

**CONTRA COSTA COUNTY  
HAZARDOUS MATERIALS COMMISSION  
PLANNING AND POLICY DEVELOPMENT COMMITTEE MEETING**

**Wednesday, August 15, 2018  
4:00 p.m. – 5:30 p.m.**

**1333 Pine Street  
Suite C-1  
Martinez CA 94553**

*The Contra Costa County Hazardous Materials Commission will provide reasonable accommodations for persons with disabilities planning to attend the Hazardous Materials Commission meetings who contact Michael Kent, Hazardous Materials Commission Executive Assistant, at least 24 hours before the meetings, at (925) 313-6587*

**AGENDA**

**1. CALL TO ORDER, ANNOUNCEMENTS AND INTRODUCTIONS**

**2. APPROVAL OF MINUTES: JUNE 20, 2018**

**3. PUBLIC COMMENT**

**4. OLD BUSINESS:**

a) Presentation by Jim Holland of Levin Richmond Terminal Corporation on their coal and petroleum coke loading operations.

b) Discuss and consider recommendations about Best Management Practices for coal and petroleum coke loading operations.

**5. NEW BUSINESS:**

a) None

**6. REPORTS FROM COMMISSIONERS ON MATTERS OF COMMISSION INTEREST ..... Members**

**7. PLAN NEXT AGENDA**

**8. ADJOURNMENT**

*Attachments*

**Questions:** Call Michael Kent (925) 313-6587

*Any disclosable public records related to an open session item on a regular meeting agenda and distributed by Contra Costa Health Services to a majority of members of the Hazardous Materials Commission less than 72 hours prior to that meeting are available for public inspection at 597 Center Avenue in Martinez*

**Contra Costa County Hazardous Materials Commission  
597 Center Avenue, Suite 200, Martinez CA 94553 (925) 313-6712 Fax (925) 313-6721**

## **Hazardous Materials Commission**

### **Draft Minutes**

Planning and Policy Development Committee

June 20, 2018

#### **Members and Alternates:**

**Present:** Frank Gordon, Ron Chinn (alternate), Tracy Scott (alternate), Leslie Stewart

**Absent:** Don Bristol, Mark Ross, George Smith (represented by alternate), Jim Payne (represented by alternate), Industrial Association Seat (vacant), Environmental Seat #2 (Vacant)

**Members of the Public:** Julia Walsh

#### **1. Call to order, introductions and announcements**

Commissioner Scott called the meeting to order at 4:10.

#### **Announcements:**

Michael Kent announced:

- The Environmental Health Department is holding an informational meeting about the investigation they are conducting into the possible disposal of radiologically-contaminated soil at the Keller Canyon landfill at 6:30 tomorrow at the Ambrose Center in Bay Point.
- The Commission will be holding their annual meeting with Supervisor Gioia on July 2<sup>nd</sup> at 2:30 at his offices in El Cerrito.
- There will be a legislative committee hearing on SB 212, a bill setting up a state-wide pharmaceutical collection program next week sometime.
- DTSC has sent out notices about clean-up activity at the PG&E Shell Pond site in Bay Point and the UC Richmond Field Station.
- A letter was sent to all the Chambers of Commerce in the County asking them if they would be interested in promoting another workshop on Cybersecurity by the Department of Homeland Security.
- The Commission's meeting with Supervisor Glover on June 7<sup>th</sup> went well, and the Supervisor said he supports the Commission's priorities, especially the emphasis on brownfield remediation.
- A notice has been sent out advertising the open Environmental Seat #2 position.

**2. Public Comments:** None

**3. Approval of Minutes:**

The minutes from May 16, 2018 meeting were moved by Commissioner Gordon, seconded by Commissioner Scott and approved 2-0-1 with Commissioner Scott abstaining.

**4. Old Business:** None

**5) New Business:**

**a) Review of material related to bulk coal and coke loading**

Michael Kent summarized the Air District's proposed Regulation 6, Rule 1 which addresses controlling particulate emissions from coal and coke loading facilities, and the City of Richmond's proposal to amend their municipal code to define the open storage and transfer of coal and petroleum coke as a public nuisance. Both rules would affect the coal and petroleum coke loading operations at the Levin Richmond Terminal at the Port of Richmond. He pointed out that the primary policy difference between the two approaches is that the Air District's rule only contains numerical emission standards, while the Richmond proposal contains numerical emission standards and proscribes Best Management Practices to be implemented. He also found out that a hearing for the proposed Air District rule is scheduled for August 1<sup>st</sup> but may be postponed, and that the Richmond City Council passed a new first reading of the proposed amendments to the Richmond Municipal Code on May 19<sup>th</sup> and hasn't scheduled the second reading yet.

Julia Walsh thought that a proposed study of air quality around the facility by Levin Richmond Terminal would be done before the second reading.

Commissioner Gordon reviewed that after community complaints about coke dust from the Diablo Coke loading facility in Pittsburg, the facility ended up closing because of storm drain and water quality issues. The Koch coke loading facility next door that is all enclosed has no problems meeting their environmental standards. Moving forward, he feels the Air District isn't helpful because they only focus on air emissions, not the whole picture.

Julia Walsh added that the Regional Water Quality Control Board has re-issued the Levin Richmond Terminal their storm water permit till 2023, but the facility has increased exports by 4 times since the permit was re-issued.

Commissioner Chinn thought water quality laws would be difficult to use to control emissions from the facility because measurements are not readily available.

