

Bay Area Air Quality Management District  
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## **APPROVED MINUTES**

Summary of Board of Directors  
Stationary Source Committee Meeting  
9:30 a.m., Friday, March 5, 2010

**Call to Order – Roll Call:** Chairperson Gayle Uilkema called the meeting to order at 9:30 a.m.

**Present:** Gayle B. Uilkema, Chairperson; Vice Chairperson James Spering; and Committee Members Susan Garner, Carole Groom, Carol Klatt and Scott Haggerty

**Absent:** Directors John Gioia, Liz Kniss and Nate Miley

### **Public Comment Period:**

Joseph Guth, Legal Director, Science and Environmental Health Network, spoke of the District's significant risk thresholds for existing facilities as the highest of any other air district in the State. He believes there is a large gap between existing and new facilities which creates an incentive to retain existing facilities and voiced opposition to grandfathering in facilities, allowing extensions and relaxing of standards.

### **3. Approval of Minutes of November 16, 2009**

**Committee Action:** Director Garner made a motion to approve the minutes of November 16, 2009; Director Groom seconded the motion; unanimously carried without objection.

### **4. Status Report on Proposed Amendments to Regulation 11, Rule 16, Perchloroethylene and Synthetic Solvent Dry Cleaning Operations**

Director of Engineer, Brian Bateman, provided background on the District regulation of Perchloroethylene (Perc) and synthetic solvent dry cleaning operations, stating they have been subject to increasing rounds of regulatory requirements over the years. He described dry cleaner operations under the original adopted rule and said the Board of Directors adopted Perc amendments in March 2009 and directed staff to develop additional amendments. The effect of regulations from 1993 through 2008 shows a trend of emissions declining. This decline is due to facilities removing Perc from operations and replacing it with new solvents as they become available.

The first part of Perc phase-out was effective January 1, 2008 where no new installations were allowed. The deadline of July 1, 2010 will require Perc machines located in co-residential

facilities, converted machines, and machines greater than 15 years old to be prohibited. And, as machines reach 15 years of age, they need to be retired by January 1, 2023.

Mr. Bateman noted that staff has looked at options to accelerate phase out and identified four (4) options:

Option A: Shutdown at 12 years of age

Option B: Shutdown at 10 years of age

Option C: Shutdown at 8 years of age

After the District held workshops, received comments and completed its socio-economic impact analysis, Option D was developed. Option D would retain the 15-year shutdown provision but advance the date for final Perc phase-out, moving the date up to January 1, 2020.

Mr. Bateman stated that a large number of existing Perc machines will be subject to this requirement. However, there have been issues involving financing equipment replacements, but the deadline currently stands which would result in about half of the remaining dry cleaners in the Bay Area being removed from service. Since there are many machines proposed to be phased out by July 1, 2010, if an accelerated phase-out is implemented, staff does not recommend doing this on that same date, but rather to start the phase-out one year later, or July 1, 2011.

Mr. Bateman presented a chart of existing versus proposed phase-out for the total number of machines with a 15-year timeline for Perc machines to shutdown under each option from July 2010 through 2023. He presented a second chart of the same data, which represents Perc machines remaining under each option from July 2010 through 2023, noting that in years 2015 through 2016, there is an increase in the number of machines that would become 15 years old. This is largely due to facilities complying with a rule adopted in the 1990's. He noted for Option D, conditions are identical to the 15-year option until the end of Perc machines where in 2020, a total of 8 machines will remain. He then presented a chart expressed in a slightly different manner; showing Perc machines remaining for retirement at 15 years with all four options.

Staff conducted a socio-economic impact analysis for accelerated Perc phase-out. The typical cost of a new non-Perc drying cleaning machine is \$65,000. The annual loss of equity costs is \$2,700 to \$3,100 per year and the following represents the total loss of equity costs of shutting down equipment in advance of 15 years:

Option A: \$5,400 to \$9,300

Option B: \$10,800 to \$15,500

Option C: \$16,200 to \$21,700

Option D: \$9,300 (for 3 machines in the District)

Additionally, Mr. Bateman noted dry cleaners are small businesses; about two-thirds have between 1 and 4 employees. Average annual sales are estimated at \$62,200 and average annual profits are at \$4,100. The loss of equity costs are 66% to 76% of average annual profits. In CARB's rule development, a figure of 10% as business loss is considered potentially significant. However, due to economic downturn, current annual sales and profits are likely to be less than average. Because of this, the District held a workshop with an industry work group who meet on a regular basis, and the following comments were received:

- They do not want to lose equity they have in Perc machines, as many were installed in the late 1990's to comply with adoption of Regulation 11, Rule 16;
- Current economic conditions are not great, with severely reduced income;
- Difficulty in securing financing for new equipment;
- Limited equipment availability;
- Limited contractor availability

