted in 2010 and the District is participating in their development. He noted that "early action measures" is a term used by CARB to refer to measures on this list that were already underway or will be initiated in the 2007-2012 timeframe, and which constitute the majority of measures on the list. He said there are also nine "discreet early action" measures which refer to measures that would be adopted by CARB and enforceable at the beginning of January 1, 2010.

In terms of their significance, the single most significant measure is cap and trade, although there are a couple measures in the mobile source sector which are close to it. The cap and trade measure is under development now and does not focus on any specific industry or technology, but requires affected industries to reduce their GHG emissions as they see fit. If they cannot do

this adequately, they will be able to go out on the open market and buy allowances from other facilities that have been able to reduce their emissions further.

Mr. Bateman concluded by discussing AB 32 early action measures, which include the Landfill Methane Control Measure, adopted June 25, 2009; a measure relating to Semiconductor Operations approved by CARB on February 26, 2009, the Stationary Refrigerant Program approved by CARB on December 9, 2009; and the GHG Tailoring Rule from the Environmental Protection Agency, which is expected to double the number of required Title V and PSD Permits. He noted that if Congress takes action to adopt a national GHG program (e.g., the Waxman-Markey Bill approved by the House of Representatives last June), it is likely that this would remove EPA's authority to regulate GHGs under the Clean Air Act.

D. Grants & Incentives: Programs, Eligible Projects & Emission Reductions
Damian Breen
Director, Strategic Incentives Division

Director of Strategic Incentives, Damian Breen, gave an overview of grants and incentives and GHG and climate benefits from these programs, stating that many requirements for programs are defined in State law. The programs' primary objectives are to reduce criteria pollutants, reduce toxic air contaminants, with co-benefits of reducing GHGs of CO_2, black carbon and ozone precursors.

Mr. Breen presented and discussed the following programs, representing a total of $58 million in funding:

- **Transportation Fund for Clean Air (TFCA) Regional Fund/Program Manager:**
  - $22 million annually
  - 40% to County Program Manager Fund/60% to Regional Fund
  - Trip reduction, alternative fuel, smart growth and advanced demonstration vehicles
  - Bicycle Facility Program
  - Smoking Vehicle Program
  - Spare the Air
  - Emissions reduced FY 08/09 = ROG-0171 ton, NOx-379 tons, PM-94 tons, CO_2-167,781 tons

  Requirements:
  - Program restricted to On-road Vehicles Emissions Reductions Only (H&S Code)
  - Criteria Pollutant Program
  - Board Mandated Cost-effectiveness threshold: $90,000 - $500,000/ton of Emissions Reduced
  - Other Project Attributes Considered - Impacted Areas, PDA's, GHG Emissions Reductions

- **Carl Moyer/Mobile Source Incentive Fund (MSIF):**
  - Carl Moyer $9 Million/MSIF $9 Million annually
  - Criteria Pollutant Program
  - Program Guidelines provided by ARB

- 50% of funding spent in Impacted Communities
- Funds provided for:
  - Trucks/On-road vehicles, Locomotives, Marine Craft, Shorepower, Off-Road and Agricultural Equipment, Vehicle Buy-Back, School Bus
- Cost Effectiveness:
  - Threshold: $16,000 per ton of emissions reduced
- Emissions Reduced FY08/09 = ROG-1,225 tons, NOx-9,700 tons PM-410 tons

- **California Goods Movement Bond (I-Bond):**
  - $35 Million promised annually for 4 years
  - Less than $10 Million delivered
  - Criteria Pollutant Program (focus on DPM and NOx)
  - Program Guidelines provided by ARB
  - Focused on Goods Movement Equipment
    - Trucks/On-road vehicles, Locomotives, Marine Craft, Shorepower, Cranes/Yard Equipment, Truck Stop Electrification
  - No Cost Effectiveness Requirement
  - Emissions Reduced FY08/09 = PM-56 tons