Commission Stewart said that she has concerns about employing strictly performance-based standards, and cited the case of MTBE as an example.

Julia Walsh said that due to a Bay Keeper law suit in 2012 that was settled in 2014, the Levin Terminal has covered their conveyor belt loading material onto ships and employs the use of tarps, and there is a confidential agreement to do water sampling. But there has been a huge increase in throughput since then.

Commissioner Gordon observed that Supervisor Gioia was at the May 22 Richmond City Council meeting when they discussed the proposed amendments to the Municipal code. Julia

Walsh said that at that meeting Supervisor Gioia supported the proposed changes to the Municipal Code and wanted monitoring.

Commissioner Gordon made a motion, seconded by Commissioner Chinn, that the Commission should find out what Supervisor Gioia said that the hearing, and to ask the Board of Supervisors to recommend to the Bay Area Quality Management District that they add requirements to implement the Best Management Practices to their proposed Rule that are listed in South Coast Air Quality Management District's Rule 1158. The motion passed 3-0.

- 6) **Items of Interest:** Commissioner Gordon said he would like the Operations committee to look at the issue of whether the charter school being proposed for the John Mansville brownfield site in Pittsburg has to follow the state's school siting guidelines.
  
- 7) **Plan Next Agenda:** No items discussed.
  
- 8) **Adjournment** – The meeting was adjourned at 5:30.

**Attachment**

**Item 4b**

October 25, 2017

# **Socioeconomic Impact Analysis: Proposed New Regulation 6 (Common Definitions and Test Methods) and Proposed Amendments to Regulation 6, Rule 1 (General Requirements)**

*Prepared for:*

**Bay Area Air Quality Management District**

*Prepared by:*

**Applied Development Economics, Inc.**

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# TABLE OF CONTENTS

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TABLE OF CONTENTS.....2

1. Introduction .....1

2. Overview of Draft New Regulation 6 And Draft Amendments to Regulation 6, Rule 1 ....2

    Cost of Compliance ..... 2

Methodology .....4

4. Economic and Demographic trends .....5

    Regional Population Trends ..... 5

    Regional Economic Trends ..... 5

    Types of Industries Subject to Amendment 6-1-307..... 7

5. Socioeconomic Impact Analysis Of Draft New Reg. 6 And Draft Amendments to Reg. 6,  
Rule 1 .....9

    Small Business Disproportionate Impact Analysis..... 9

# 1. INTRODUCTION

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The Bay Area Air Quality Management District ("Air District") is proposing a new Regulation 6 ("Regulation 6: Common Definitions and Test Methods ") to provide common definitions, administrative requirements and test methods that apply to existing Regulation 6 rules and any other source-specific rules as they are developed in the future. In addition, the Air District seeks to amend Regulation 6, Rule 1: General Requirements, particularly with respect to updating particulate standards that are stringent enough to protect the health of Bay Area residents. Included in proposed changes to Reg. 6, Rule 1 is proposed amendment, Section 6-1-307, which is a new requirements to control particulate matter pertaining to bulk material storage and handling. This report analyzes the socioeconomic impacts associated with the proposed new regulation and amendments.

After this introduction, this report discusses the proposed revisions in greater detail (Section Two). After that discussion, the report describes the socioeconomic impact analysis methodology and data sources (Section Three). The report describes population and economic trends in the nine-county San Francisco Bay Area (Section Four), which serves as a backdrop against which the Air District is contemplating its various rule changes. Finally, the socioeconomic impacts stemming from the regulatory proposals are discussed in Section Five. The report is prepared pursuant to Section 40728.5 of the California Health and Safety Code, which requires an assessment of socioeconomic impacts of proposed air quality rules. The findings in this report can assist Air District staff in understanding the socioeconomic impacts of the proposed requirements, and can assist staff in preparing a refined version of the rule. Figure 1 is a map of the nine-county region that comprises the San Francisco Bay Area Air Basin.





## 2. OVERVIEW OF PROPOSED NEW REGULATION 6 AND PROPOSED AMENDMENTS TO REGULATION 6, RULE 1

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The Air District is proposing a new Regulation 6: Common Definitions and Test Methods ("Reg. 6") to provide definitions; monitoring requirements and test methods that apply to all Regulation 6, Particulate Matter regulations. Proposed new Reg. 6 includes the following:

- Common definitions that apply to all particulate matter rules: This approach standardizes the definitions and provides a single reference location for these definitions. Definitions can be compromised when located in several source-specific rules, where version control is difficult.
- A common expectation of monitoring the emission or specific limitation as needed to ensure compliance.
- Source test methods that apply to all or most individual particulate matter rules. Similarly, this approach standardizes test methods and provides a single reference location for these test methods.

In addition to new Reg. 6, Staff proposes amendments to Rule 6-1 because its particulate standards have not been updated in decades; other air districts in California have more stringent standards; and amendments are needed to ensure the Bay Area standards are health-protective. Control technology is available that facilities can use to comply at a reasonable cost and the revised standards will obtain PM<sub>2.5</sub> reductions that will help the Air District achieve its health-based PM<sub>2.5</sub> goals. As part of the Rule 6-1 proposed amendment, the Air District is proposing a new section for Rule 6-1, Section 6-1-307) that addresses fugitive dust from active operations and from wind erosion of bulk material storage piles, disturbed surfaces, and any other activities where the solids can be exposed to the wind by setting limits on any allowable fugitive dust plume, and by prohibiting any visible emissions of fugitive dust from traveling or carrying beyond the site property.

