Final
Dust Management Plan
Schlage Lock Facility
San Francisco, California

Prepared for

Universal Paragon Corporation
150 Executive Park Boulevard
Suite 4200
San Francisco, CA 94134

Recycled Material Company, Inc.
PO Box 1045
Arvada, CA 80001-1045

MACTEC Project No. 4096088539.01

Jeff Werter, PG, CEG
Senior Principal Engineering Geologist

John Balbeck, CPESC, CPSWQ
Senior Environmental Scientist

December 23, 2008

MACTEC Engineering and Consulting, Inc.
5341 Old Redwood Highway, Suite 300
Petaluma, CA 94954 - (707) 793-3600
Final
Dust Management Plan
Schlage Lock Facility
San Francisco, California

Prepared for

Universal Paragon Corporation
150 Executive Park Boulevard
Suite 4200
San Francisco, CA 94134

Recycled Material Company, Inc.
PO Box 1045
Arvada, CA 80001-1045

MACTEC Project No. 4096088539.01

Jeff Werter, PG, CEG
Senior Principal Engineering Geologist

John Balobeck, CPESC, CPSWQ
Senior Environmental Scientist

December 23, 2008
Final
Dust Management Plan
Schlage Lock Facility
San Francisco, California

MACTEC Project No. 409608859.01

This document was prepared by MACTEC Engineering and Consulting, Inc. (MACTEC) at the direction of Recycled Material Company, Inc (RMCI), Universal Paragon Corporation (UPC) and BP PLT1, LLC (BP) for the sole use of RMCI, UPC and BP. No other party should rely on the information contained herein without prior written consent of RMCI, UPC and BP, the only intended beneficiaries of this work. This report and the interpretations, conclusions, and recommendations contained within are based in part on information presented in other documents that are cited in the text and listed in the references. Therefore, this report is subject to the limitations and qualifications presented in the referenced documents.
CONTENTS

SITE CONTACT PERSONNEL................................................................................................................. iv

1.0 INTRODUCTION ................................................................................................................................1-1
  1.1 Document Objective ........................................................................................................1-1
  1.2 Regulatory Basis ..............................................................................................................1-1

2.0 BACKGROUND ..........................................................................................................................2-1
  2.1 Site Description ............................................................................................................... .2-1
  2.2 Site History ......................................................................................................................2-1
  2.3 Phase I Scope of Work .....................................................................................................2-2
  2.4 No Visible Dust Goal .......................................................................................................2-3

3.0 POTENTIAL SOURCES OF FUGITIVE DUST.........................................................................3-1

4.0 GENERAL CONSTRUCTION FUGITIVE DUST CONTROL METHODS .............................4-1
  4.1 Construction Traffic .........................................................................................................4-1
    4.1.1 Trackout Prevention ............................................................................................4-1
    4.1.2 Traffic Control ....................................................................................................4-1
    4.1.3 Off-site Transport ...............................................................................................4-2
  4.2 Site Preparation and Grading ...........................................................................................4-3
  4.3 Crushing ....................................................................................................................... ....4-4
  4.4 Material Stockpiles ..........................................................................................................4-4
  4.5 Post-Construction Stabilization of Disturbed Areas ........................................................4-4

5.0 MONITORING AND RECORDS................................................................................................5-1
  5.1 General ........................................................................................................................ .....5-1
  5.2 Visible Dust during Site Activities ..................................................................................5-1
    5.2.1 Visible Dust Crossing the Property Boundary ....................................................5-1
    5.2.2 Onsite Visible Dust .............................................................................................5-2
  5.3 Windblown Visible Dust during Inactive Periods ...........................................................5-2
  5.4 Dust Monitoring ...............................................................................................................5-2
    5.4.1 Air Monitoring: ...................................................................................................5-3
    5.4.2 Sampling Frequency Options ..............................................................................5-3
    5.4.3 Monitoring Equipment ........................................................................................5-3
  5.5 Recordkeeping and Reporting..........................................................................................5-4

APPENDIXES

A Regulatory Documentation: BAAQMD Regulation 6, Particulate Matter and Visible Emissions;
Demolition Regulation 11, Rule 2 Notification Form; Ordinance Number 176-08 and Article 22B
B Site Maps
SITE CONTACT PERSONNEL

Property Owner:

Universal Paragon Corporation
150 Executive Park Boulevard
Suite 4200
San Francisco, CA 94134

Contact Name: ____________________________________________________________________

Contact Phone Number: ___________________________________________________________

Demolition Contractor

Recycled Material Company, Inc.
PO Box 1045
Arvada, CA 80001-1045

Contact Name: ____________________________________________________________________

Contact Phone Number: ___________________________________________________________


1.0 INTRODUCTION

1.1 Document Objective

This plan is being prepared for Universal Paragon Corporation (UPC) and Recycled Materials Company, Inc. (RMCI) as part of the planning process for upcoming demolition activities at the former Schlage Lock manufacturing facility in San Francisco, California.

This Dust Control Plan has been prepared by MACTEC Engineering and Consulting, Inc. (MACTEC) in accordance with the requirements of the permit process established in certain Bay Area Air Quality Management District (BAAQMD) regulations often applicable to redevelopment activities, as further described herein. This plan addresses dust control measures that will be implemented during demolition at the site.

This plan only applies to demolition of existing structures and dust control associated with soil disturbance or excavation on the San Francisco County portions of the site. The plan was prepared under the supervision of a professional engineer registered in the State of California.

1.2 Regulatory Basis

Dust control is one of the specific mitigation measures applicable to demolition activities. This plan specifically identifies the steps that will be taken to reduce particulate matter smaller than 10 microns (PM10) emissions during demolition of existing structures and site infrastructure. This plan also includes the monitoring and reporting requirements.

This Dust Control Plan incorporates requirements of the following applicable regulations:

- BAAQMD Regulation 6, Particulate Matter and Visible Emissions
- BAAQMD Demolition Regulation 11, Rule 2
- City and County of San Francisco Ordinance Number 176-08
- City of San Francisco Health Code, Article 22B: Construction Dust Control Requirements

Best management practices (BMPs) are required to be implemented throughout the project. These may include wetting and seeding unpaved or inactive areas, minimizing activity during periods of high wind,
sweeping paved areas, covering trucks, etc. Additionally, BAAQMD Regulation 6, which generally prohibits emission of visible dust beyond the property boundary, is also applicable. Once the buildings are abated of asbestos, submittal of a BAAQMD Regulation 11, Rule 2 Notification is required. RMCI will be responsible for submitting the documentation and fees for this notification prior to the start of demolition activities. A blank copy of this document is located in Appendix A.

Serpentine rock has the potential to have naturally occurring asbestos. This project does not reside on serpentine rock. Therefore, CCR Title 17, Section 93105 (ATCM) does not apply.
2.0 BACKGROUND

2.1 Site Description

The approximately 54-acre site is located at 2401-2555 Bayshore Boulevard. 12.5 acres on the north side of the project reside in San Francisco County, and the remaining 41.5 acres on the south portion reside in San Mateo County. The entire west and north side of the project is bordered by Bayshore Boulevard. Geneva Avenue borders the south, and the Union Pacific/Joint Powers Board railroad tracks are located adjacent to the eastern property line. The surface elevation of the site ranges from approximately 50 feet above mean sea level (AMSL) in the north to approximately 10 feet AMSL in the south.

The former Schlage Lock manufacturing facility consists of several former lock manufacturing buildings on the northern portion of the site. These buildings are now vacant and scheduled for demolition to begin in the winter of 2008/2009. 41.5 acres in the southern portion of the site are currently vacant fields with no structures. The entire site is scheduled to be redeveloped for mixed uses including residential, commercial, and open space. Additionally, a car wash and statue manufacturing facility reside adjacent to the property along Bayshore at Sunnydale Ave. These facilities are not associated with the project. Site maps are located in Appendix B.

The project is divided into 3 phases:

1. Demolition of existing structures
2. Remediation
3. Mass grading and re-development

A Remedial Action Plan (RAP) for the remediation phase is currently being developed for the remediation activities that will take place on site. Appropriate BMP measures will be developed based on the specific RAP approved by the Department of Toxic Substances Control (DTSC). Therefore, the Dust Management Plan as of this date only covers the demolition phase of the project. This Dust Management Plan will be amended prior to the remediation phase as approved plans become available.

2.2 Site History

The Schlage Lock Company manufactured door hardware and lock parts on the Schlage Lock portion of the Site from 1926 to 1999. Ingersoll-Rand acquired the company in 1974. The manufacturing processes
conducted at the plant included stamping and machining metal alloys; deburring brass, bronze, nickel, silver and steel parts; electroplating; and cleaning brass and bronze parts with Safety Kleen 150, a petroleum naphtha solvent. The plant ceased operation in December 1999.

In 1980, Pacific Lithograph Company acquired Plant 3. Pacific Lithograph used solvent products in lithographic processing until 1993. In 1995, Touch-Plate International, a Schlage subsidiary, acquired the Plant 3 and 3X Buildings from Pacific Lithograph. The Schlage Lock Company ceased all manufacturing at the Site in 1999 and removed all of its equipment (except for several underground storage tanks [USTs] that were closed in place).

UPC acquired the Schlage Lock property from Ingersoll-Rand in May 2008 as part of litigation settlement. Buildings remain on the Site, but are unoccupied.