- **Lower Emissions School Bus Program:**
  - $8.4 Million promised annually for 4 years
  - Less than $2.6 Million delivered
  - Criteria Pollutant Program (focus on DPM and NOx)
  - Program Guidelines provided by ARB
  - No Cost Effectiveness Requirement
  - Emissions Reductions not Reported

- **GHG/Criteria Pollutant Reduction Program (AB 118):**
  - 3 Programs – ARB, BAR and CEC
  - ARB – Air Quality Improvement Plan (Criteria) - $50 Million
    - Deployment Programs: On road-Hybrid Vehicles, lawn mowers, Marine, Locomotive, Agriculture
  - BAR – Vehicle Buy Back Program (Criteria) - $40 Million
  - CEC – Investment Plan (GHG) - $100 Million annually
    - Alternative Fuels Infrastructure, Advanced Vehicle Demonstrations, Job Training
    - Air District has applied for $450,000 for LNG station at Oakland

- **GHG Reduction Grant:**
  - $4.4 Million from ConocoPhillips Settlement
  - GHG Reduction Program
  - Funds available in Communities Surrounding Refinery (Rodeo, Crockett, Hercules, Pinole)
  - Funding available to Public Buildings Only
  - Project Types:
    - Energy Efficiency, Cool Roofs, Renewable Power (solar/wind)
  - More than $9 million in applications received (final submittals due - February 19, 2010)

- **Climate Protection Grant:**
  - $3 million in Air District funds invested in 52 grants
  - Youth Outreach
  - Planning (Climate Protection and Capacity-Building)
  - Regional Strategies (Best Practices and Innovative Approaches)
  - Interim Results:
    - Job creation of 10 permanent, 63 temporary and youth jobs
    - 122 public meetings held
    - 6,400+ youth directly involved

Mr. Breen concluded by stating District staff seeks new sources of federal and other funding and is focusing reduction of GHGs through clean transportation (EV and infrastructure), clean and renewable energy, energy efficiency and funding for stationary sources.

E. GHGs in CEQA Guidelines & 2010 Clean Air Plan
Henry Hilken
Director, Planning, Rules & Research Division

Director of Planning Rules & Research, Henry Hilken, reported that staff has been working on the update of the 1999 CEQA guidelines over the past year, as well as thresholds of significance, which are considered a policy decision and brought to the Board of Directors for approval. He said air quality standards for ozone and PM have been strengthened. Therefore, the District must lower the thresholds of significance so that emissions from new development are minimized to meet the standards and so that cities and counties consider local air quality impacts when making land use decisions.

He said there are many questions surrounding CEQA. Environmental groups have challenged a number of CEQA documents and have been successful because lead agencies have not addressed GHGs in their CEQA documents. The District is attempting to address this void and has developed three threshold options for land use projects, based upon the AB 32 Scoping Plan: 1) a plan based approach; 2) a bright line which is 1,100 metric tons/year; and 3) an efficiency based option of 4.6 tons/service population/year (residents and employees) which would address those projects over 1,100 metric tons.

Mr. Hilken said the Office of Planning and Research issued guidance to include GHGs in CEQA documents but they did not provide thresholds for significance. They advised that cities still needed to make this determination and work with local air districts.

Mr. Hilken then discussed local community risks and hazards, the CARE program which identifies 6 priority communities in the Bay Area with high emissions, and concentrations of toxics, PM. The District is encouraging cities and counties to develop Community Risk Reduction Plans (CRRPs) and staff has begun some pilot programs with communities. The plans allow a communitywide approach to reducing emissions for new and existing development. The District supports smart growth and infill development but also works to protect residents, and he displayed two maps showing priority development areas and modeled air toxics risk. Through implementation of local CRRPs, the District will work with cities to develop much more localized strategies to address impacts and future development.