### **COST OF COMPLIANCE**

Regulation 6 is a foundational regulation for the existing particulate matter rules, and any new source-specific rules that may be developed in the future. No controls are required from proposed new Reg. 6, so no costs are incurred. Future administrative costs are expected to be reduced with definitions, monitoring requirements and test methods located in one regulation, rather than being repeated.

As for proposed amendments to Regulation 6-1, there are a set of costs associated with proposed amendment, Section 6-1-307. This new section to Regulation 6-1 will affect approximately 120 facilities that store and handle bulk materials, ten of which handle petroleum coke, and three facilities

that store and handle coal. Approximately 40 of these facilities already have controls for fugitive dust, mostly water sprays.

Air District staff has identified approximately 90 sources which, in adopting Reg. 6-1-307-related controls, would incur an estimated \$1.7 million in total capital costs (Table 1). Emission reduction estimates generated by BAAQMD assume half of these 90 sources will find ways to meet the opacity limit and other requirements without having to install significant controls. Thus, the Air District assumes that only half of the controls shown below will actually be installed.

**Table 1- Total Capital Cost of Compliance: Proposed Amendment Section 6-1-307**

|  | Controls\<br>Facilities | Total<br>Capital<br>Cost |
|--|-------------------------|--------------------------|
| <b>Total</b>                                 | <b>123</b>              | <b>\$1,701,600</b>       |
| Windscreen or shroud for storage             | 13                      | \$36,000                 |
| Windscreen or shroud for handling            | 21                      | \$90,000                 |
| Windscreen for stockpile                     | 11                      | \$448,000                |
| Windscreen for screener                      | 9                       | \$37,800                 |
| Windscreen for grinder                       | 2                       | \$5,400                  |
| Windscreen for conveyor and transfer points  | 16                      | \$108,000                |
| Windscreen for loading\unloading             | 3                       | \$10,800                 |
| Portable shroud, chute for loading\unloading | 5                       | \$90,000                 |
| Windscreen for presser                       | 1                       | \$1,800                  |
| Windscreen for mixer                         | 1                       | \$1,800                  |
| Windscreen for dryer                         | 2                       | \$7,200                  |
| Water mist                                   | 33                      | \$693,000                |
| Water fog system                             | 6                       | \$171,800                |

Source: BAAQMD (see Attachment 2: STAFF REPORT – PARTICULATE MATTER: Draft Amendments to Regulation 6, Rule 1: General Requirements [2017 Clean Air Plan, Control Measure SS31], pages 32 to 39).

# METHODOLOGY

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Applied Development Economics (ADE) typically begins its impact analysis by preparing a statistical description of the industries affected by proposed rules and amendments, analyzing data on the number of establishments, jobs, and payroll. We also estimated sales generated by impacted industries. To generate its estimates, ADE relies on the most current data available from a variety of sources, particularly the State of California's Employment Development Department (EDD) Labor Market Information Division, the US Census County Business Patterns, and the US Internal Revenue Service. When presented with a list of specific firms affected by proposed new regulations, ADE also analyzes firm-specific data from private data vendors, such as InfoUSA.

When compliance cost information is readily available, ADE then compares costs against net profits, in the case of private sector entities affected by proposed rules, with the results of socioeconomic analysis shows what proportion of profits the compliance costs represent. Based on assumed thresholds of significance, ADE discusses in the report whether the affected sources are likely to reduce jobs as a means of recouping the cost of rule compliance or as a result of reducing business operations. To the extent that such job losses appear likely, the indirect multiplier effects of the jobs losses are estimated using a regional IMPLAN input-output model. In the case of impacts borne by public sector entities, ADE analyzes whether affected sources can cover costs a combination of sources' annual revenues and fund balance reserves.

When analyzing the socioeconomic impacts of proposed new rules and amendments, ADE attempts to work closely within the parameters of accepted methodologies discussed in a 1995 California Air Resources Board (ARB) report called "Development of a Methodology to Assess the Economic Impact Required by SB513/AB969" (by Peter Berck, PhD, UC Berkeley Department of Agricultural and Resources Economics, Contract No. 93-314, August 1995). The author of this report reviewed a methodology to assess the impact that California Environmental Protection Agency proposed regulations would have on the ability of California businesses to compete. The ARB has incorporated the methodologies described in this report in its own assessment of socioeconomic impacts of rules generated by the ARB. One methodology relates to determining a level above or below which a rule and its associated costs is deemed to have significant impacts. When analyzing the degree to which its rules are significant or insignificant, the ARB employs a threshold of significance that ADE follows. Berck reviewed the threshold in his analysis and wrote, "The Air Resources Board's (ARB) use of a 10 percent change in [Return on Equity] ROE (i.e. a change in ROE from 10 percent to a ROE of 9 percent) as a threshold for a finding of no significant, adverse impact on either competitiveness or jobs seems reasonable or even conservative."

# 4. ECONOMIC AND DEMOGRAPHIC TRENDS

This section of the report discusses the larger context within which the Air District is contemplating proposed New Regulation 6 (Common Definitions and Test Methods) and proposed Amendments to Regulation 6, Rule 1 (General Requirements). This section begins with a broad overview of demographic and economic trends, with discussion then narrowing to industries and sources affected by the proposed rule changes.