A portion of the site was acquired by Southern Pacific Transportation Company (SPTC) in 1896. SPTC operated the former Brisbane Rail Yard from 1914 through 1960. The property was used for major railcar rehabilitation, locomotive maintenance operations, and material transfer operations. Tuntex USA, Inc. was granted title to the SPTC property in December 1989 for the San Mateo parcels, and in August 1990 for the San Francisco parcels. Tuntex USA, Inc. changed its corporation name to Universal Paragon Corporation, Inc. (UPC) effective January 1, 1997. UPC holds title to the San Francisco portions of the property. Title to the San Mateo County portions of the property is held by Sunquest Properties, Inc., a wholly owned subsidiary of UPC. No manufacturing operations or other activities (except for groundwater extraction, soil vapor extraction, and monitoring) have occurred on the property since it was acquired.

Currently, the site is owned by UPC under BP. RMCI is the demolition contractor under contract to BP.

2.3 Phase I Scope of Work

Activities described herein will only occur in San Francisco County. All existing buildings on site are scheduled to be demolished and all material removed from the site in early 2009, except for the office building located on the north end of the site which is considered to be a historical structure. Demolition activities are expected to be complete by the end of summer 2009.

Buildings scheduled for demolition are listed as follows:
Schlage Lock Plant 1, Schlage Lock Plant 1X, Schlage Office Building, Schlage Lock Plant 2, Schlage Lock Plant 2X, Schlage Lock Plant 3, and Schlage Lock Plant 3X.

2.4 **No Visible Dust Goal**

The dust control measures set forth in this plan are intended to achieve a goal of no visible dust emissions associated with soil disturbance or excavation, to the extent required by BAAQMD Regulation 6.
3.0 POTENTIAL SOURCES OF FUGITIVE DUST

Planned site activities have the potential to generate emissions in the form of fugitive dust and vehicle emissions. Possible sources of emissions include:

- Demolition Activities – Wrecking, intentional burning, moving or dismantling of any load-supporting structural member, or portion of a building. Any related cutting, disjointing, stripping or removal of structural elements. Crushing of concrete for recycling/reuse.

- Construction Traffic – Movement of construction equipment around the construction area is capable of creating construction fugitive dust in excavated or cleared areas. There is also the potential for vehicular traffic on paved or unpaved roads and parking lots to produce construction emissions.

- Site Preparation and Foundation Work – Grading, excavation of footings and foundations, and backfilling operations can produce fugitive dust.

- Material Stockpiles – Stockpiles of excavated soil from trenching activities may contribute to windborne dust emissions.

- Cleanup and Grading – Backfilling, grading and revegetating of the excavated areas may produce fugitive dust.
4.0 GENERAL CONSTRUCTION FUGITIVE DUST CONTROL METHODS

Control methods for fugitive dust generated from construction activities are described in the following sections:

4.1 Construction Traffic

4.1.1 Trackout Prevention

Track-out of loose materials will be controlled using gravel pads installed at the access point from the project site at Bayshore Boulevard and Sunnydale Avenue to prevent tracking of mud on to public roadways. The stabilized construction entrance (gravel pads) will be installed according to the specifications provided in the Erosion and Sediment Control Plan of the Storm Water Pollution Prevention Plan (SWPPP) for the site. All vehicle tires will also be inspected and cleaned as necessary to prevent trackout (at gravel ramps of at least 50 feet long) prior to entering the paved roadways. Any visible track-out on a paved public road at any location where vehicles exit the work site must be removed. Removal must be done using brooms, wet sweeping, a high-efficiency particulate air (HEPA) filter-equipped vacuum device or a combination of these BMPS at the end of the workday, or at least one time per day, and as applicable.

4.1.2 Traffic Control

Fugitive dust emissions from construction traffic traveling on unpaved surfaces will be controlled with the following mitigation measures:

1. All unpaved roads in the project construction site will be watered every two hours or frequently enough to maintain adequate wetness. The frequency of watering can be reduced or eliminated during periods of precipitation. Watering frequency may be increased during above average ambient air temperatures or wind speeds.

2. Visible speed limit signs will be posted at the construction site entrances. No vehicle will exceed 10 miles per hour (mph) (16 kilometers per hour [km/h]) within the construction site.

3. Implementation of erosion control measures identified in the Construction SWPPP, to be provided separately, will control fugitive dust emissions from public roadways and parking areas.

4. Gravel access pads will be constructed in the temporary stockpile locations. Four to six inches of appropriate gravel will be spread evenly to construct the pads. Additional gravel will be added periodically to maintain effectiveness.
The following mitigation measures will be followed for fugitive dust emissions from construction traffic traveling on paved surfaces:

1. All construction vehicles will exit the construction site through gravel pads that will be located at the entrance roadways. Additional gravel pads will be installed at all access points to prevent tracking of mud on to public roadways should they be applicable.

2. Construction areas adjacent to and above grade from any paved roadway will be treated with BMPs, as specified in the Construction SWPPP.

3. Any visible track-out on a paved public road at any location where vehicles exit the work site must be removed. Removal must be done using brooms, wet sweeping, a high-efficiency particulate air (HEPA) filter-equipped vacuum device or a combination of these BMPs, at the end of the workday or at least one time per day and as applicable.

4. All paved roads within the construction site will be swept twice daily with a wet sweeper.

5. At least the first 500 feet of any public roadway exiting from the construction site will be swept twice daily. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.)

If any of the above mitigation measures fail to properly control fugitive dust emissions, one or more of the following reasonably available control measures, will be applied:

1. Physical or chemical stabilization will be applied to control dust on unpaved roads if necessary.

2. Paved portions of the construction site will be swept more frequently as necessary to control windblown dust and dust generated by vehicle traffic. Streets adjacent to the construction site will be swept as necessary to remove accumulated dust and soil. Water may also be applied to the paved roads if necessary.

3. Gravel, re-crushed/recycled asphalt or other material of low silt content (<5 percent) will be applied to a depth of 3 or more inches, if necessary.

4. Vehicle trips will be reduced if necessary.

5. Construction employees will park in the laydown areas, which will be paved or graveled to reduce fugitive dust emissions.

4.1.3 Off-site Transport

All vehicles that are used to transport solid bulk material and that have the potential to cause visible emissions will be provided with a tarp cover, or the materials will be sufficiently wetted and loaded onto the trucks in a manner to provide at least 1 foot of freeboard. Trucks carrying loose soil or sand will be
covered before they leave the construction site, and on-site vehicle speeds will be limited to 10 mph (16 km/h) or lower in construction areas.

Vehicles will be checked to ensure that they are tarped and to remove any excess material on the shelf or exterior surfaces of the cargo compartment. All off-site haul trucks will access the sites via paved access roads and established gravel pads. Site personnel will be stationed at the access point to monitor inflow/outflow to and from the site if necessary. They will be responsible for inspecting all vehicles exiting and performing the cleaning of the tires.

4.2 Site Preparation and Grading

Fugitive dust emissions from site preparation and foundation work will be controlled using the following methods:

1. If grading will not take place immediately following the demolition, the surface soil will be stabilized with dust palliative and water to form a crust on the soil surface.

2. Prior to completion of grading, water will be applied to any disturbed areas as needed to prevent visible emissions.

3. Graded areas will be stabilized with chemical stabilizers within 14 working days of grading completion. Seed and water all unpaved, inactive portions of the lot or lots under construction to maintain a grass cover if they are to remain inactive for long periods during building construction. Refer to the construction SWPPP for stabilization details.

4. Halt all demolition, grading, earthmoving, and excavating activities during periods of sustained strong winds (hourly average wind speeds of 25 mph (40 kilometers per hour [km/h] or greater).

5. Limit the area subject to excavation, grading or other construction activity at any one time. Cover on-site storage piles of loose soil or sand as applicable.

6. For inactive disturbed surfaces, the following dust control methods will be used:

   • A dust palliative will be applied in sufficient quantity to form a crust and create a stabilized surface.
   
   • Backfill material will be covered or enclosed when not actively handling.
   
   • Inactive stockpiles (no disturbance of stockpile for more than 14 days) will be thoroughly wetted, tarped, and secured as necessary to contain fugitive dust.
4.3  **Crushing**

It is anticipated that a concrete crusher will be mobilized to the site to crush and recycle concrete debris resulting from building and roadway demolition. Crushing operations will be visually monitored for the appearance of fugitive dust. If dust is being generated, water will be applied to control the dust.

4.4  **Material Stockpiles**

Fugitive dust emissions from soil storage piles will be controlled by using a temporary cover, water, or a dust palliative.

1. Sprinklers, wobblers, water trucks, or water pulls will be used to pre-water during cut and fill activities to allow time for penetration.

2. Wind erosion control techniques, such as windbreaks, water/chemical dust suppressants, and vegetation, will be used on all construction areas that may be disturbed. Any windbreaks used will remain in place until the soil is stabilized or permanently covered with vegetation.

3. For backfilling during earthmoving operations, backfill material will be watered as needed to maintain moisture. If required, backfill soil will be mixed with water prior to moving. Loader buckets will be emptied slowly and drop height from loader bucket minimized. Once backfill material is in place, water will be applied immediately to form a crust, if necessary. A water truck or large hose will be dedicated to backfilling equipment and operations.