He reviewed CRRPs elements as:

1. Defining CRRP planning area
2. Identifying goal or reduction target, e.g., no net increase/net reduction, percent reduction from baseline conditions, and equivalent to regional average risk.
3. Preparing emission inventories
4. Conducting risk modeling
5. Identifying emission reduction measures
6. Utilizing a monitoring and updating mechanism
7. Ensuring public involvement process

Mr. Hilken said staff has worked closely with local government staff that has questions on the effect of the thresholds on infill development. The District does not want to provide barriers, believes the thresholds are written in a way to support infill development, and staff will continue to meet and explain the process. He said staff will also work with regional agencies and cities to develop the Sustainable Community Strategy under SB 375 and ensure there is clarity on how projects would be treated under CEQA guidelines.

Mr. Hilken then discussed the 2010 Clean Air Plan; a multi-pollutant plan and update from the 2005 Ozone Strategy. He said the District needs to make continued progress toward the State air quality standards, provide local benefits in impacted communities, and also reduce GHG emissions. In addition to ozone cursors, the plan considers fine PM, key air toxics, especially diesel PM, and GHGs. Staff evaluates co-benefits and trade-offs in the control strategy and estimates the health and climate benefit in terms of dollars.

He noted that the draft Clean Air Plan proposes 55 control measures: 18 stationary source measures, 10 mobile source measures, 17 transportation control measures, 6 land use and local impacts measures, and 4 energy and climate measures. Many control measures will provide GHG reductions as co-benefits through cleaner vehicles and fuels, reduced vehicle usage, and increased transit and bicycling. Some of the stationary source measures will reduce GHGs, which include livestock waste and natural gas processing for methane reduction, and GHGs in permitting for CO2 reduction. Energy and climate measures will promote energy efficiency and renewables which will reduce the urban heat island and lower temperatures, promote green building codes and practices, promote solar power and other renewables, cool roofing and cool paving and promote planting of low VOC emitting trees.

Mr. Hilken reviewed next steps, which include:

- County workshops with planning departments
- Additional meetings with local officials, staff and interested stakeholders
- Provide technical resources and training to local staff
- Seek Board approval of significance thresholds June 2010
- Adoption of the Final Clean Air Plan late summer

G. Climate Protection Program Activities
Abby Young
Principal Environmental Planner, Planning, Rules & Research Division

Principal Environmental Planner, Abby Young, provided a presentation on climate protection program activities, stating that activities span many divisions in the District and encompass many programs. One of the largest focuses has been to assist the 101 cities and 9 counties in the Bay Area to develop their own local climate protection efforts.

Ms. Young stated that the District played the role of convener in 2006 where it convened the first ever regional Climate Protection Summit, which was highly successful. The second summit; the Climate Action Leadership Summit, was conducted last May 2009, and Thomas Friedman served as an inspiring keynote speaker. She said 450 local government representatives attended the conference which focused on highly interactive discussion-based, break out sessions. Topical issues related to issues addressing GHG mitigation through CEQA, challenges and opportunities SB 375 will bring to the region and the role of local, versus regional, jurisdictions in trying to think about green building.

Ms. Young reviewed the District's role as technical assistance provider, stating that the District worked with the International Council for Local Environmental Initiatives (ICLEI) over the last two years to convene a series of training workshops for local government staff, by county. Staff from a total of 52 local governments were trained to conduct their own community-wide GHG inventory. She said 85 of the 101 cities have completed community-wide GHG inventories over the last two years.

The District also provides on-demand, technical assistance and last year launched a partnership with the Institute for Local Government to develop a best practices web portal hosted on their site. The portal is designed specifically for local governments in addressing climate protection work. She presented a sample of the web page, stating the District tracks local governments' progress on inventories, climate action plans, reviews case studies, and has trained and presented the website to the District's regional agency partners.

Ms. Young discussed education and outreach such as *Protect Your Climate,* which provides 4th and 5th grade curriculum, *Cool the Earth, Cancel-a-car p*rogram, climate messages built into the *Spare the Air Everyday* program, and a variety of climate funding programs and community outreach grants. She said the District's climate planning efforts include regional GHG inventory, GHG quantification in control measures, and CEQA GHG thresholds, guidance and tools.