Given this information and due to the socio-economic impact analysis, and the fact that Perc dry cleaners are already subject to significant regulations, staff recommends Option D. Option D would phase out Perc machines at 15 years of age beginning on July 1, 2010, but accelerate the final phase-out date by 3 years which would work as follows:

51% of Perc machines shutdown by July 1, 2010  
 70% shutdown by January 1, 2016  
 100% shutdown by January 1, 2020

Staff believes Option D would minimize adverse economic impacts on operators. He noted that it would still represent the most stringent Perc dry cleaning rule of any other air districts in the state and would provide additional time for non-solvent alternatives to develop prior to the required date for machine replacement.

Committee Comments/Discussion:

Director Garner questioned and confirmed that solvents cannot be used in existing machines and the average life of a machine is about 15 years; however, there are some in service at about 20-25 years.

Director Sperring questioned if industry members had agreed to Option D in workshops. Mr. Bateman noted Option D was developed after the workshop. Two facilities have two machines, but he stated others would not be affected. He reiterated that there were many concerns of dry cleaners expressed during adoption of the State regulations; however, the District cannot adopt a rule that is less stringent than that of the State ATCM.

Director Sperring suggested Option A as more business-friendly. Mr. Bateman agreed Option A is the least stringent; it would require shutdown of machines three years sooner. He noted that action to develop options was based on Board direction, and staff wants to present a range of options for consideration. Further, Mr. Bateman said most air districts follow the State ATCM with a 15-year phase out option.

Director Groom confirmed that if Option A or D was chosen, the bulk of the machines must be replaced in 2014, 2015 and 2016. She believed that if there is an average annual profit of about \$4,000, it would be very difficult for operators to have enough money in the bank to purchase new machines.

Public Comments:

Sushma Dhulipala, San Francisco Department of Environment, reported that they have been very involved in the regulatory matter and have voiced concerns about use of toxic solvents by local businesses within residential neighborhoods. She discussed their undertaking of a

comprehensive, scientific assessment that compared solvents. Research shows that wet cleaning is the most cost comparative and viable option, and the least polluting. They have aggressively promoted its use in San Francisco and she thanked the air district for funding which helped extend their rebate program for switching from Perc to wet cleaning. She stated that the staff report fails to acknowledge the environmental and health costs incurred by the public and government with the continued use of Perc and it implies that Option D will benefit greener cleaning options by providing more time for their advancement, which they disagree with. She proposed a modified Option B which would phase out Perc by 2018, but allow a provision for extension to those cleaners who are committed to using wet cleaning.

Joseph Guth, Legal Director, Science and Environmental Health Network, questioned whether depreciation was taken into account, given Perc machines' 15-year life cycle. He asked that the loss be calculated into the factor as a fair measure of the true cost of the rule.

Lynette Watterson, Crystal Cleaning Center, San Mateo, said she owns the single location dry cleaning center with two machines. They started the business in 1963, are the last cleaner to be considered, and installed a Perc machine on December 1, 2007. After considering options and having participated in workshops, she was stunned by the State's ruling when staff recommended maintaining Perc as a viable alternative with viable restrictions. She received the Dry Cleaner of the Year Award in 2008 from the California Cleaners Association, has complied with all recommendations, risk assessments, filter vapor barrier room, maintains a meticulous machine, and wants full use of their machines. The old machine was removed even though it had good life, they use wet cleaning, but while applicable for some garments it is not 100% successful on all garment types. She asked for balance and noted that dry cleaning's impact on the environment is small. She asked the District to maintain the State standard and disregard any options presented.

Mr. Broadbent clarified that in March 2009, the Board directed staff to look at how the District could phase out Perc sooner. Staff looked at accelerating a Perc dry cleaner and when it would be closed from the ATCM that calls for 15 years to 12, 10 or 8 years. After working with dry cleaners, staff developed an Option D which keeps the 15 year life in the ATCM but advances when all Perc must be out by 3 years. Staff thought that given economic conditions and financing issues, this represented a more reasonable approach for the industry.

Regarding loss of equity, Mr. Bateman said the methodology was developed by CARB and staff did not see a reason to change it. It assumes the value of the equipment linearly decreases over time, but it is the same each year.

Director Haggerty noted the existence of problems associated with co-residential facilities expressed in the past, and he questioned if stand-alone businesses could be provided more leeway. Mr. Bateman said co-residential businesses are subject to stringent requirements but they are also slated to be phased out entirely July 1, 2010, which is a requirement of the State ATCM incorporated into the District's rule last March.