4.5  **Post-Construction Stabilization of Disturbed Areas**

Unpaved areas disturbed during excavation, grading, and/or construction activities will be covered with one of the following to reduce dust generation on the site:

- Temporary cover
- Hard surface paving

Refer to the Construction SWPPP for stabilization details.
5.0 MONITORING AND RECORDS

5.1 General

A publicly visible sign with the telephone number to contact regarding dust, noise, or odor complaints will be posted prior to starting construction and maintained during construction. The contractor will respond and take corrective action as soon as it is feasible.

Monitoring to ensure compliance with the provisions of this plan will be performed by a third party observer. Control of visible dust will be the primary responsibility of the contractor working at the site. Universal Paragon Corporation (UPC) or a designee of UPC, will provide quality assurance monitoring and will have the authority to direct the contractor to implement the measures outlined below if visible dust is observed.

5.2 Visible Dust during Site Activities

The goal of this plan is no visible dust. While all parties understand that soil disturbance and excavation activities, by their nature, will produce dust, site controls will be used to mitigate visible dust as it is generated in an effort to achieve the no visible dust goal. This section establishes the steps that must be taken toward achieving the goal of no visible dust from soil disturbance or excavation in terms of the amount of time permitted to address visible dust plumes. The criteria in this section apply to an active work site when equipment and personnel are driving on the site and performing work activities. The “initial observation” starts the clock for the required response measures described below. The “initial observation” is the time any of the following personnel observe visible dust: (a) workers who are disturbing soils or excavating for the permitted activity or (b) and RMCI representative, supervisor, contractor, subcontractor or consultant with responsibility for monitoring the permitted activity.

5.2.1 Visible Dust Crossing the Property Boundary

In the event visual dust from soil disturbance or excavation is observed crossing the property boundary, the following procedures will be followed to ensure adequate mitigation measures are in place to address the dust:

1. The specific source of the emissions will be immediately shut down and a more aggressive application of the existing mitigation measures described in Section 4.0 will be directed.

2. Once the mitigation measures have been applied, the source of emissions will resume and observations will be conducted to verify threat the mitigations measures were successful.
5.2.2 Onsite Visible Dust

In the event visual dust from soil disturbance or excavation is observed onsite, but does not cross the property boundary, the following procedures will be followed to ensure adequate mitigation measures are in place to address the dust:

1. A more aggressive application of the existing mitigation measures described in Section 4.0 or additional measures of dust suppression will be directed to the specific source of emissions within 60 minutes the initial observation.

2. If despite these more aggressive and/or additional methods the visible dust emissions continue for 90 minutes from the time of the initial observation, the specific source of the emissions will be temporarily shut down until the implemented dust control mitigations is effective or, due to changed conditions, or no longer necessary.

5.3 Windblown Visible Dust during Inactive Periods

The standards in this section apply on weekends and holidays or any other times when no equipment and personnel are performing work activities on site. In the event of observations on windblown visible dust plumes from soils originating on the project site, mitigation measures described in Section 4.0 will be directed within less than 4 hours of making the observation. Mitigation measures will be implemented until the visible dust plumes originating from the project site are minimized or eliminated. Any observations of visible dust originating from the project site during inactive periods will be reported to the on-site Construction Manager. During active periods, a Site representative will verify proper installation and effectiveness of the dust management BMPs at the end of each day.

5.4 Dust Monitoring

BMPs will be deployed to minimize the generation of fugitive dust. Real time dust monitoring will be conducted as outlined in the dust monitoring program, as described below. Prevailing wind on the site is from the west or southwest towards the east or northeast. Monitoring locations will initially be established based on these prevailing winds but will be checked daily and adjusted if necessary to maintain the upwind and downwind locations. Monitoring will be conducted at the project boundary both up and downwind of the work zone. Real-time particulate dust monitors (DataRAM PDM-1000 or equivalent) will be placed in three locations at the site, one upwind and two downwind.

Real time dust monitoring will be conducted to ensure absence of PM10 concentrations above nuisance levels at the site boundaries. With the deployment of BMPs as described above, PM10 concentrations will be maintained below nuisance levels.
5.4.1 Air Monitoring:

The Air Monitoring Program will include the following elements:

- Samples will be collected as close to the center of the dust-generating activity as possible.
- If portable monitor reading approaches 250.0 micrograms per cubic meter (ug/m3), then the portable monitor will be moved toward the downwind site boundary and continue monitoring.
- If visible dust plumes are observed, additional dust suppression measures will be implemented.

5.4.2 Sampling Frequency Options

Sampling Frequency options are as shown below:

<table>
<thead>
<tr>
<th>Sampling Option Frequency</th>
<th>Duration</th>
<th>Method</th>
<th>Readings</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. First two days of a new dust-generating activity plus every day during a new activity</td>
<td>One sample per hour for 10-15 minutes</td>
<td>Walk site with portable monitor</td>
<td>&lt;250 ug/m3&lt;br&gt; &gt;250 ug/m3</td>
<td>Sample one day per week for remainder of dust activity; if exceedance occurs, then sample daily or until two consecutive days do not exceed limit.</td>
</tr>
<tr>
<td>2. Sample continuously during any dust-generating activity</td>
<td>Continuously</td>
<td>Dust monitor is set up in one location at a height of 5 feet. Check monitor 4 times per day</td>
<td>&lt;250 ug/m3&lt;br&gt; &gt;250 ug/m3</td>
<td>Continue monitoring. Implement/improve dust control measures.</td>
</tr>
</tbody>
</table>

5.4.3 Monitoring Equipment

Monitoring will be performed for PM10 using a portable real time dust monitor, such as a DataRAM (or equivalent). The monitoring devices will have a minimum detection limit of 100.0 ug/m3 and a minimum accuracy of 1.0 ug/m3. Calibration of the monitor will be based on the manufacturer’s specifications.
5.5 Recordkeeping and Reporting

Dust monitors will be equipped with data loggers. Dust monitoring data of this Dust Management Plan will be retained separately. All recorded data is to be kept for a minimum of three years after completion of the project.
APPENDIX A

REGULATORY DOCUMENTATION: BAAQMD REGULATION 6, PARTICULATE MATTER AND VISIBLE EMISSIONS; DEMOLITION REGULATION 11, RULE 2 NOTIFICATION FORM; ORDINANCE NUMBER 176-08 and ARTICLE 22B
REGULATION 6
PARTICULATE MATTER
RULE 1
GENERAL REQUIREMENTS

INDEX

6-1-100 GENERAL
  6-1-101 Description
  6-1-110 Exemption, Temporary Sandblasting Operations
  6-1-111 Exemption, Open Outdoor Fires

6-1-200 DEFINITIONS
  6-1-201 Exhaust Gas Volume
  6-1-202 Particulate Matter
  6-1-203 Process Weight
  6-1-204 Process Weight Rate

6-1-300 STANDARDS
  6-1-301 Ringelmann No. 1 Limitation
  6-1-302 Opacity Limitation
  6-1-303 Ringelmann No. 2 Limitation
  6-1-304 Tube Cleaning
  6-1-305 Visible Particles
  6-1-306 Diesel Pile Driving Hammers
  6-1-310 Particulate Weight Limitation
  6-1-311 General Operations
  6-1-320 Sulfuric Acid Manufacturing Plants
  6-1-330 Sulfur Recovery Units

6-1-400 ADMINISTRATIVE REQUIREMENTS
  6-1-401 Appearance of Emissions

6-1-500 MONITORING AND RECORDS
  6-1-501 Sampling Facilities and Instruments Required
  6-1-502 Data, Records and Reporting
  6-1-503 Records

6-1-600 MANUAL OF PROCEDURES
  6-1-601 Particulate Matter, Sampling, Sampling Facilities, Opacity Instruments and Appraisal of Visible Emissions
REGULATION 6
PARTICULATE MATTER
RULE 1
GENERAL REQUIREMENTS
(Renumbered and Renamed December 5, 2007)

6-1-100 GENERAL

6-1-101 Description: The purpose of this Regulation is to limit the quantity of particulate matter in the atmosphere through the establishment of limitations on emission rates, concentration, visible emissions and opacity.

6-1-110 Exemption, Temporary Sandblasting Operations: Temporary Sandblasting operations are exempt from the provisions of this Rule. Such operations are subject to the provisions of Regulation 12, Rule 4. *(Adopted July 11, 1990)*

6-1-111 Exemption, Open Outdoor Fires: The limitations of this rule shall not apply to emissions arising from open outdoor fires. *(Adopted December 19, 1990)*

6-1-200 DEFINITIONS

6-1-201 Exhaust Gas Volume: The volume of gases discharged from an operation; or an emission point.

6-1-202 Particulate Matter: Any material which is emitted as liquid or solid particles, or gaseous material which becomes liquid or solid particles at the testing temperatures specified in the Manual of Procedures, excluding uncombined water.

6-1-203 Process Weight: The total weight of all material introduced into an operation, excluding liquids and gases used solely as fuels, air which is not consumed as a reactant, and combustion air.

6-1-204 Process Weight Rate: A rate established as follows:

204.1 For continuous or long-run steady-state operations, the total process weight for the entire period of continuous operation or for a typical portion thereof, divided by the number of hours of such period or portions thereof.