The District is also participating and collaborating with the SB 375 Sustainable Communities Strategy Working Group, the RTP Climate Working Group, Climate Bay Area, supporting the Joint Policy Committee's 6-point Climate Strategy and CEQA guidelines. She also reported on statewide leadership efforts with CAPCOA and the CARB. At the end of August, CAPCOA will convene a State-wide conference on climate protection, and the District is serving on its steering committee.

Public Comments:

Sam Altshuler, former Advisory Council Member, noted that fossil fuels are sequestered carbon, and anything the District can do to minimize the removal and burning of fossil carbon from the earth, the better off we are. He said he had asked former Advisory Council member Bob Sawyer what percent of CO_2 in ambient air is fossil carbon, and he replied that it is consistent at 57%, which he believed was fairly large. Lastly, he said the EPA uses comprehensive procurement guidelines when assessing federal projects, and they are looking for energy efficiency, use of recycled materials and opportunities for lower emissions on federal projects.

DISCUSSION

3. Air District Climate Protection Initiatives

Chairperson Bramlett thanked District staff for their time and presentations and recognized Board Chairperson Wagenknecht and Director Ross in attendance.

Dr. Holtzclaw referred to the GHG Inventory presentation, Slide 6; 2007 Bay Area GHG Emissions by Sector which shows the transportation at 36.4%, and Slide 7, a comparison of California and Bay Area GHG Inventories, which shows the transportation sector at 39% and 39.5%. Mr. Fanai said he tried to make the Bay Area and California charts consistent with one another; off-road equipment was added to the 36.4% in the chart on Slide 6 to arrive at 39% and 39.5% on Slide 7.

Dr. Holtzclaw referred to media outreach for Spare the Air Everyday, and questioned emphasis was placed on the activity and health benefits of walking and biking. Ms. Fasano replied that the District emphasizes biking, walking, walkable carpools and walkable school buses to schools, and talks about how these programs help with air quality and physical health, which is mostly focused to students, who in turn, bring information home to family members.

Ms. Young added that the $4^{th}/5^{th}$ grade curriculum also addresses health, and as part of the transportation lessons, these are part of the solutions that students can put into action. Through the grant program, the District also awarded several grants to school-based programs that focus on alternative modes to school. Ms. Fasano also added that through the employer program, the District encourages bicycle use and establishment of bicycle-friendly work places and lockers, as well.

Secretary Hayes thanked presenters and said the District has been on the cutting edge. He is proud to be part of an organization that is so proactive. He felt it was important for the Advisory Council to understand what is feasible, given the District's charter and statutory limitations. He referred to GHG Inventory presentation's pie chart on Slide 6, and questioned which portion of it is subject to District authority. Mr. Fanai said he would guess it is about 50/50 that are under District authority.

Secretary Hayes said of that 50%, how much was under permitting control. Mr. Bateman replied that currently, for permitted sources the total is about 27 million metric tons per year of CO_2 equivalent emissions, or about 25%-30% of the total. There could be other facilities within the District's regulatory jurisdiction that could be permitted, but this is based on current permitted facilities. Ms. Roggenkamp noted that in addition to regulatory authority, the District also works

to touch all of the sectors in some way—through grant programs, the Clean Air Plan, and model ordinances. She clarified that the one area the District does not get involved with is imported electricity.

Secretary Hayes referred to the AB 32 Scoping Plan measures prepared by Mr. Bateman and questioned which ones the District had authority for implementing. Mr. Bateman said out of the 72 measures, there are not many stationary sources where the Air District will be the lead agency in terms of implementation and enforcement. The District will not have much of a role with cap and trade. Nevertheless, some of the measures could be very significant in terms of resources they require.