Mr. Broadbent stated that co-residential facilities are concerned and have contacted the District indicating they cannot secure financing and meet the July 1<sup>st</sup> deadline. The District is attempting to work on the issue with the State and Assemblywoman Hayashi.

Director Haggerty confirmed with Mr. Broadbent that associated costs involve the equipment change from Perc dry cleaning to wet cleaning.

Director Garner noted the difference between Option D and the State ATCM, and said three machines are affected in San Francisco and San Mateo.

Chair Uilkema confirmed with Mr. Bungler that the Committee is being asked to recommend Option D and to provide guidance to staff for development of the Rule and to return to the Board of Directors.

Director Haggerty cited the speaker's active involvement at the state and local level, supported maintaining the existing State ATCM and suggested financial incentives be provided to the affected parties. Mr. Broadbent indicated that the Board had directed staff to return with a proposal to phase out Perc dry cleaning sooner.

Director Spring agreed with Director Haggerty's suggestion to maintain the existing ATCM and supported financial incentives to bring the remaining three machines into compliance with the 2020 cycle.

The Committee gave staff direction to pursue Option D in developing its rule amendments; to retain the 15-year shutdown provision but to advance the date for final Perc phase-out to January 1, 2020; and, to develop a plan to assist the two affected Perc dry cleaners (three machines).

## **5. Status Report on Proposed Bay Area Power Plants**

Director of Engineering, Brian Bateman provided background on California's power needs, noting that California's peak demand for electric power is almost 53,000 MW (Megawatts) and consumption is growing by about 24% per year which relates to 1,250 MW of new power needed each year. Although California is one of the most energy-efficient states, per capita consumption is over 40% less than the national average due to stringent state energy efficiency standards for new buildings and appliances.

Needs are driven by population growth, mostly in inland areas. He presented a chart of population in coastal and inland areas through the year 2040, California's electricity mix for the year 2007, noting that natural gas combustion is the largest category of power used in the state and almost 90% of this power is produced in state. Geothermal, biomass, small hydro, wind and solar are considered renewables and collectively provide 12% of the State's power needs.

Mr. Bateman said California has the most diverse renewable power generation systems in the world due mostly to regulatory and incentive programs intended to increase renewables, and he discussed the California Renewables Portfolio Standard (RPS) program which requires electric companies to increase procurement from eligible renewable resources to at least 20% of their total retail sales by the end of the year. The Governor signed an Executive Order which increases this requirement to 33% by 2020. However, the RPS results are not on track to meet the 2010 mandate because of insufficient transmission infrastructure. He described solar plants under licensing review which, all combined, would have a peak output of 4500 MW.

Mr. Bateman described the 94 Bay Area power plants which have a peak electrical output of 0.1 MW or greater, as well as smaller “distributed energy” plants which include photovoltaic, reciprocating engines that burn natural gas, micro-turbine, wind turbine and fuel cells. He reviewed the power plant permitting process, which is regulated through the California Energy Commission (CEC) as the licensing entity. The CEC’s permitting process is a certified regulatory program under CEQA. The CEC’s license subsumes all requirements of state, regional, or local agencies otherwise required for a new plant. Air quality permits can be issued for power plants under the federal Prevention of Significant Deterioration (PSD) program.

Mr. Bateman noted that the only PSD permit the District has issued is the Russell City project, issued on February 3, 2010. Five other projects are under evaluation, are simple-cycle and combined-cycle, and all are very similar in terms of equipment with varying efficiencies. All projects must have the Best Available Control Technology to minimize emissions which is met through the exclusive use of natural gas fuel, automated combustion controls, selective catalytic reduction, and oxidation catalysts. The new NOx and CO back limits for new power plants have become much more stringent due to advances in technology, have continuous emissions monitors, and the actual average emissions are typically far less than the permit limits would otherwise dictate.

He noted additional air quality permitting requirements include air quality impact analysis, health risk screening analysis, emission offsets, and visibility, oils, and vegetation analysis. For GHG emissions, there are yet no existing regulatory requirements for power plants, but this may change due to EPA requirements which would establish PSD permitting requirements for facilities based on GHG emissions; however, staff believes it would not affect any of the presented plants because requirements would not likely come into effect until July 1, 2011.

The CEC has begun addressing GHG emissions as CEQA lead agency. In terms of mitigation, natural gas has lowest GHG emissions of any fossil fuel, new plants have high energy efficiencies, new plants will displace power produced from higher emitting existing plants leading to a reduction in GHG emission from what would otherwise occur, and dispatchable gas fired plants are needed to support renewable.