204.2 For cyclical or batch operations, the total process weight for a period which covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such period. Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of this section, that interpretation which results in the minimum value for allowable emission shall apply.

6-1-300 STANDARDS

6-1-301 Ringelmann No. 1 Limitation: Except as provided in Sections 6-1-303, 6-1-304 and 6-1-306, a person shall not emit from any source for a period or periods aggregating more than three minutes in any hour, a visible emission which is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree. *(Amended July 11, 1990)*

6-1-302 Opacity Limitation: Except as provided in Sections 6-1-303, 6-1-304 and 6-1-306, a person shall not emit from any source for a period or periods aggregating more than three minutes in a any hour an emission equal to or greater than 20% opacity as perceived by an opacity sensing device, where such device is required by District regulations. *(Amended July 11, 1990)*

6-1-303 Ringelmann No. 2 Limitation: A person shall not emit for a period or periods aggregating more than three minutes in any hour, a visible emission which is as dark or darker than No. 2 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree, nor shall said emission, as
perceived by an opacity sensing device in good working order, where such device is required by District regulations, be equal to a greater than 40% opacity, from the following sources:

303.1 Internal combustion engines of less than 25 liters (1500 in³) displacement, or any engine used solely as a standby source of motive power;
303.2 Laboratory equipment used exclusively for chemical or physical analyses or experimentation;
303.3 Portable brazing, soldering or welding equipment;
303.4 Deleted July 11, 1990.

(Amended 1/5/83; 7/11/90)

6-1-304 Tube Cleaning: During tube cleaning, and except for three minutes in any one hour, a person shall not emit from any heat transfer operation using fuel at a rate of not less than 148 GJ (140 million BTU) per hour, a visible emission as dark or darker than No. 2 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree, or equal to or greater than 40% opacity as perceived by an opacity sensing device in good working order. The aggregate duration of such emissions in any 24 hour period shall not exceed 6.0 minutes per 1055 GJ (one billion BTU) gross heating value of fuel burned during such 24 hour period.

6-1-305 Visible Particles: A person shall not emit particles from any operation in sufficient number to cause annoyance to any other person, which particles are large enough to be visible as individual particles at the emission point or of such size and nature as to be visible individually as incandescent particles. This Section 6-1-305 shall only apply if such particles fall on real property other than that of the person responsible for the emission.

6-1-306 Diesel Piledriving Hammers: Piledriving hammers powered by diesel fuel shall comply with one of the following standards:

306.1 A person shall not emit from any diesel piledriving hammer for a period or periods aggregating more than four minutes during the driving of a single pile, a visible emission which is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree.

306.2 A person shall not emit from any diesel piledriving hammer for a period or periods aggregating more than four minutes during the driving of a single pile, a visible emission which is as dark or darker than No. 2 on the Ringelmann Chart or of such opacity as to obscure an observer's view to an equivalent or greater degree provided that the operator utilizes kerosene, smoke suppressing fuel additives and synthetic lubricating oil, and the requirements of Section 6-1-503 are satisfied.

(Adopted July 11, 1990)

6-1-310 Particulate Weight Limitation: A person shall not emit from any source particulate matter in excess of 343 mg per dscm (0.15 gr. per dsfc) of exhaust gas volume.

310.1 Incineration or Salvage Operations. For the purposes of 6-1-310, the actual measured concentration of particulate matter in the exhaust gas from any incineration operation or salvage operation shall be corrected to the concentration which the same quantity of particulate matter would constitute in the exhaust gas minus water vapor corrected to standard conditions, containing 12% CO₂ by volume, and as if no auxiliary fuel had been used.

310.2 Gas-fired Pathological Waste Incinerators. The particulate emissions from gas-fired pathological waste incinerators, where emissions are not mingled with emissions from incineration of general wastes, shall be corrected as specified in Section 6-1-310.1 except that correction for auxiliary fuel shall not be required.

310.3 Heat Transfer Operation. For the purposes of 6-1-310, the actual measured concentration of particulate matter in the exhaust from any heat transfer operation shall be corrected to the concentration which the same quantity of particulate matter would constitute in the exhaust gas minus water vapor, corrected to standard conditions, containing 6% oxygen by volume.
6-1-311 General Operations: In addition to the limitation of Section 6-1-310, a person shall not discharge into the atmosphere from any general operation particulate matter from any emission point, at a rate in excess of that specified in Table 1 for the process weight rate indicated. This section shall not apply to fuel-fired indirect heat exchangers.

### TABLE 1
ALLOWABLE RATE OF EMISSIONS BASED ON PROCESS WEIGHT RATE

<table>
<thead>
<tr>
<th>Process wt rate = P</th>
<th>Emission = E</th>
</tr>
</thead>
<tbody>
<tr>
<td>kg/hour</td>
<td>lbs/hour</td>
</tr>
<tr>
<td>250</td>
<td>550</td>
</tr>
<tr>
<td></td>
<td>0.8</td>
</tr>
<tr>
<td>300</td>
<td>660</td>
</tr>
<tr>
<td></td>
<td>0.9</td>
</tr>
<tr>
<td>400</td>
<td>880</td>
</tr>
<tr>
<td></td>
<td>1.1</td>
</tr>
<tr>
<td>500</td>
<td>1100</td>
</tr>
<tr>
<td></td>
<td>1.3</td>
</tr>
<tr>
<td>1000</td>
<td>2205</td>
</tr>
<tr>
<td></td>
<td>2.1</td>
</tr>
<tr>
<td>2000</td>
<td>4410</td>
</tr>
<tr>
<td></td>
<td>3.3</td>
</tr>
<tr>
<td>3000</td>
<td>6615</td>
</tr>
<tr>
<td></td>
<td>4.3</td>
</tr>
<tr>
<td>4000</td>
<td>8820</td>
</tr>
<tr>
<td></td>
<td>5.2</td>
</tr>
<tr>
<td>5000</td>
<td>11020</td>
</tr>
<tr>
<td></td>
<td>6.0</td>
</tr>
<tr>
<td>10000</td>
<td>22045</td>
</tr>
<tr>
<td></td>
<td>9.6</td>
</tr>
<tr>
<td>20000</td>
<td>44090</td>
</tr>
<tr>
<td></td>
<td>15.2</td>
</tr>
<tr>
<td>over 26000</td>
<td>57320</td>
</tr>
<tr>
<td></td>
<td>18.1</td>
</tr>
</tbody>
</table>

(Interpolation formula deleted May 21, 1980. See page 6-1-5 for formulae.)

Interpolation in kg/hr

\[
E = 0.02 P^{0.67} \text{ in kg/hr}
\]

The interpolation of the data in this Table shall be accomplished by the use of the equation \( E = 0.02P^{0.67} \), where \( E \) = rate of emission in kg/hour, not to exceed 18.1 kg/hour and \( P \) = process weight rate in kg/hour.

Interpolation in lbs/hr

\[
E = 4.10 P^{0.67} \text{ in lbs/hr}
\]

6-1-320 Sulfuric Acid Manufacturing Plants: A person shall not emit from any operation manufacturing sulfuric acid using as a principal raw material any sulfur-containing material, any emission having a concentration of \( \text{SO}_3 \) or \( \text{H}_2\text{SO}_4 \), or both, expressed as 100% \( \text{H}_2\text{SO}_4 \), exceeding 92 mg per dscm (0.04 gr/dscf) of exhaust gas volume.

6-1-330 Sulfur Recovery Units: A person shall not emit from any operation manufacturing sulfur, using as a principal raw material any sulfur-containing material, any emission having a concentration of \( \text{SO}_3 \) or \( \text{H}_2\text{SO}_4 \), or both, expressed as 100% \( \text{H}_2\text{SO}_4 \), exceeding 183 mg per dscm (0.08 gr/dscf) of exhaust gas volume.

6-1-400 ADMINISTRATIVE REQUIREMENTS

6-1-401 Appearance of Emissions: Every person responsible for an emission (except from gas fired heat transfer operations regulated by Sections 6-1-301, 6-1-303 and 6-1-304) shall have and maintain means whereby the operator of the plant shall be able to know the appearance of the emission at all times.

6-1-500 MONITORING AND RECORDS

6-1-501 Sampling Facilities and Instruments Required: Persons subject to this regulation shall provide sampling facilities and install instruments as required pursuant to the provisions of Sections 1-501, 1-520 and 1-521 of Regulation 1.

6-1-502 Data, Records and Reporting: Persons monitoring emissions in accordance with the requirements of Sections 1-520 and 1-521 of Regulation 1 shall keep records, report emission excesses and provide summaries of data collected as required by Regulation 1.

6-1-503 Records: A person responsible for the operation of a diesel pile-driving hammer who chooses to comply with subsection 6-1-306.2 shall maintain and have available
for inspection records which establish the use of kerosene, smoke suppressing fuel additives and synthetic lubricating oil.