Mr. Bateman stated that the District already has a rule for the landfill measure, and based upon the number of facilities, the refrigerant program would be quite significant. Semi-conductor is focused with fewer facilities, and there are several other measures where the Air District will take some lead role in terms of implementation. Also, the tailoring rule could be very significant for all air permitting agencies in the country.

Dr. Vura-Weis thanked staff for the presentation and referred to Mr. Breen's presentation on grants and incentives and the requirements for cost per emission reduction. She questioned whether the District was meeting those targets. Mr. Breen explained that as part of program requirements, the District does not provide funding unless specific criteria are met. He said there is wide variation and a lot depends on the category, the type of equipment provided, and the State legislature as to what funding is available. Heavy-duty emission reductions involve ships, trains and locomotives which are unregulated categories that cross state lines. For passenger vehicles and advanced demonstration projects, higher cost effectiveness is allowed because so much money must be expended to push those vehicles and their technology out. However, by doing these projects, the District is demonstrating that the technology can work and it encourages more of the market to take it up.

Dr. Vura-Weis recognized that in addition to reducing CO_2 emissions, public health is often improved, which is not quantified. She also believed the District was taking the lead in CEQA guidelines and questioned whether other air districts are working together so as not to duplicate efforts. Mr. Hilken agreed the District was in the lead; staff meets regularly with CAPCOA and sits on a variety of working groups. He noted that the South Coast Air District is working on CEQA thresholds, have not adopted any for the land use side but have already adopted thresholds for stationary sources subject to their permitting. He said the San Joaquin Air District recently adopted thresholds for land use projects. They took a different approach and they have received negative comments on their best practices approach.

Dr. Vura-Weis thanked staff for the Scoping Plan Measures Implementation Timeline and felt that it would be helpful to separate out who is responsible for setting standards and who is responsible for implementing and enforcing them. There are many where CARB is listed, but the work ends up with the Air District.

Dr. Bornstein stated that each presentation was highly professional and he was amazed at the fact that the work had begun just a few years ago. He referred to Slide 8 of Mr. Bateman's presentation on GHG fees, stating that he worked with an engineer that was following EPA guidelines to determine out-gassing. They were told to put a monitor downwind of the prevalent

wind direction; however, at night this has no meaning. The slide indicates that the District is measuring at 25 foot intervals, and he questioned if this was all the time, during the day, during the night. He also questioned how to account for the local effects, especially at night.

Mr. Bateman said the surface leak monitoring requirements in the Landfill Methane Control Measure and the District's existing rule, Regulation 8, Rule 34 are based on the use of hand-held hydrocarbon detectors. The technician walks across the surface of landfills and takes readings quarterly. He said there are other programs that involve ambient monitoring that measure air at the fence line at the facility. Dr. Bornstein said the sources of gases coming out depend on atmospheric conditions and where they are going to go depends on meteorology, and at night meteorology is local. Mr. Bateman replied that there are more sophisticated devices under experiment which will allow one to look at surface leaks from a remote location across the entire landfill, and CARB will be deploying this in southern California to see how it works.

Dr. Bornstein referred to the Grants and Incentives presentation; Slides 5, 7 and 8, and questioned staff as to what fraction of the total emissions the reductions represent. Mr. Breen referred to Slide 8 regarding I-Bond funding and reduction of emissions, stating the bulk of the 56 tons of PM emissions comes from drayage trucks from the Port of Oakland. The emissions reductions for that project are about 14 tons a year. The representation shown is based upon a 4 year life for the project, which translates to about 0.03 tons of emission reductions per day. He said while not a lot, when thinking about the entire emissions inventory for the Bay Area for heavy-duty trucks, which is about 2.6 tons of emissions daily. He said the 0.03 tons represents about 1% of the entire emissions from trucks in the Bay Area, and a whole percentage point is quite significant when talking about grant dollars.