## REGIONAL POPULATION TRENDS

Table 2 tracks population growth in the nine-county San Francisco Bay Area between 2007 and 2017, including data for the year 2012. Between 2007 and 2017, the region grew by approximately 0.5 percent a year. Between 2012 and 2017, the region grew annually at a somewhat faster rate of 0.9 percent per year. Overall, there are 7,714,638 people in the region. At 1,938,180, Santa Clara County has the most people, while Napa has the least, at 142,408. Alameda and Contra Costa Counties grew the fastest between 2012 and 2017, at 1.3 percent a year, while Marin and Napa grew by the slowest rate (0.6 percent a year) over the same period.

**Table 2: Population Trends: Bay Area Counties, Region, and California**

| JURISDICTION       | 2007              | 2012              | 2017              | 07-12<br>CAGR | 12-17<br>CAGR | 07-17<br>CAGR |
|--------------------|-------------------|-------------------|-------------------|---------------|---------------|---------------|
| <b>California</b>  | <b>37,463,609</b> | <b>37,881,357</b> | <b>39,523,613</b> | <b>0.2%</b>   | <b>0.9%</b>   | <b>0.5%</b>   |
| <b>SF Bay Area</b> | <b>7,122,615</b>  | <b>7,300,094</b>  | <b>7,714,638</b>  | <b>0.5%</b>   | <b>1.1%</b>   | <b>0.8%</b>   |
| Alameda            | 1,519,250         | 1,543,027         | 1,645,359         | 0.3%          | 1.3%          | 0.8%          |
| Contra Costa       | 1,035,097         | 1,069,977         | 1,139,513         | 0.7%          | 1.3%          | 1.0%          |
| Marin              | 254,532           | 255,812           | 263,604           | 0.1%          | 0.6%          | 0.4%          |
| Napa               | 134,726           | 138,074           | 142,408           | 0.5%          | 0.6%          | 0.6%          |
| San Francisco      | 823,940           | 826,103           | 874,228           | 0.1%          | 1.1%          | 0.6%          |
| San Mateo          | 727,719           | 735,256           | 770,203           | 0.2%          | 0.9%          | 0.6%          |
| Santa Clara        | 1,797,623         | 1,828,496         | 1,938,180         | 0.3%          | 1.2%          | 0.8%          |
| Solano             | 422,646           | 415,862           | 436,023           | -0.3%         | 1.0%          | 0.3%          |
| Sonoma             | 478,935           | 487,487           | 505,120           | 0.4%          | 0.7%          | 0.5%          |

Source: ADE, Inc., based on California Dept. of Finance E-5 Reports (note: CAGR = compound annual growth rate)

## REGIONAL ECONOMIC TRENDS

Data in Table 3 describe the larger economic context within which officials are contemplating the proposed new Regulation 6 and amendments to Regulation 6, Rule 1, including proposed amendment Section 6-1-307. Businesses in the region employ over three and a half million workers, or 3,611,076. Of the 3,611,076 workers, 157,408 or 4.4 percent, are civil servants in the public sector (109,269 are local government employees and 48,140 are state and federal workers). This figure does not include public sector education employees, who were combined with private sector education employees in an

effort to present a picture as to the total number of persons in education in the Bay Area. There are 145,498 employees in "Education: elementary and secondary", and another 77,514 in "Education: post-secondary", for a total of 223,012 (or 6.2 percent). For the same reason, we combined public sector workers in health care with private sector workers in health.