(Adopted July 11, 1990)

6-1-600 MANUAL OF PROCEDURES

6-1-601 Particulate Matter, Sampling, Sampling Facilities, Opacity Instruments and Appraisal of Visible Emissions: The MOP contains the testing temperature for the determination of the presence of particulate matter, procedures relating to the siting of sampling facilities, source test procedures, opacity instrument specifications, calibration and maintenance requirements, and the procedure for appraising visible emissions.
## Site of Demolition

<table>
<thead>
<tr>
<th>Site Address:</th>
<th>Cross Street:</th>
</tr>
</thead>
<tbody>
<tr>
<td>City:</td>
<td>Zip: 63463</td>
</tr>
<tr>
<td>Owner/Operator</td>
<td>Phone (   )</td>
</tr>
</tbody>
</table>

### Specific Location of Project within Building/Address:

- [ ] Single Family Dwelling
- [ ] Commercial
- [ ] Multifamily Dwelling
- [ ] Govt Bldg
- [ ] School

## Contractor/ Individual Performing Demolition

<table>
<thead>
<tr>
<th>Name: Company/Individual</th>
<th>Contact:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mailing Address:</td>
<td></td>
</tr>
<tr>
<td>City:</td>
<td>Zip:</td>
</tr>
<tr>
<td>Phone: (   )</td>
<td></td>
</tr>
</tbody>
</table>

### Have you previously submitted notifications for other sites?

- [ ] Yes
- [ ] No

## Description of Demolition

### Is this Demolition by Fire for Fire Training purposes?

- [ ] yes
- [ ] No

### Is this Demolition ordered by a Government Agency?

- [ ] yes
- [ ] No

**(Emergency only – attach copy of order)**

### If not Demolition for Fire Training, check applicable method:

- [ ] Heavy Equipment
- [ ] Implosion
- [ ] By Hand
- [ ] Other

### Dates of Demolition:

**Actual dates must be entered, “ASAP” or “SOON” will be rejected.**

<table>
<thead>
<tr>
<th>Start:</th>
<th>Completion:</th>
<th>Weekend Work?</th>
<th>Night Work (After 5 PM)?</th>
</tr>
</thead>
</table>

## Asbestos Survey Report

<table>
<thead>
<tr>
<th>Name of company that conducted survey:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
</tr>
<tr>
<td>City:</td>
</tr>
<tr>
<td>Zip:</td>
</tr>
<tr>
<td>Phone: (   )</td>
</tr>
</tbody>
</table>

| Name of person who completed the survey: |
| CAC/SST #: |

- [ ] Yes
- [ ] No

### If yes, who will remove/has removed prior to demo?

- [ ]

## Form Preparation Information

<table>
<thead>
<tr>
<th>This form prepared by:</th>
<th>Title:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name: Company/Individual</td>
<td>Phone: (   )</td>
</tr>
<tr>
<td>Address:</td>
<td>City:</td>
</tr>
<tr>
<td>State:</td>
<td></td>
</tr>
<tr>
<td>Zip:</td>
<td></td>
</tr>
</tbody>
</table>
**Required Information**

Payment must be received before J# will be assigned. See Schedule L of Regulation 3 for appropriate fees.

<table>
<thead>
<tr>
<th>Payment type:</th>
<th>☐ Check</th>
<th>☐ Cashier’s Check</th>
<th>☐ Money Order</th>
<th>☐ Credit Card (Visa, MasterCard Only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(payments, other than credit card payment, must be mailed or delivered to: 939 Ellis St., San Francisco, CA 94109)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I certify that the above information is correct and that I will comply with all of the requirements of the BAAQMD’s regulations, as well as all other applicable federal, state and local requirements.

Signature of Contractor or Person Performing Demolition: ______________________________________

Form: 1102_demolition_052108

**GENERAL INFORMATION**

- This notification form shall be used to notify the BAAQMD of a demolition operation only. Notification is required for every demolition. All boxes must be completed. Appropriate fee payment must accompany each notification. Notifications may be faxed to (415) 749-4658, but job numbers will not be issued unless accompanied by a valid credit card authorization or until a valid check, cashier’s check or money order for applicable fees is received.

- Notification shall be provided to the District at least 10 working days prior to commencement of demolition, or as early as possible prior to commencement of emergency demolition. The notification period will not start until a complete notification is submitted (see above).

- An Acknowledgement Letter is mailed to the contractor/person listed within 3 days of receipt of a complete notification. This should be checked for accuracy of data.

- If the job is postponed or cancelled, the District must be notified of a revision; the Acknowledgement Letter should be used to fax or mail the revision information. When cancelled, a cancellation fee will apply.

- For specifically-defined "Emergency" conditions, the 10 working day period will be waived. Notification must be made by fax, and the job number will be issued if accompanied with a faxed copy of a valid check, cashier’s check or money order.

- For 4 or fewer unit residences, the 10 working day period may be reduced to 72 hours for an additional fee.

**INSTRUCTIONS**

- **SPECIFIC LOCATION OF PROJECT:** Identify where the demolition is taking place if the site contains more than one building.

- **START AND COMPLETION DATES:** The start date is the date on which demolition of the facility or structure commences. Any revision to the start or completion dates must be submitted prior to the previously notified date(s). Under no circumstances may the revised start date be earlier than the 10th working day following the postmark or fax date of the original notification. If the start date is unknown, enter an estimated start date and revise the notification when the actual start date is known, but not later than the estimated start date.

- **FIRE TRAINING:** Reg. 11-2-206 includes "intentional burning" in the definition of demolition. Notification is required, the 10 working day requirement must be met and all Asbestos-Containing Material (ACM) >1% must be removed prior to fire training. The District’s Open Burning Notification form must also be filed and the applicable requirements of Regulation 5 must be met.

- **SURVEY REPORT:** Provide information showing that prior to commencement of the demolition, a survey was performed to determine the presence of Regulated ACM (RACM). Indicate if there was/was not suspected ACM.

- **GOVERNMENT ORDERED DEMOLITION:** If an "Emergency" demolition (see above) is the result of a state or local agency declaring the building a public nuisance or structurally unsound and in danger of imminent collapse, a copy of the written order must accompany this notification.
FEES APPLICABLE TO DEMOLITION OPERATIONS (FROM REGULATION 3, SCHEDULE L)

Demolition conducted at a single family dwelling is subject to the following fee:

OPERATION FEE: $49
Cancellation: $49 (100% of fee) non-refundable, for notification processing.

Demolition conducted at a single family dwelling or multiple family dwelling with four or fewer units with 72 hours instead of 10 days prior notice (excluding emergencies) is allowed upon payment of the following additional fee:

OPERATION FEE: $340

Demolition, other than those conducted at a single family dwelling, is subject to the following fee:

OPERATION FEE: $205
Cancellation: $137 of above amount non-refundable for notification processing.

Demolition conducted for the purpose of fire training is exempt from fee.

SURVEY REQUIREMENTS FOR DEMOLITION OPERATIONS (FROM REGULATION 11, RULE 2)

303.8 Surveys: Except for ordered demolitions, prior to commencement of any demolition or renovation, the owner or operator shall thoroughly survey the affected structure or portion thereof for the presence of asbestos-containing material, including Category I and Category II nonfriable asbestos-containing material. The survey shall be performed by a person who is certified by the Division of Occupational Safety and Health, and who has taken and passed an EPA-approved Building Inspector course and who conforms to the procedures outlined in the course. The survey shall include sampling and the results of laboratory analysis of the asbestos content of all suspected asbestos-containing materials. This survey shall be made available, upon request by the APCO, prior to the commencement of any RACM removal or any demolition. This subsection shall not apply if the owner or operator asserts that the material to be renovated is RACM and will be handled in accordance with the provisions of Sections 11-2-303, 304 and 401. The requirement for certification by the Division of Occupational Safety and Health shall not apply to in-house health professionals within a specific nonasbestos related company who perform occasional surveys only for that company as part of their regular job responsibilities.

8.1 When a structure, or portion thereof, is demolished under an ordered demolition, the survey must be done prior to, during, or after the demolition but prior to loading or removal of any demolition debris. If the debris contains regulated asbestos-containing material, all of the debris shall be treated as asbestos-containing waste material pursuant to Section 11-2-304.

8.2 For renovation or demolition of residential buildings having four or fewer dwelling units, a survey is not required. A sample and test of the material will be required only when any of the following will be removed or disturbed: heating, ventilation, air conditioning ducting and systems; acoustic ceiling material or acoustic plaster; textured or skim coated wall surfaces, cement siding or stucco, or resilient flooring. Where the material is found to contain greater than 1 percent asbestos and is friable, the material must be handled in accordance with Section 11-2-303.
CREDIT CARD PAYMENT FORM
(Visa and Mastercard ONLY)

for Demolition and Asbestos Job Notifications Use Only
For multiple notifications, please use a separate form for each job
Refer to Regulation 3, Schedule L for Fees

Site Address
City Zip

Project Description:
Demolition □ Amount Paid $_____
Renovation □ Amount Paid $_____

Removal Amount (of regulated asbestos):
_______ lin ft _______ sq ft _______ cu ft

PAYMENT TYPE:
Master Card □ VISA □

CREDIT CARD INFORMATION
Name
Company Name
Card No.
Billing Address Zip Code _______
CVV2 Code (3 digit code on reverse side of card) _______ Expiration Date _______

FOR ADMIN USE ONLY:
Authorization # _____________ Invoice # _______
Date ________________ Job # ___________
[Construction Dust Control.]