Mr. Breen noted that in terms of the other programs, it is difficult to define how those projects affect the daily and yearly conditions in the Bay Area because they are spread over different sources and categories, and this is why they are reported on an annual basis. However, through I-Bond and other programs, the District is seeing a daily impact on emissions.

Dr. Bornstein referred to Slide 6 of the CEQA guidelines presentation and identified modeled hot spots. He questioned what contribution from the San Jose Airport was to that hot spot. Mr. Hilken said staff has been at meetings with Dr. Bornstein and has spoken with community groups. He believed locally, the airport contributes but staff would have to report back on how much. He would estimate that in the downtown area and including San Jose, diesel PM is, by far, the largest driver of cancer risk. The confluence of Highway 101 and I-880 has a much larger impact and is, by far, the largest driver of those highest concentrations in downtown San Jose. Dr. Bornstein said they were not able to find a strong signal from the airport but concluded that based on the location of the 4th Street station and other studies of airports, it was probably too far away to see the impact. He said they will recommend some sort of mobile measurements or a temporary fixed monitor, and he agreed to forward a copy of their report to staff.

Vice Chair Blonski thanked all presenters and referred to Slide 10 of Mr. Fanai's presentation and to the amount of CO_2 emissions in Contra Costa County versus Marin and Napa. He questioned staff how grant programs are balanced and equality provided, based upon the refining capacity in Contra Costa County and the significantly heavier impact on its residents. Ms. Roggenkamp said the District's grant programs are focused on reducing criteria pollutants, largely on diesel PM and NOx from heavy duty equipment. There is a requirement that they be

spent most heavily in those impacted communities and the District also believes this is the right thing to do. One of the District's grant programs focuses on GHGs, which is a temporary program from the ConocoPhillips settlement, and the GHG benefit is calculated for the TFCA program so staff can report them, and this is probably something which could be done for all of them even though it is not state mandated. She said the point raised is a good one when thinking about pushing the State to fold in GHG reductions as part of the grant programs.

Vice Chair Blonski referred to the promotion of low VOC tree planting, and he questioned if there is a list the District provides to local government agencies. Mr. Hilken said staff sent out general guidance to Bay Area planning directors several years ago on higher and lower VOC emitting species. He said one thing included in the Clean Air Plan measure is to revisit this and send it out again to cities.

Vice Chair Blonski referred to increasing requirements imposed and the effect it is having on local governments when they are struggling. He cautioned the District to take into account what the true cost is for some of the things and ensure the payback is beneficial.

Ms. Bard thanked speakers for their presentation and referred to the semi-conductor industry which uses a lot of nanotechnology. She stated that at the A&WMA conference, there was interesting research being done on the health impacts of nanotechnology and micro fibers, which found health impacts similar to impacts of asbestos exposure. The EPA is interested in this and she questioned if the District was looking at related impacts from such technology. Mr. Bateman replied that he was not aware that the District was pursuing study of such technology.

Ms. Bard referred to the multi-pollutant plan and said there was a methodology used that ranks health and cost benefits. She questioned if this methodology was being used for other programs when assigning or awarding grant dollars. Mr. Hilken said staff would definitely want to look at this and there is a discussion of this in the plan. He said staff is prioritizing control measures and thinks there may be applications for other programs. However, staff already considers various pollutant reductions in the grant programs already, but there may be additions to this that staff may want to consider in the future.

Ms. Bard thanked the District for their leadership, for being a true public health agency, and noted that some of last year's recommendations are being implemented. In the District's work with local governments, she asked to emphasize the public health benefit of the proposed policies. Public health departments want to be partners in this and are organizing a public health letter to MTC and ABAG to elevate the public health discussion, benefits of transportation planning and strategies that will reduce GHGs from SB 375. She indicated that one of their recommendations was for the Air District to advocate for a strong regional GHG reduction target and CARB will be setting a target in June. She believes that according to SB 375, local regions should provide input, and she questioned if the discussion about the Air District considering what model target could be embraced was moving forward.