**Table 3 — San Francisco Bay Area Employment Trends By Sector: 2006 - 2016**

| INDUSTRY SECTOR |                             | 2006             | 2011             | 2016             | 2016           | 2016 CA     | SFBA CAGR*<br>06-11 | SFBA CAGR<br>11-16 | CA CAGR<br>11-16 |
|-----------------|-----------------------------|------------------|------------------|------------------|----------------|-------------|---------------------|--------------------|------------------|
| <b>Total</b>    |                             | <b>3,150,735</b> | <b>3,040,409</b> | <b>3,672,206</b> | <b>100.00%</b> | <b>100%</b> | <b>-0.7%</b>        | <b>3.8%</b>        | <b>2.7%</b>      |
| 11              | Agriculture                 | 20,450           | 19,231           | 20,317           | 0.6%           | 2.5%        | -1.2%               | 1.1%               | 1.6%             |
| 21              | Mining                      | 2,047            | 1,977            | 1,638            | 0.0%           | 0.1%        | -0.7%               | -3.7%              | -2.8%            |
| 22              | Utilities                   | 15,689           | 18,940           | 18,705           | 0.5%           | 0.6%        | 3.8%                | -0.2%              | 0.3%             |
| 23              | Construction                | 192,897          | 130,376          | 184,119          | 5.0%           | 4.6%        | -7.5%               | 7.1%               | 6.5%             |
| 31-33           | Manufacturing               | 352,040          | 311,361          | 335,243          | 9.1%           | 7.8%        | -2.4%               | 1.5%               | 0.9%             |
| 42              | Wholesale                   | 125,200          | 113,953          | 128,274          | 3.5%           | 4.3%        | -1.9%               | 2.4%               | 1.8%             |
| 44-45           | Retail                      | 336,232          | 311,906          | 343,504          | 9.4%           | 10.0%       | -1.5%               | 1.9%               | 1.7%             |
| 48-49           | Transportation and          | 85,970           | 76,695           | 89,958           | 2.4%           | 3.0%        | -2.3%               | 3.2%               | 4.7%             |
| 51              | Information                 | 112,820          | 116,668          | 172,891          | 4.7%           | 3.1%        | 0.7%                | 8.2%               | 3.8%             |
| 52              | Finance and Insurance       | 151,360          | 118,888          | 129,338          | 3.5%           | 3.2%        | -4.7%               | 1.7%               | 0.9%             |
| 53              | Real Estate                 | 62,020           | 52,139           | 58,855           | 1.6%           | 1.7%        | -3.4%               | 2.5%               | 2.2%             |
| 54              | Prof., Scientific, Tech.    | 312,042          | 339,865          | 436,816          | 11.9%          | 7.3%        | 1.7%                | 5.1%               | 2.8%             |
| 55              | Mgt. of Companies           | 56,807           | 60,196           | 72,498           | 2.0%           | 1.4%        | 1.2%                | 3.8%               | 2.8%             |
| 561             | Admin. Support              | 175,238          | 158,050          | 200,162          | 5.5%           | 6.2%        | -2.0%               | 4.8%               | 4.4%             |
| 562             | Waste Management            | 10,482           | 11,105           | 12,499           | 0.3%           | 0.3%        | 1.2%                | 2.4%               | 3.0%             |
| 6111            | Education - elem., sec.     | 123,430          | 120,714          | 145,498          | 4.0%           | 5.3%        | -0.4%               | 3.8%               | 1.6%             |
| 6112-6117       | Education - post-sec.       | 68,644           | 69,239           | 77,514           | 2.1%           | 3.1%        | 0.2%                | 2.3%               | 1.0%             |
| 62              | Health                      | 345,833          | 384,305          | 469,975          | 12.8%          | 14.1%       | 2.1%                | 4.1%               | 3.8%             |
| 71              | Arts, Entert., Recreation   | 50,976           | 52,549           | 61,090           | 1.7%           | 1.8%        | 0.6%                | 3.1%               | 3.7%             |
| 721             | Accommodations              | 222,418          | 236,326          | 300,218          | 8.2%           | 1.3%        | -0.4%               | 1.9%               | 2.2%             |
| 722             | Food, drinking              | 47,380           | 46,522           | 51,100           | 1.4%           | 8.1%        | 1.2%                | 4.9%               | 4.6%             |
| 81              | Other service***            | 105,108          | 105,729          | 123,827          | 3.4%           | 3.1%        | 0.1%                | 3.2%               | 2.9%             |
| 92              | Public: Local Govt.**       | 116,196          | 105,061          | 109,269          | 3.0%           | 3.9%        | -2.0%               | 0.8%               | 0.5%             |
| 92              | Public: State and Federal** | 59,325           | 66,047           | 48,140           | 3.0%           | 2.5%        | 2.2%                | -6.1%              | -0.7%            |
| 99              | Unclassified                | 131              | 12,567           | 19,630           | 0.5%           | 0.6%        | 149.1%              | 9.3%               | 7.4%             |

Source: Applied Development Economics, Inc. based on California EDD LMID QCEW (<http://www.labormarketinfo.edd.ca.gov/qcew/qcew-select.asp>).  
 \*Note: CAGR = compound annual growth rate. \*\*Note: EDD LMID public education (elementary, secondary, and post-secondary), public health, and public utilities employment data moved out of local, state and federal public administration categories and into their corresponding private categories above, in an effort to accurately profile employment trends by sector. \*\*\*Note: in 2013, the US BLS moved a large portion of NAICS 814110 (private households) to NAICS 624120 (Support to elderly persons and persons with disabilities); the totals above account for that adjustment for 2006 and 2011.

The top-five sectors in the Bay Area in terms of total number of workers are Health and Social Assistance (NAICS 62) (469,75 workers), Professional/Technical Services (NAICS 54) (436,816 workers), Retail (NAICS 44-45) (343,504), Manufacturing (NAICS 31-33) (335,243) and Food Services (300,218). Of the top-ten leading sectors in terms of employment, six exhibited high rates of annual growth from 2010 to 2015, growing annually by more than four percent. These sectors are Health and Social Assistance (4.1 percent per year), Professional/Technical Services (5.1 percent), Food Services (4.9 percent), Administrative Support (NAICS 561) (4.8 percent), Construction (NAICS 23) (7.1

percent per year) and Information (NAICS 51), which grew at a phenomenal annual rate of 8.2 percent. Combined, these five sectors employ 49 percent of total employment, or 1,764,180 out of 3,611,076. The table also demonstrates the advanced nature of the regional economy, as 12.1 percent of all workers are in the Professional, Scientific and Technical (NAICS 54), whereas in the state as a whole, 7.3 percent of all workers are in this sector. Interestingly, at 1.5 percent per year, manufacturing employment growth in the Bay Area almost doubled statewide manufacturing growth rates (0.9 percent), underscoring the diversity of the regional economy.

## TYPES OF INDUSTRIES SUBJECT TO SECTION 6-1-307

As indicated above, Air District staff has identified approximately 90 sources requiring over 120 controls related to proposed amendments to Rule 6-1 having to do with bulk material storage and handling. Slightly over 40 specific firms operate these 90 sources. These firms are spread across 25 different industries (Table 4). The table below includes capital costs stemming from the proposed amendments, which is annualized. It is important to note that the annual capital cost assumes that only half of the control measures would be adopted. Thus, the 43 specific firms operating 90 sources will annually incur an estimated \$200,050 in aggregate annual costs as a result of 6-1-307.