Ordinance amending the San Francisco Building Code by adding Section 106.3.2.6 to require that all site preparation work, demolition, or other construction activities within the City and County of San Francisco that have the potential to create dust or will expose or disturb more than 10 cubic yards or 500 square feet of soil must comply with specified dust control measures whether or not the activity requires a permit from the Department of Building Inspection, with provision for waiver by the Director for activities on sites less than one half acre that are unlikely to result in any visible windblown dust; amending the San Francisco Health Code by adding Article 22B to require, for projects over one half acre, that the project sponsor obtain approval of a dust control plan from the Director of Public Health unless the Director waives these requirements or the project qualifies for an interior only tenant improvement project exemption, and enacting fees to defray the costs of implementation; adopting environmental and general findings.

Note: Additions are single-underline italics Times New Roman; deletions are strikethrough italics Times New Roman. Board amendment additions are double underlined. Board amendment deletions are strikethrough normal.

Be it ordained by the People of the City and County of San Francisco:

Section 1. Findings. The Board of Supervisors of the City and County of San Francisco hereby finds and determines that:

(a) Environmental Findings. The Planning Department has determined that the actions contemplated in this Ordinance are in compliance with the California Environmental Quality Act (California Public Resources Code Sections 21000 et seq.). Said determination is

Supervisor Maxwell, Supervisor Peskin, Supervisor Ammiano, Supervisor Duffy
BOARD OF SUPERVISORS
on file with the Clerk of the Board of Supervisors in File No. ____________ and is
incorporated herein by reference.

(b) General Findings.

(1) Even though there are Federal Standards for air pollutants and implementation
of State and Regional air quality control plans, air pollutants continue to have impacts on
human health throughout the country. California has found that particulate matter exposure
can cause health effects at lower levels than national standards. The current health burden of
particulate matter demands that, where possible, public agencies take feasible available
actions to reduce sources of particulate matter exposure.

(2) According to the California Air Resources Board, reducing ambient particulate
matter from 1998-2000 levels to natural background concentrations in San Francisco would
prevent over 200 premature deaths.

(3) Dust can be an irritant causing watering eyes or irritation to the lungs, nose and
throat.

(4) Demolition, excavation, grading, and other construction activities can cause
wind-blown dust to add to particulate matter in the local atmosphere. Depending on
exposure, adverse health effects can occur due to this particulate matter in general and also
due to specific contaminants such as lead or asbestos that may be constituents of dust.

(5) The intent of this ordinance is to reduce the quantity of dust generated during
site preparation, construction and demolition in order to protect the health of the general
public, protect the health of on-site workers, minimize public nuisance complaints, and avoid
orders to stop work by the Department of Building Inspection.

Section 2. The San Francisco Building Code is hereby amended by adding Section
106.3.2.6, to read as follows:
SEC. 106.3.2.6. Construction dust control.

106.3.2.6.1. Dust control required. All applicants for a building, demolition, excavation, grading, foundation, or other permit required by this Code to construct a new building, to demolish a building, to substantially alter or to add to an existing building shall comply with the requirements for dust control and, in addition, for projects over a half acre the applicant will be required to submit a Dust Control Plan for approval by the San Francisco Health Department as set forth in Article 22B of the San Francisco Health Code.

106.3.2.6.2. Permit approval. For projects of over one half acre in size, no building or other permit application subject to the requirements of this section shall be approved until the Department of Building Inspection receives either

(a) written notification from the Director of Public Health that the applicant either has a site-specific dust control plan for the project approved by the Director of Public Health or the Director of Public Health has waived the requirement or

(b) the applicant qualifies as an interior only tenant improvement project that will not produce exterior visible dust and therefore is exempt from complying with Article 22B of the San Francisco Health Code.

EXCEPTION: The Director may issue a site permit pursuant to Section 106.3.4.2 prior to the time an applicant complies with this section.

106.3.2.6.3. GENERAL DUST CONTROL REQUIREMENTS.

(a) All site preparation work, demolition or construction activities within the City and County of San Francisco that have the potential to create dust or will expose or disturb more than 10 cubic yards or 500 square feet of soil shall comply with the requirements of this Section whether or not the activity requires a permit from the Department of Building Inspection.
(b) For projects over one half acre in size, the project sponsor shall designate a person or persons who will be responsible for monitoring compliance with dust control requirements. The designated person or persons shall be on the site or available by telephone or other means during all times that site preparation, demolition or construction activities may be in progress, including holidays and weekends. The name and telephone number where such person or persons may be reached at all times shall be provided to the Director and to the Director of Public Health prior to commencement of work on the project.

(c) The project sponsor and the contractor responsible for construction activities at the project site shall use the following practices to control construction dust on the site or other practices that result in equivalent dust control that are acceptable to the Director.

(1) Water all active construction areas sufficiently to prevent dust from becoming airborne. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour.

(2) Reclaimed water must be used if required by Article 21, Section 1100 et seq. of the San Francisco Public Works Code. If not required, reclaimed water should be used whenever possible.

(3) Provide as much water as necessary to control dust (without creating run-off) in any area of land clearing, earth movement, excavation, drillings, and other dust-generating activity.

(4) During excavation and dirt-moving activities, wet sweep or vacuum the streets, sidewalks, paths, and intersections where work is in progress at the end of the workday.

(4) Cover any inactive (no disturbance for more than seven days) stockpiles greater than ten cubic yards or 500 square feet of excavated materials, backfill material, import material, gravel, sand, road base, and soil with a 10 mil (0.01 inch) polyethylene plastic or equivalent tarp and brace it down or use other equivalent soil stabilization techniques.

(5) Use dust enclosures, curtains, and dust collectors as necessary to control dust in the excavation area.
106.3.2.6.4. Large projects. If the project is over one half acre in size and the project does not qualify for an interior only tenant improvement project exemption or the Department of Public Health has not issued a waiver for a site-specific dust control plan for the project; construction, demolition, excavation, grading, foundation work, or other permitted activities may not commence until the owner or the owner’s agent has submitted to the Department a copy of the Director of Public Health’s written approval of the dust control plan. All site preparation and construction activities on the job site shall comply with the general requirements for dust control and the site-specific dust control plan approved by the Director of Public Health. The failure to comply with all provisions of the approved site-specific dust control plan shall be considered a violation of this Code.

106.3.2.6.5. Waiver of requirements for compliance for small sites; rescission of waiver.

For sites less than a half acre in size:

(a) The Director may waive these requirements if the applicant demonstrates to the Director’s satisfaction that the proposed site preparation, demolition or construction activities are unlikely to result in any visible windblown dust.

(b) If at any time, contrary to the applicant’s assertions, the construction activities produce visible windblown dust, the Director may issue a written order rescinding the waiver. A copy of the rescission order shall be personally served on the owner of the property at the address on file with the Department of Building Inspection and posted on the job site.

(c) If the Director orders rescission of the waiver, the owner of the property and the contractor or other persons responsible for construction activities at the site shall comply immediately with the above dust control requirements.

106.3.2.6.6. Permit notification. All building, demolition, excavation, grading, foundation, or other permit subject to this section issued by the Central Permit Bureau shall bear notice of the above requirements and of the owner’s responsibility to control construction dust on the site.
106.3.2.6.7. Violations

Upon receipt of complaints, the Director is authorized to administer and enforce all provisions of this Section and may enforce the provisions of this Section by any lawful means available for such purpose, including taking actions authorized pursuant to Section 103 of this Code.

106.3.2.6.8 Fees. The Department shall determine and recommend to the Board of Supervisors the amount of fee that is required to compensate the Department for the costs of enforcing these dust control requirements.

Section 3. The San Francisco Health Code is hereby amended by adding Article 22B, to read as follows:

ARTICLE 22B
CONSTRUCTION DUST CONTROL REQUIREMENTS

SEC. 1240. DEFINITIONS.

In addition to the general definitions applicable to this Code, whenever used in this Article, the following terms shall have the meanings set forth below:

(a) "Applicant" means a person applying for any permit specified in Section 106.3.2.6 of the San Francisco Building Code or, if a permit for the work is not required from the Department of Building Inspection, the owner of the property where the activities will take place.

(b) "Director" means the Director of the San Francisco Department of Public Health or the Director's designee.

(c) "Director of Building Inspection" means the Director of the Department of Building Inspection of the City and County of San Francisco.

(d) "Owner" means the owner or owners of the property that is the site of the construction activities.
(e) "Sensitive Receptor" means residence, school, childcare center, hospital or other health-care facility or group living quarters.

SEC. 1241. APPLICABILITY OF ARTICLE.

This Article shall apply to any site preparation or construction activities taking place within the City and County of San Francisco that has the potential to create dust or that will expose or disturb soil.

SECTION 1242. SITE-SPECIFIC DUST CONTROL PLAN.

(a) Applicants for projects over a half acre in size shall submit a map showing the location of the project and clearly identifying all surrounding sensitive receptors and particularly noting those within 1000 feet of the project. The Director of Health shall review this map and any other information available to the Director to verify compliance with this submittal requirement. If no sensitive receptors are determined to be within 1000 feet of the project, then the Director of Health may issue a waiver to the Applicant that specifies that the project is not required to have a site-specific dust control plan.

(b) For projects determined by the Director to be within 1000 feet of sensitive receptors, the Applicant will submit a site-specific dust control plan to the Director for approval.