Ms. Roggenkamp said there is a staff level working group that is on-going and talking amongst the regional agencies about SB 375 and the target for reducing GHGs between land use and transportation. One of the things they are doing is scenario-building processes for GHG reductions from the land use/transportation sector. In addition, the ABAG General Assembly will be held in April, and SB 375 is the topic for that meeting. Regional agencies are grappling with

SB 375 intensely and the General Assembly is intended to get local officials up to speed, look at scenarios, and identify what is possible in the region.

Ms. Young added that MTC and ABAG are organizing a preliminary meeting in March at the staff level to talk about the methodology that ARB will be following to develop the targets, and this, in combination with the General Assembly, will probably provide the District with good input that it can provide to CARB prior to them coming out with their draft targets in June.

Mr. Brazil said MTC is working with CARB staff and others around the state to develop methodologies in setting targets for SB 375. Ms. Roggenkamp said that being aggressive is important, but there is a lot of concern about the economy and things need to be balanced while also reaching as far as the District can in terms of making a difference in reduction of GHGs.

Ms. Bard said because there are initiatives in California now to rollback SB 375 and AB 32, she questioned if the Air District could provide a leadership role in opposing those efforts or recommending a policy to the JPC, MTC or ABAG. Ms. Roggenkamp noted that as bills come forward, the Legislative Committee of the Board will discuss them and determine whether or not to take action or discuss it with regional agency partners. Ms. Bard asked that the Air District take the lead in opposing any effort to rescind SB 375 and AB 32. Ms. Roggenkamp noted that local elected officials are members of the League of California Cities and CSAC, and lively discussions are expected.

Mr. Brazil thanked all presenters and referred to Slide 12 of Mr. Breen's presentation, and asked for examples of innovative approaches and best practices under regional strategies. Ms. Young stated that the District has different categories of funding; one is for regionalizing best practices; taking activities that might have been tried on a small scale, have demonstrated success, and then ramping them up to apply on a larger scale.

For innovative projects, staff was looking for something that had not yet been tried. They wanted to fund the actual incubation of new concepts and approaches to policy and new ideas. She said this is exactly what they got with the BerkeleyFIRST program, which was to determine the barrier to widespread implementation of both energy efficiency in commercial and residential buildings and applications of solar on site, such as PV and hot water heating. They realized the biggest barrier was the upfront cost and getting financing, as well as connecting the financing given a property owner may sell their home. They connected the financing with the owner's property taxes as opposed to the person taking out the loan, which was a solution to the barrier.

Mr. Brazil questioned the VMT used in developing the inventory. Mr. Fanai said it was the baseline that MTC provide ARB as part of the 2007 projections, which he said takes into account socioeconomic growth.

Board Director Ross said he was impressed with the array of questions and thanked the Advisory Council for their work. He noted that the public seems to have a grasp of the consequences of GHG emissions, but recent media coverage on third hand smoke and nicotine that meet up with other pollutants forms even worse carcinogens, which is surprising. He cited a study out of Berkeley relating to a person's proximity to freeways and the thickening of artery walls, and interesting is that most people know the consequences of GHGs but do not understand that 85% of cancer is related to diesel PM. He questioned how the Board could convey and translate that

message to the public about the consequences of diesel PM so that when the Board considers CEQA guidelines, toxic thresholds, elected officials can better understand the consequences of them.

Dr. Huang thanked all staff presenters and questioned if the District was the lead agency in climate protection in the Bay Area. Ms. Roggenkamp said the District wants to be and has played a strong role, but climate protection is a huge area dealing with air quality, water quality and supply, public health and she believed the District was among the leaders in the Bay Area. She said it is broad and needs to get integrated into everything public agencies do.

Dr. Huang questioned if the District partners with the private sector, especially in climate protection outreach. Ms. Fasano replied that the District targets youth with the hopes they will bring the message home to their families. The District targets the message through the employer program so that carpooling, sharing rides and public transportation can be addressed, and the District gets the message out to the general public to create a dialogue of conversation where it is on everybody's mind for discussion.