Mr. Bateman presented the proposed Bay Area power plants and indicated that each plant’s equipment and emission controls are very similar to each other. He displayed aerial photographs of each plant showing their locations and confirmed that construction of the Russell City Energy Center cannot begin until the appeal period has completed.

Russell City Energy Center, Hayward:

600-MW combined cycle; a gas turbine plant, uses only natural gas, is owned by the same company as Metcalf Energy Center, an identical facility, located at Highway 101 and Highway 85.

Los Esteros Critical Energy Facility, San Jose

320-MW combined cycle (conversion from 180-MW simple cycle); the application on file will convert the plant into a combined cycle plant that will increase energy efficiency and power output and make it cleaner. Staff is working on the application and hoping to get the preliminary determination of compliance done within the next month or so.

Marsh Landing Generating Station, Unincorporated Antioch

760-MW simple cycle; staff thinks the preliminary determination of compliance will be issued within the next month.

Willow Pass Generating Station, Pittsburg

550-MW combined cycle, it is co-located at the existing Pittsburg site; the applicant has requested putting this review on hold until Marsh Landing is finished (same applicant), and the District is 5-6 months away from a preliminary determination of compliance for this plant.

Oakley Generating Station, Oakley

624-MW combined cycle; similar to Willow Pass Generating Station and he presented the aerial view of Willow Pass, Marsh Landing and Oakley generating stations.

Mariposa Energy Project, Northeastern Alameda County

200-MW simple cycle; located near the eastern boundary of Alameda County, northeast of the Bethany Reservoir, and Mr. Bateman displayed its location in San Jose, west of Interstate 80 and north of Highway 237.

Mr. Bateman summarized his presentation stating that collectively, the plants would add 3,000 MW of capacity if all built. There is a trend for older power plants in the Bay Area to be shut down as new capacity is added, like the Hunters Point plant in San Francisco, the Potrero plant which will likely close soon, and the Contra Costa Power Plant which is slated to be shut down when the Marsh Landing plant is operational.

Committee Comments/Discussion:

Director Groom questioned and confirmed that the average length of time from start to finish for plants become operable through permitting is typically 1 to 1.5 years and that general public support varies and is dependent upon location of the plant. Mr. Bateman noted that Russell City Energy Center took a lot longer due to issues with the PSD permit.

Mr. Broadbent added that the presentation does a good job of showing the array of proposed power plants for the Bay Area and staff agrees that the Bay Area is getting its fair share than the rest of California. In attempts to inquire about this fact, the State has not yielded any information about why the Bay Area is experiencing this. In addition, he said there is a growing level of concern that there should not be any fossil fuel combustion power plant facilities sited any more and that power needs of California should be met by solar and other renewables. While renewables are growing in importance, there will still be a need for fossil fuel power plants.

Director Garner referred to the GHG emissions and questioned if the plants would be subject to the proposed GHG requirements under CEQA. Mr. Bateman said the CEQA guideline proposal does have a threshold for stationary source projects like this and all plants would be over that threshold of significance. The CEC is the lead agency and they look somewhat differently at power plants; plants are connected together and electricity is only produced based upon power needs and cannot be stored in significant quantities. When new power is introduced, this by definition will reduce other power that needs to be contributed to some degree. As long as plants are better than average in terms of GHG emissions per MW produced, they will reduce GHG emissions.

Director Garner questioned whether a construction project would have to consider GHG emissions from power plants. Mr. Bunger said from a CEQA perspective, the only time emissions are considered is when looking at cumulatively considerable and these would already be over the threshold. Therefore, one would never get to the question that they are cumulatively considerable, even if less than significant.

**Committee Member Comments/Other Business:**

Director Uilkema shared that the Committee has met every three months or four times a year, with significant public comment and inefficiency. She suggested a schedule to address one major facility per meeting, accelerate and combine the rate of the meetings, and if possible, look at rule development that relates to stationary sources. Therefore, the dates coming up will not be addressing all projects in the District's jurisdiction. She relayed the following proposed schedule:

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|-------------------------|---|
| April 12, 2010          | Facility Update on Pacific Steel Casting, Consideration of the Metal Melting Rule and Update of the Flare Management Plan |
| May 7, 2010 (tentative) | Facility Update on Lehigh, the Cement Kiln Rule, and the proposed Stationary Source Control Measures                      |
| June Meeting            | Petroleum Refinery NOx rule and the Open Burning Rule   |
| July/August Meeting     | Custom Alloy Allied Scrap Sales and Natural Gas Production Rule   |

**Time and Place of Next Meeting:** Monday, April 12, 2010, at 9:30 a.m.

**Adjournment:** The meeting adjourned at 10:56 a.m.

*/s/ Lisa Harper*  
Lisa Harper  
Clerk of the Boards