**Table 4 - Types of Industries Subject to Proposed Amendment 6-1-307 (Particulate Matters and Bulk Material Storage and Handling)**

|  |        | Nos. Of Affected Firms | Controls \ Facilities | Annual Cost      |
|--|--------|------------------------|-----------------------|------------------|
| <b>Total</b>                                       |        | <b>43</b>              | <b>123</b>            | <b>\$200,050</b> |
| Other Crushed & Broken Stone Mining & Quarrying    | 212319 | 1                      | 1                     | \$6,300          |
| Construction sand and gravel mining                | 212321 | 2                      | 5                     | \$11,510         |
| Comm. and Instit. Bldng Const. Contractors         | 236220 | 1                      | 2                     | \$3,270          |
| Highway Street & Bridge Construction               | 237310 | 1                      | 1                     | \$135            |
| Poured Concrete Foundation & Structure Contractors | 238110 | 2                      | 17                    | \$29,480         |
| All Other Specialty Trade Contractors              | 238990 | 1                      | 1                     | \$6,300          |
| Other Animal Food Manufacturing                    | 311119 | 3                      | 11                    | \$13,050         |
| Oil refineries                                     | 324110 | 3                      | 6                     | \$11,235         |
| Fertilizer (Mixing Only) Manufacturing             | 325314 | 1                      | 1                     | \$225            |
| Other Concrete Product Manufacturing               | 327390 | 1                      | 1                     | \$225            |
| Gypsum Product Manufacturing                       | 327420 | 1                      | 2                     | \$3,270          |
| Fabricated Pipe & Pipe Fitting Manufacturing       | 332996 | 1                      | 1                     | \$525            |
| Brick, Stone/Related Constr Material Mrchnt Whlsrs | 423320 | 5                      | 27                    | \$41,010         |
| Recyclable Material Merchant Wholesalers           | 423930 | 3                      | 5                     | \$13,445         |
| Other Miscellaneous Durable Goods Merchant Whlsrs  | 423990 | 1                      | 11                    | \$13,170         |
| Other Chemical & Allied Products Merchant Whlsrs   | 424690 | 1                      | 1                     | \$525            |
| Grain merchant wholesalers                         | 424510 | 1                      | 1                     | \$270            |
| Home Centers                                       | 444110 | 1                      | 3                     | \$3,540          |
| Other Building Material Dealers                    | 444190 | 5                      | 11                    | \$14,655         |
| All Other Professional, Scientific/Technical Svcs  | 541990 | 2                      | 6                     | \$10,835         |
| All Other Business Support Services                | 561499 | 1                      | 2                     | \$3,360          |
| Solid Waste Collection                             | 562111 | 2                      | 3                     | \$3,585          |
| Other Waste Collection                             | 562119 | 1                      | 1                     | \$225            |
| Waste Mgmt. Landfill                               | 562212 | 1                      | 2                     | \$3,405          |
| Local government                                   | 999300 | 1                      | 1                     | \$6,500          |
| <i>Source: ADE, Inc., based on BAAQMD</i>          |        |                        |                       |                  |

Many of the industries subject to proposed Section 6-1-307 are in construction and/or industries having to do with handling and moving materials in bulk (Table 5). In the Bay Area, affected industries declined by 21,200 jobs between 2006 and 2011, as the downturn affected the hardest real estate-related industries and sectors (including construction). However, between 2011 and 2016, these industries in the Bay Area had rebounded, having grown by 21,900 jobs over this five-year period.

**Table 5 - Employment Trends for Type of Industries Subject to Proposed Amendment 6-1-307 (Particulate Matters Pertaining to Bulk Material Storage and Handling)**