Ms. Fasano added that the District targets the message through different approaches, changes it over time when staff identifies which messages truly resonate with the public and what they hear. Most are not concerned about climate change per se, but more concerned about health. So, the more the District can wrap messages around public health, it will have more resonance with people. They also have looked at their messaging to different ethnic groups and have found different segments of the population have different concerns given their familial focus.

Dr. Huang questioned how much of the District's resources are devoted to GHG reduction. Ms. Roggenkamp said it is difficult to say; the District's focus has been to integrate it into existing programs, and there are specific grant programs that are very focused on GHGs. She said the District collects about $1 million from fees to cover expenses for integrating consideration of GHG reductions into the stationary source program as a whole. Staff thinks that integrating it into what the District does is an efficient way as opposed as having it be completely separate from other programs.

Dr. Holtzclaw referred to toxins and Slide 6 which represents modeled air toxics risk, and said it is obvious that freeway truck traffic is responsible. He suggested legislation or publicity focusing on the District's proposal for something that reduces PM from trucks, particularly in heavily impacted areas. Ms. Roggenkamp said in drawing attention to the issue, when the District issues grants for reducing diesel PM and NOx, the District talks with and sends out information to local communities about grant dollars awarded to projects in their area. There was a good deal of press relating to the Port of Oakland in cleaning up trucks, getting the message out with the woodsmoke rule which results in good and bad press, and staff will continue to look for opportunities.

Secretary Hayes referred to the split on funding for the grant program on slide 4 of Mr. Breen's grants and incentives presentation and said the two largest components are the TFCA Regional Fund/Program Manager and Carl Moyer/MSIF monies. He compared the emission reductions in 2008/09 and it appears that the $18 million for Carl Moyer money is achieving greater reductions than the TFCA, which may be derived from the different criteria for the grants. He thinks there was value in seeking coordinated and combined funding pools from the State that allow the

District to do its own prioritization with broader latitude, and felt that it would provide the ability for staff to target projects that provide the greatest public health return.

Secretary Hayes referred to Slide 6 of Mr. Fanai's presentation; modeled air toxics risk, and said the reason there is a pattern around freeways and roadways is because the underlying spatial resolution is 1 kilometer. For purposes of community risk reduction plans or multi-pollutant plans where toxics risks are included, the space scale for variations in risk can be on the order of a few tens or hundreds of meters, which will not be picked up in a 1 kilometer scale. He said the District will spend money, time and effort trying to resolve emission inventory questions and the entire message can be skewed to the public if data is not accurate. He reiterated the need to spend the time and money to make sure the data is right when going into community risk reduction planning.

Dr. Bornstein suggested a paragraph be developed by the Advisory Council to the Board indicating how happy they were to have heard the presentations. He noted that after spending 40 years studying urban heat island, he volunteered to be a conduit to the research community to ensure the District has access to the best information.

Dr. Vura-Weis referred to Slide 10 of Mr. Fanai's presentation, noted that Santa Clara County is responsible for about 20% of the emissions in the Bay Area, and questioned the source. Mr. Fanai said he did not break it down for presentation purposes, but could provide the data.

Chair Bramlett thanked District staff for their informative presentations and Advisory Council members for their participation.

OTHER BUSINESS

4. Council Member Comments/Other Business

Chair Bramlett reported that the recruitment process is underway to replace the unexpired seats of two Advisory Council members, under the categories of Public Health Agency and Community Planning. He stated that the A&WMA Conference will be held in Calgary this year and staff will be discussing this soon.

5. Time and Place of Next Meeting - 9:00 a.m. – 12:00 noon, Wednesday, March 10, 2010, 939 Ellis Street, San Francisco, CA 94109.

6. Adjournment: The meeting adjourned at 11:57 a.m.

Lisa Harper
Clerk of the Boards