(c) The site-specific dust control plan shall contain all provisions of Section 106.3.2.6.3 of the Building Code and enhanced site-specific dust monitoring and control measures that will apply to the project. These site-specific measures may include the following or equivalent measures, which accomplish the goal of minimizing visible dust:

   (1) wetting down areas around soil improvement operations, visibly dry disturbed soil surface areas, and visibly dry disturbed unpaved driveways at least three times per shift per day.

   (2) analysis of the wind direction.

   (3) placement of upwind and downwind particulate dust monitors.

   (4) recordkeeping for particulate monitoring results.
(5) hiring of an independent third party to conduct inspections for visible dust and keeping records of those inspections.

(6) requirements for when dust generating operations have to be shut down due to dust crossing the property boundary or if dust is contained within the property boundary but not controlled after a specified number of minutes.

(7) establishing a hotline for surrounding community members to call and report visible dust problems so that the Applicant can promptly fix those problems; posting signs around the site with the hotline number and making sure that the number is given to adjacent residents, schools and businesses.

(8) limiting the area subject to excavation, grading, and other demolition or construction activities at any one time.

(9) minimizing the amount of excavated material or waste materials stored at the site.

(10) installing dust curtains, plastic tarps or windbreaks, or planting tree windbreaks on the property line on windward and down windward sides of construction areas, as necessary.

(11) paving, applying water three times daily, or applying non-toxic soil stabilizers on all unpaved access roads, parking areas and staging areas at the construction site. Reclaimed water must be used if required by Article 21, Section 1100 et seq. of the San Francisco Public Works Code, Article 22. If not required, reclaimed water should be used whenever possible.

(12) loading haul trucks carrying excavated material and other non-excavated material so that the material does not extend above the walls or back of the truck bed. Tightly cover with tarpaulins or other effective covers all trucks hauling soil, sand, and other loose materials before the trucks leave the loading area. Wet prior to covering if needed.

(13) establishing speed limits so that vehicles entering or exiting construction areas shall travel at a speed that minimizes dust emissions. This speed shall be no more than 15 miles per hour.
(14) sweeping streets with water sweepers at the end of each day if visible soil material is carried onto adjacent paved roads. Reclaimed water must be used if required by Article 21, Section 1100 et seq. of the San Francisco Public Works Code. If not required, reclaimed water should be used whenever possible.

(15) installing wheel washers to clean all trucks and equipment leaving the construction site. If wheel washers cannot be installed, tires or tracks and spoil trucks shall be brushed off before they re-enter City streets to minimize deposition of dust-causing materials.

(16) terminating excavation, grading, and other construction activities when winds speeds exceed 25 miles per hour.

(17) hydroseeding inactive construction areas, including previously graded areas inactive for at least 10 calendar days, or applying non-toxic soil stabilizers.

(18) sweeping of surrounding streets during demolition, excavation and construction at least once per day to reduce particulate emissions.

SEC. 1243. EXEMPTION FOR INTERIOR ONLY TENANT IMPROVEMENT PROJECTS
Interior Only Tenant Improvement Projects that are over one half acre in size and will not produce any exterior visible dust are exempt from complying with these requirements. If the interior only tenant improvement projects are changed during the course of construction and begin producing exterior visible dust then they will be required to immediately comply with Section 1242 by submitting a site-specific dust control plan for the Director’s approval.

SEC. 1244. WAIVER OF REQUIREMENTS FOR COMPLIANCE; RESCISSION OF WAIVER.
(a) The Director may waive the requirements for a site-specific dust control plan as described in Section 1242 (a) or if the Applicant demonstrates to the Director’s satisfaction that a site-specific dust control plan should not be required.

(b) The Director may rescind a waiver.

Supervisor Maxwell, Supervisor Peskin, Supervisor Ammiano
BOARD OF SUPERVISORS
(1) if sensitive uses are placed within 1000 feet of the project;

(2) if requested by the Director of Building Inspection; or

(3) the Director is presented with information that contradicts the Applicant’s
demonstration that a site-specific dust control plan should not be required.

The Director shall provide the Director of Building Inspection with a copy of the rescission
order. If the Director orders rescission of the waiver, the owner of the property and the contractor or
other persons responsible for construction activities at the site shall comply immediately with Section
1242 by submitting a site-specific dust control plan for the Director’s approval.

SEC. 1245. DIRECTOR’S APPROVAL OF DUST CONTROL PLAN AND NOTIFICATION TO
THE DIRECTOR OF BUILDING INSPECTION.

After the Director has approved the Applicant’s dust control plan, the Director shall provide the
Applicant and the Director of Building Inspection with written notification that the Applicant has
complied with the requirements of this Article.

SEC. 1246. RULES AND REGULATIONS.

The Director may adopt, and may thereafter amend, rules, regulations and guidelines that the
Director deems necessary to implement the provisions of this Article. A public hearing before the
Health Commission shall be held prior to the adoption or any amendment of the rules, regulations and
guidelines recommended for implementation. In addition to any notices required by law, the Director
shall send written notice, at least 15 days prior to the hearing, to any interested party who sends a
written request to the Director for notice of hearings related to the adoption of rules, regulations and
guidelines under this section.

SEC. 1247. CONSTRUCTION ON CITY PROPERTY.

All departments, boards, commissions, and agencies of the City and County of San Francisco
that authorize construction or improvements on land under their jurisdiction under circumstances
where no building, excavation, grading, foundation, or other permit needs to be obtained under the San Francisco Building Code shall adopt rules and regulations to insure that the same dust control requirements that are set forth in this Article are followed. The Directors of Public Health and Building Inspection shall assist the departments, boards, commission and agencies to insure that these requirements are met.

SEC. 1248. NO ASSUMPTION OF LIABILITY.

In undertaking the enforcement of this ordinance, the City is assuming an undertaking only to promote the general welfare. It is not assuming, nor is it imposing on its officers and employees, an obligation for breach of which it is liable in money damages to any person who claims that such breach proximately caused injury.

SEC. 1249. FEES.

The Director is authorized to charge the following fees to defray the costs of document processing and review, consultation with applicants, and administration of this Article: for fiscal year 2008-2009 (1) an initial fee of $492, payable to the Department upon the filing of a Dust Control Plan with the Department; and (2) an additional fee of $164 per hour for time spent in document processing and review and applicant consultation exceeding three hours or portion thereof, payable to the Department. Beginning with fiscal year 2009-2010, no later than April 15 each year, the Controller shall adjust the fees provided in this Article to reflect changes in the relevant Consumer Price Index without further action by the Board of Supervisors. In adjusting the fees, the Controller may round these fees up or down to the nearest dollar. The Director shall perform an annual review of the fees scheduled to be assessed for the following fiscal year and shall file a report with the Controller no later than May 1st of each year, proposing, if necessary, an adjustment to the fees to ensure that costs are
fully recovered and that fees do not produce significantly more revenue than required to cover the costs of operating the program. The Controller shall adjust fees when necessary in either case.

APPROVED AS TO FORM:
DENNIS J. HERRERA, City Attorney

By:  

JUDITH A. BOYAJIAN  
Deputy City Attorney.
Ordinance amending the San Francisco Building Code by adding Section 106.3.2.6 to require that all site preparation work, demolition, or other construction activities within the City and County of San Francisco that have the potential to create dust or will expose or disturb more than 10 cubic yards or 500 square feet of soil must comply with specified dust control measures whether or not the activity requires a permit from the Department of Building Inspection, with provision for waiver by the Director for activities on sites less than one half acre that are unlikely to result in any visible windblown dust; amending the San Francisco Health Code by adding Article 22B to require, for projects over one half acre, that the project sponsor obtain approval of a dust control plan from the Director of Public Health unless the Director waives these requirements or the project qualifies for an interior only tenant improvement project exemption, and enacting fees to defray the costs of implementation; adopting environmental and general findings.

August 7, 2007  Board of Supervisors — SUBSTITUTED

June 24, 2008  Board of Supervisors — SUBSTITUTED

July 16, 2008  Board of Supervisors — PASSED ON FIRST READING
   Ayes: 10 - Alioto-Pier, Chu, Daly, Duffy, Elsbernd, Maxwell, McGoldrick, Mirkarimi, Peskin, Sandoval
   Absent: 1 - Ammiano

July 22, 2008  Board of Supervisors — FINALLY PASSED
   Ayes: 11 - Alioto-Pier, Ammiano, Chu, Daly, Duffy, Elsbernd, Maxwell, McGoldrick, Mirkarimi, Peskin, Sandoval
I hereby certify that the foregoing Ordinance was FINALLY PASSED on July 22, 2008 by the Board of Supervisors of the City and County of San Francisco.

Angela Calvillo
Clerk of the Board

7-30-08
Date Approved

Mayor Gavin Newsom
ARTICLE 22B: CONSTRUCTION
DUST CONTROL REQUIREMENTS

Sec. 1240. Definitions.

Sec. 1241. Applicability of Article.

Sec. 1242. Site-Specific Dust Control Plan.

Sec. 1243. Exemption for Interior Only Tenant Improvement Projects.

Sec. 1244. Waiver of Requirements for Compliance: Rescission of Waiver.

Sec. 1245. Director's Approval of Dust Control Plan and Notification to the Director of Building Inspection.

Sec. 1246. Rules and Regulations.

Sec. 1247. Construction on City Property.

Sec. 1248. No Assumption of Liability.

Sec. 1249. Fees.

SEC. 1240. DEFINITIONS.