| NAICS  | Total Employment in Select Industries                   | 2006           | 2011           | 2016           | 06-11 Chg      | 06-11 CAGR | 11-16 Chg     | 11-16 CAGR |
|--------|---|----------------|----------------|----------------|----------------|------------|---------------|------------|
|        | <b>Total</b>  | <b>212,496</b> | <b>191,044</b> | <b>213,386</b> | <b>-21,219</b> | <b>-2%</b> | <b>21,953</b> | <b>2%</b>  |
| 212319 | Other crushed and broken stone mining and quarrying     | 47             | 54             | na^            | 7              | 3%         | ---           | ---        |
| 212321 | Construction sand, gravel mng.                          | na             | 157            | na             | ---            | ---        | ---           | ---        |
| 236220 | Commercial and institutional building construction      | 14,510         | 9,030          | 17,127         | -5,480         | -9%        | 8,097         | 14%        |
| 237310 | Highway, street, bridge constr.                         | 7,962          | 6,609          | 7,238          | -1,353         | -4%        | 629           | 2%         |
| 238110 | Poured concrete foundation and structure contractors    | 5,505          | 3,376          | 6,376          | -2,129         | -9%        | 3,000         | 14%        |
| 212321 | Construction sand, gravel mining                        | 222            | 135            | 288            | -87            | -9%        | 153           | 16%        |
| 238990 | All other specialty trade contr.                        | 7,997          | 5,841          | 7,537          | -2,156         | -6%        | 1,696         | 5%         |
| 311119 | Other animal food mfg.                                  | 63             | na             | na             | ---            | ---        | ---           | ---        |
| 324110 | Petroleum refineries                                    | 6,197          | 6,935          | 4,068          | 738            | 2%         | -2,867        | -10%       |
| 325314 | Fertilizer (mixing only) mfg.                           | na             | na             | na             | ---            | ---        | ---           | ---        |
| 327390 | Other concrete product mfg.                             | 644            | 130            | 61             | -514           | -27%       | -69           | -14%       |
| 327420 | Gypsum product manufacturing                            | 269            | 149            | 185            | -120           | -11%       | 36            | 4%         |
| 332996 | Fabricated pipe, pipe fitting mfg.                      | 6              | na             | 35             | ---            | ---        | ---           | ---        |
| 423320 | Brick, stone, and related construction mat. wholesalers | 955            | 539            | 997            | -416           | -11%       | 458           | 13%        |
| 423390 | Other constr. matl. wholesalers                         | 47             | 67             | 277            | 20             | 7%         | 210           | 33%        |
| 424510 | Grain merchant wholesalers                              | 18             | 13             | na             | -5             | -6%        | ---           | ---        |
| 424690 | Oth. chemical, allied prod. whsl                        | 2,108          | 1,911          | 1,885          | -197           | -2%        | -26           | 0%         |
| 444110 | Home centers  | 13,665         | 12,110         | 13,279         | -1,555         | -2%        | 1,169         | 2%         |
| 444190 | Other building material dealers                         | 6,448          | 4,228          | 4,835          | -2,220         | -8%        | 607           | 3%         |
| 541190 | All other legal services                                | 2,075          | 1,014          | 1,940          | -1,061         | -13%       | 926           | 14%        |
| 561499 | All other business support svc.                         | 424            | 1,116          | 1,282          | 692            | 21%        | 166           | 3%         |
| 562111 | Solid Waste Collection                                  | 2699           | 3085           | 3,789          | 692            | 21%        | 166           | 3%         |
| 562119 | Other waste collection                                  | 15             | na             | 40             | ---            | ---        | ---           | ---        |
| 562212 | Waste Mgmt. Landfill                                    | 1,799          | 1,486          | 1,185          | -313           | -4%        | -301          | -4%        |
| 999300 | Local government*                                       | 138,821        | 133,059        | 140,962        | -5,762         | -1%        | 7,903         | 1%         |

Source: ADE, Inc., based on EDD LMID QCEW (<http://www.labormarketinfo.edd.ca.gov/qcew/cew-select.asp>): \*Note: local government excludes local school districts and community colleges, as well as local government health services and districts. ^Notes: "na" employment figures due to EDD LMID data suppression for purposes of confidentiality.

# 5. SOCIOECONOMIC IMPACT ANALYSIS OF PROPOSE NEW REG. 6 AND PROPOSED AMENDMENTS TO REG. 6, RULE 1

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Because proposed new Reg. 6 ("Regulation 6: Common Definitions and Test Methods ") is a foundational regulation that addresses definitions, monitoring requirements, and test methods, no new controls are required and no costs are incurred by affected industries. However, industries subject to proposed amendment 6-1-307 will incur costs. As indicated below, costs incurred by affected industries are less than significant across the board, with the overall cost-to-net profit ratio averaging approximately four percent (Table 6). Revenue, net profit, and cost-to-net profit ratios in the table below are presented in ranges in order to preserve the confidentiality affected sources' data, much of which was obtained for specific firms from InfoUSA. The cost-to-net profit ratio for 21 out of the 25 affected industries is less than 3.0 percent, while the remaining four industries exhibited cost-to-net profit ratios between 3 and 4 percent.

## SMALL BUSINESS DISPROPORTIONATE IMPACT ANALYSIS

The State of California procures goods and services from a wide range of businesses, including small businesses. For purposes of certifying small business, the California Department of General Services defines a small business as a business that meets the following criteria<sup>1</sup>:

- Be independently owned and operated;
- Not dominant in field of operation;
- Principal office located in California;
- Owners (officers, if a corporation) domiciled in California; and,
- Including affiliates, be either,
  - A business with 100 or fewer employees; an average annual gross receipts of \$15 million or less, over the last three tax years;
  - A manufacturer\* with 100 or fewer employees; or,

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<sup>1</sup>California



- A microbusiness. A small business will automatically be designated as a microbusiness, if gross annual receipts are less than \$3,500,000; or the small business is a manufacturer with 25 or fewer employees.

Of the 43 specific firms that will be subject to the requirements of proposed section 6-1-307, 17 meet California's definition of small business. These 17 firms could incur as much as \$55,075 in annual costs as a result of the proposed amendment. This annual cost amounts to 1.2 percent of estimated net profits generated by the affected small businesses. Thus, small businesses are not disproportionately impacted by the proposed section 6-1-307.

