

# MEMO

Project name **Communications Hill / Naturally-Occurring Asbestos Dust Mitigation**  
 Project no. **1690014334**  
 Client **KB Home South Bay, Inc.**  
 To **Dan Auten, SVP Operations/ Customer Service**  
 From **Michael Keinath, PE**

Per your request, Ramboll has prepared recommendations for enhanced control of naturally-occurring asbestos (NOA) contained in fugitive dust relating to construction activities at KB Home South Bay, Inc.'s (KB Home) Communications Hill Development in San Jose, CA (Site). To do so, we analyzed the existing Asbestos Dust Mitigation Plan (ADMP)<sup>1,2</sup>, which the Bay Area Air Quality Management District (BAAQMD) approved on March 2, 2015,<sup>3</sup> with addenda approved on July 19, 2016<sup>4</sup> and October 27, 2016,<sup>5</sup> and conducted a Site visit on August 28, 2019.

Date September 3, 2019

The existing ADMP is robust and is being implemented effectively at the Site. In addition, based on the Site walk, it appears KB has implemented a number of mitigation measures in addition to those specifically identified in the ADMP, including street sweeping, keeping the ground surface adequately wetted at all times, paving or landscaping areas as soon as practical, hydroseeding or covering inactive work areas, and maintaining gravel cover on unpaved roadways, in addition to conducting a robust air monitoring program with daily measurement (each work day) at six total monitoring locations.

Ramboll  
 201 California Street  
 Suite 1200  
 San Francisco, CA 94111  
 USA

T +1 415 796 1950  
 F +1 415 398 5812  
<https://ramboll.com>

This memorandum identifies additional measures which KB Home may consider implementing to augment the ADMP and improve the efficacy of NOA dust control. Please note that the listed measures are focused on Phase 2 vertical construction, with limited earth moving activity; we may recommend different measures for Phase 3 grading and soils movement.

- <sup>1</sup> Asbestos Dust Mitigation Plan (ADMP) Communication Hill 2 Phase I San Jose, prepared by McCloskey Consultants, Inc. and dated February 27, 2015.
- <sup>2</sup> ADMP Addendum, Phase II Communication Hill, San Jose, prepared by McCloskey Consultants, Inc. and dated July 15, 2016
- <sup>3</sup> Bay Area Air Quality Management District (BAAQMD) letter dated March 2, 2015 approving the February 27, 2015 ADMP Application.
- <sup>4</sup> BAAQMD letter dated July 19, 2016 approving the July 15, 2016 ADMP Amendment.
- <sup>5</sup> BAAQMD letter dated October 27, 2016 approving the October 24, 2016 ADMP Amendment.

## 1 Recommendations for Augmenting Existing ADMP Measures

As discussed, the existing Site ADMP is robust and is being implemented well. However, there are areas where additional measure could be effective a reducing dust generation.

### **Recommendation 1a: Power-washing/sweeping public roadways to remove track-out.**

During the Site visit, we observed that track-out on Llano de los Robles Avenue and other public roads leading to construction areas is currently being controlled with watering and sweeping; however, in some locations visible track-out remained. As much of the construction site has recently been paved, there is significantly less opportunity for additional track-out during future activities. As such, we recommend power-washing followed by sweeping to remove all visible track-out (in accordance with BAAQMD Rule 6-6). At that point, sweeping frequency could likely be reduced to once per day and watering public streets is likely unnecessary.

### **Recommendation 1b: Ensure gravel roadways/pads in all construction areas**

During the site visit, we observed that construction roadways were either paved or on gravel. Continue to ensure that all construction traffic (worker vehicles, gradalls, delivery trucks) is either on paved roads or gravel pads with 6-12" thick of 2-3" coarse aggregate. Additionally, ensure that all construction materials (lumber, etc.) are stored on gravel pads.

### **Recommendation 1c: Ensure proper stabilization of all inactive disturbed surface areas**

During the Site visit, we observed that all disturbed areas were either covered with visqueen/landscaping cloth or had been hydroseeded. Hydroseeding is most effective when vegetation is established. During the dry season, consider a chemical dust suppressant or stabilizer to establish an adequate surface crusting, as discussed in the ADMP.

### **Recommendation 1d: Speed limit signage**

Post speed limit signs at entrances to construction site with onsite speed limit of 15 mph.