In addition to the general definitions applicable to this Code, whenever used in this Article, the following terms shall have the meanings set forth below:

(a) "Applicant" means a person applying for any permit specified in Section 106.3.2.6 of the San Francisco Building Code or, if a permit for the work is not required from the Department of Building Inspection, the owner of the property where the activities will take place.

(b) "Director" means the Director of the San Francisco Department of Public Health or the Director's designee.

(c) "Director of Building Inspection " means the Director of the Department of Building Inspection of the City and County of San Francisco.

(d) "Owner" means the owner or owners of the property that is the site of the construction activities.
(e) "Sensitive Receptor" means residence, school, childcare center, hospital or other health-care facility or group living quarters.

(Added by 176-08, File No. 071009, App. 7/30/2008)

SEC. 1241. APPLICABILITY OF ARTICLE.

This Article shall apply to any site preparation or construction activities taking place within the City and County of San Francisco that has the potential to create dust or that will expose or disturb soil.

(Added by 176-08, File No. 071009, App. 7/30/2008)

SEC. 1242. SITE-SPECIFIC DUST CONTROL PLAN.

(a) Applicants for projects over a half acre in size shall submit a map showing the location of the project and clearly identifying all surrounding sensitive receptors and particularly noting those within 1,000 feet of the project. The Director of Health shall review this map and any other information available to the Director to verify compliance with this submittal requirement. If no sensitive receptors are determined to be within 1,000 feet of the project, then the Director of Health may issue a waiver to the Applicant that specifies that the project is not required to have a site-specific dust control plan.

(b) For projects determined by the Director to be within 1,000 feet of sensitive receptors, the Applicant will submit a site-specific dust control plan to the Director for approval.

(c) The site-specific dust control plan shall contain all provisions of Section 106.3.2.6.3 of the Building Code and enhanced site-specific dust monitoring and control measures that will apply to the project. These site-specific measures may include the following or equivalent measures, which accomplish the goal of minimizing visible dust:

(1) wetting down areas around soil improvement operations, visibly dry disturbed soil surface areas, and visibly dry disturbed unpaved driveways at least three times per shift per day.

(2) analysis of the wind direction,

(3) placement of upwind and downwind particulate dust monitors,

(4) recordkeeping for particulate monitoring results,

(5) hiring of an independent third party to conduct inspections for visible dust and keeping records of those inspections,
(6) requirements for when dust generating operations have to be shut down due to dust crossing the property boundary or if dust is contained within the property boundary but not controlled after a specified number of minutes,

(7) establishing a hotline for surrounding community members to call and report visible dust problems so that the Applicant can promptly fix those problem; posting signs around the site with the hotline number and making sure that the number is given to adjacent residents, schools and businesses.

(8) limiting the area subject to excavation, grading, and other demolition or construction activities at any one time,

(9) minimizing the amount of excavated material or waste materials stored at the site,

(10) installing dust curtains, plastic tarps or windbreaks, or planting tree windbreaks on the property line on windward and down windward sides of construction areas, as necessary,

(11) paving, applying water three times daily, or applying non-toxic soil stabilizers on all unpaved access roads, parking areas and staging areas at the construction site. Reclaimed water must be used if required by Article 21, Section 1100 et seq. of the San Francisco Public Works Code, Article 22. If not required, reclaimed water should be used whenever possible.

(12) loading haul trucks carrying excavated material and other non-excavated material so that the material does not extend above the walls or back of the truck bed. Tightly cover with tarpaulins or other effective covers all trucks hauling soil, sand, and other loose materials before the trucks leave the loading area. Wet prior to covering if needed.

(13) establishing speed limits so that vehicles entering or exiting construction areas shall travel at a speed that minimizes dust emissions. This speed shall be no more than 15 miles per hour.

(14) sweeping streets with water sweepers at the end of each day if visible soil material is carried onto adjacent paved roads. Reclaimed water must be used if required by Article 21, Section 1100 et seq. of the San Francisco Public Works Code. If not required, reclaimed water should be used whenever possible.

(15) installing wheel washers to clean all trucks and equipment leaving the construction site. If wheel washers cannot be installed, tires or tracks and spoil trucks shall be brushed off before they reenter City streets to minimize deposition of dust-causing materials.

(16) terminating excavation, grading, and other construction activities when winds speeds exceed 25 miles per hour.
(17) hydroseeding inactive construction areas, including previously graded areas inactive for at least 10 calendar days, or applying non-toxic soil stabilizers.

(18) sweeping of surrounding streets during demolition, excavation and construction at least once per day to reduce particulate emissions.

(Added by 176-08, File No. 071009, App. 7/30/2008)

SEC. 1243. EXEMPTION FOR INTERIOR ONLY TENANT IMPROVEMENT PROJECTS.

Interior Only Tenant Improvement Projects that are over one half acre in size and will not produce any exterior visible dust are exempt from complying with these requirements. If the interior only tenant improvement projects are changed during the course of construction and begin producing exterior visible dust then they will be required to immediately comply with Section 1242 by submitting a site-specific dust control plan for the Director's approval.

(Added by 176-08, File No. 071009, App. 7/30/2008)

SEC. 1244. WAIVER OF REQUIREMENTS FOR COMPLIANCE: RESCISSION OF WAIVER.

(a) The Director may waive the requirements for a site-specific dust control plan as described in Section 1242(a) or if the Applicant demonstrates to the Director's satisfaction that a site-specific dust control plan should not be required.

(b) The Director may rescind a waiver,

(1) if sensitive uses are placed within 1,000 feet of the project;

(2) if requested by the Director of Building Inspection; or

(3) the Director is presented with information that contradicts the Applicant's demonstration that a site-specific dust control plan should not be required.

The Director shall provide the Director of Building Inspection with a copy of the rescission order. If the Director orders rescission of the waiver, the owner of the property and the contractor or other persons responsible for construction activities at the site shall comply immediately with Section 1242 by submitting a site-specific dust control plan for the Director's approval.

(Added by 176-08, File No. 071009, App. 7/30/2008)

SEC. 1245. DIRECTOR'S APPROVAL OF DUST CONTROL PLAN AND NOTIFICATION TO THE DIRECTOR OF BUILDING INSPECTION.
After the Director has approved the Applicant's dust control plan, the Director shall provide the Applicant and the Director of Building Inspection with written notification that the Applicant has complied with the requirements of this Article.

(Added by 176-08, File No. 071009, App. 7/30/2008)

SEC. 1246. RULES AND REGULATIONS.

The Director may adopt, and may thereafter amend, rules, regulations and guidelines that the Director deems necessary to implement the provisions of this Article. A public hearing before the Health Commission shall be held prior to the adoption or any amendment of the rules, regulations and guidelines recommended for implementation. In addition to any notices required by law, the Director shall send written notice, at least 15 days prior to the hearing, to any interested party who sends a written request to the Director for notice of hearings related to the adoption of rules, regulations and guidelines under this section.

(Added by 176-08, File No. 071009, App. 7/30/2008)

SEC. 1247. CONSTRUCTION ON CITY PROPERTY.

All departments, boards, commissions, and agencies of the City and County of San Francisco that authorize construction or improvements on land under their jurisdiction under circumstances where no building, excavation, grading, foundation, or other permit needs to be obtained under the San Francisco Building Code shall adopt rules and regulations to insure that the same dust control requirements that are set forth in this Article are followed. The Directors of Public Health and Building Inspection shall assist the departments, boards, commission and agencies to insure that these requirements are met.

(Added by 176-08, File No. 071009, App. 7/30/2008)

SEC. 1248. NO ASSUMPTION OF LIABILITY.

In undertaking the enforcement of this ordinance, the City is assuming an undertaking only to promote the general welfare. It is not assuming, nor is it imposing on its officers and employees, an obligation for breach of which it is liable in money damages to any person who claims that such breach proximately caused injury.

(Added by 176-08, File No. 071009, App. 7/30/2008)

SEC. 1249. FEES.

The Director is authorized to charge the following fees to defray the costs of document processing and review, consultation with applicants, and administration of this Article: for fiscal year 2008-2009 (1) an initial fee of $492, payable to the Department upon the
filing of a Dust Control Plan with the Department; and (2) an additional fee of $164 per hour for time spent in document processing and review and applicant consultation exceeding three hours or portion thereof payable to the Department. Beginning with fiscal year 2009-2010, no later than April 15 each year, the Controller shall adjust the fees provided in this Article to reflect changes in the relevant Consumer Price Index, without further action by the Board of Supervisors. In adjusting the fees, the Controller may round these fees up or down to the nearest dollar. The Director shall perform an annual review of the fees scheduled to be assessed for the following fiscal year and shall file a report with the Controller no later than May 1st of each year, proposing, if necessary, an adjustment to the fees to ensure that costs are fully recovered and that fees do not produce significantly more revenue than required to cover the costs of operating the program. The Controller shall adjust fees when necessary in either case.

(Added by 176-08, File No. 071009, App. 7/30/2008)
APPENDIX B

SITE MAPS
To be disturbed

EXPLANATION

Site Boundary

To be disturbed

Not to be disturbed

0 100 200

Feet

Former Schlage Lock Facility
2401 - 2555 Bayshore Blvd.
San Francisco and Brisbane, California

Demolition Phase
Pre-construction Conditions