**Table 6 - Socioeconomic Impact Analysis: Proposed Amendment 6-1-307**

| NAICS        | Industry  | Affected Sources | Control Facilities | Employment   | Revenues                | Est. Net Profits     | Annual Cost      | Cost to net profits |
|--------------|---|------------------|--------------------|--------------|-------------------------|----------------------|------------------|---------------------|
| <b>Total</b> |   | <b>43</b>        | <b>123</b>         | <b>4,273</b> | <b>\$12,376,653,000</b> | <b>\$490,249,600</b> | <b>\$200,050</b> | <b>4.1%</b>         |
| 212319       | Other Crushed & Broken Stone Mining & Quarrying                     | 1                | 1                  | 15           | \$1.0M - \$4.9M         | \$100.0K - \$499.9K  | \$6,300          | <10%                |
| 236220       | Comm. and Instit. Bldg Const. Contractors                           | 1                | 2                  | 15           | \$5.0M - \$9.9M         | \$100.0K - \$499.9K  | \$3,270          | <10%                |
| 237310       | Highway Street & Bridge Construction                                | 1                | 1                  | 20           | \$10M - \$24.9M         | \$500.0K - \$999.9K  | \$135            | <10%                |
| 238110       | Poured Concrete Foundation & Structure Contractors                  | 2                | 17                 | 64           | \$10M - \$24.9M         | \$500.0K - \$999.9K  | \$29,480         | <10%                |
| 212321       | Construction sand and gravel mining                                 | 1                | 2                  | 12           | \$25M - \$49.9M         | \$1.0M - \$2.49M     | \$7,025          | <10%                |
| 238990       | All Other Specialty Trade Contractors                               | 1                | 1                  | 38           | \$5.0M - \$9.9M         | \$100.0K - \$499.9K  | \$6,300          | <10%                |
| 311119       | Other Animal Food Manufacturing                                     | 3                | 11                 | 284          | \$50.0M - \$20.0B       | \$2.5M - \$249.9M    | \$13,050         | <10%                |
| 324110       | Oil refineries  | 3                | 6                  | 1,673        | \$50.0M - \$20.0B       | \$250.0M - \$500.0M  | \$11,235         | <10%                |
| 424510       | Grain merchant wholesalers Fertilizer (Mixing Only)                 | 1                | 3                  | 120          | \$25M - \$49.9M         | \$500.0K - \$999.9K  | \$4,485          | <10%                |
| 325314       | Manufacturing Other Concrete Product                                | 1                | 1                  | 24           | \$1.0M - \$4.9M         | \$100.0K - \$499.9K  | \$225            | <10%                |
| 327390       | Manufacturing   | 1                | 1                  | 20           | \$1.0M - \$4.9M         | \$100.0K - \$499.9K  | \$225            | <10%                |
| 327420       | Gypsum Product Manufacturing  | 1                | 2                  | 8            | \$1.0M - \$4.9M         | < \$100.0K           | \$3,270          | <10%                |
| 562111       | Solid Waste Collection Fabricated Pipe & Pipe Fitting Manufacturing | 1                | 2                  | 200          | \$50.0M - \$20.0B       | \$2.5M - \$249.9M    | \$3,360          | <10%                |
| 332996       | Brick, Stone/Related Constr Material MERCHANT                       | 1                | 1                  | 160          | \$25M - \$49.9M         | \$1.0M - \$2.49M     | \$525            | <10%                |
| 423320       | Material MERCHANT Whlrs   | 5                | 27                 | 628          | \$50.0M - \$20.0B       | \$2.5M - \$249.9M    | \$41,010         | <10%                |
| 423930       | Recyclable Material Merchant Wholesalers                            | 4                | 6                  | 324          | \$50.0M - \$20.0B       | \$2.5M - \$249.9M    | \$13,670         | <10%                |
| 423990       | Other Miscellaneous Durable Goods Merchant Whlrs                    | 2                | 12                 | 70           | \$25M - \$49.9M         | \$1.0M - \$2.49M     | \$13,440         | <10%                |
| 424690       | Other Chemical & Allied Products Merchant Whlrs                     | 1                | 1                  | 20           | \$25M - \$49.9M         | \$1.0M - \$2.49M     | \$525            | <10%                |
| 444110       | Home Centers  | 1                | 3                  | 32           | \$10M - \$24.9M         | \$500.0K - \$999.9K  | \$3,540          | <10%                |

| NAICS  | Industry  | Affected Sources | Control Facilities | Employment | Revenues          | Est. Net Profits    | Annual Cost | Cost to net profits |
|--------|---|------------------|--------------------|------------|-------------------|---------------------|-------------|---------------------|
| 444190 | Other Building Material Dealers                   | 5                | 11                 | 110        | \$25M - \$49.9M   | \$1.0M - \$2.49M    | \$14,655    | <10%                |
| 541990 | All Other Professional, Scientific/Technical Svcs | 2                | 6                  | 33         | \$5.0M - \$9.9M   | \$100.0K - \$499.9K | \$10,835    | <10%                |
| 561499 | All Other Business Support Services               | 1                | 2                  | 14         | \$1.0M - \$4.9M   | \$100.0K - \$499.9K | \$3,360     | <10%                |
| 562119 | Other Waste Collection                            | 1                | 1                  | 85         | \$10M - \$24.9M   | \$500.0K - \$999.9K | \$225       | <10%                |
| 562212 | Waste Mgmt. Landfill                              | 1                | 2                  | 14         | \$1.0M - \$4.9M   | \$100.0K - \$499.9K | \$3,405     | <10%                |
| 999300 | Local government                                  | 1                | 1                  | 290        | \$50.0M - \$20.0B | < \$100.0K          | \$6,500     | <10%                |

Source: ADE, Inc. based on BAAQMD (affected sources, facilities and controls), InfoUSA (company employment and revenues), US Economic Census 2012 (to estimate revenues in instances when information was not available from InfoUSA), and US IRS SOI (used to estimate industry after-tax net profits).