### **Recommendation 1e: Paving/landscaping/encapsulation**

Pave, landscape or encapsulate all surfaces as soon as practical. For example, ensure all curbs or roads are poured/paved as soon as practical after horizontal infrastructure is complete. Similarly, ensure driveways and landscaping are complete once building envelopes are sealed and exterior facades are complete.

## 2 Recommendations for Additional Administrative Control Measures

Below are a list of additional measures you may consider to augment the existing ADMP:

1. Post notice signs at construction entrances with a designated point of contact (phone, text and email) in case individuals would like to notify KB Home and the City of San Jose regarding concerns or observations.
2. Install wind screening (50% porosity) on all construction fencing
3. Determine adequate soil moisture content for unstabilized areas and water to maintain that soil moisture content (e.g., 12% is listed in BAAQMD guidance), as opposed to frequency

4. Install weather station for real-time, on-site wind speed data, and establish wind speed thresholds for:
  - a. Conduct site inspection to evaluate efficacy of dust control activities (e.g., 10 mph average hourly wind speed)
  - b. Implement additional dust control activities, such as enhanced watering, covering of active storage piles, etc. (e.g., 15 mph average hourly wind speed)
  - c. Stop significant excavation, grading and/or dust generating activities (e.g., 20 mph average hourly wind speed), unless no significant dust generation is observed (e.g., during a winter storm event)
5. Install intermediate wind barriers for areas of site that will not be developed for extended periods. If areas have been graded and will not be part of active construction for an extended period, observe efficacy of covering and hydroseed/chemical stabilizer application. If dust generation is still observed, install intermediate wind barriers perpendicular to the predominant wind direction every 50 to 100 yards.
6. Confirm cover of active storage piles with tarps
7. Implement additional track-out control during significant grading or earthmoving activities or if significant visible track-out is observed on public streets after main travel surfaces are paved or gravel. Options include:
  - a. Install tire shaker and/or automatic wheel wash system
  - b. Conduct daily inspections for public roadways extending 50 feet from construction gates and perform additional sweeping or power-washing if any visible track-out is present
  - c. Inspect vehicles leaving site for dust and dirt and have washing station available
  - d. Additional signage and instruction for horizontal and vertical subcontractors regarding which entrances/exits should be used for which activities
8. Establishing compliance protocol and compliance officer
  - a. Daily site walks to evaluate dust control measures
  - b. Daily logs to verify activities such as:
    - i. Watering
    - ii. Sweeping
    - iii. Site walks
    - iv. Tire washing
  - c. Corrective action documentation

### 3 Recommendations for Additional Monitoring

The ADMP includes perimeter air monitoring to measure efficacy of applicable control measures. In accordance with the ADMP, perimeter monitoring is performed every day earth-disturbing grading and construction activities occur, which we understand that, in practice, has been every day. Monitoring consists of six locations, with one "background" location (P1), which is upwind of the Project under predominant wind conditions, and five fenceline locations (P2, P3, P4, P5 and P6), which are downwind of the Project under predominant wind conditions. During the Site visit, we observed the P2 and P4 monitoring locations, where P2 is where Empoli Street ends and P4 is next to an existing residence at the corner of Llano de los Robles Ave and Henry Miller Place, directly adjacent to William Lewis Manly Park.

**Recommendation 3a: Additional NOA Monitors**

As construction activity will continue to move northwest along Llano de los Robles Avenue, we recommend KB Home consider collecting NOA data at two additional locations:

1. Near the corner of Llano de los Robles Avenue and Manuel Street and
2. Near the corner of William Manly and Manuel Streets -or- somewhere along the sidewalk that runs between Manuel and Lina Streets between the existing residences and the current construction site.

**Recommendation 3b: Real-time Dust Monitoring**

Results from NOA monitoring stations are not received until several days after they are collected and they are integrated over the sampling period (e.g., an 8-hour work day). It can be difficult, therefore, to determine which construction activities are contributing the most to NOA readings above the action level. While there is no current technology which allows real-time NOA monitoring, real time particulate matter (PM) monitors can, in some instances, be used as a surrogate for NOA data. As such, we recommend installing at least one real-time PM monitor, likely along Llano de los Robles Avenue, near William Lewis Manly Park. After several days of concurrent monitoring with the PM monitor and the existing or enhanced NOA monitors, we can establish a correlation between the two types of monitors with the goal of setting real-time action levels for NOA-disturbing activities based on the PM monitor data. The system could be configured to alert site personnel when a PM action level is exceeded so that they can determine what activity is causing the dust generation and address it in real time.