



City and County of San Francisco  
**DEPARTMENT OF PUBLIC HEALTH**  
**ENVIRONMENTAL HEALTH**

Edwin M. Lee, Mayor  
Barbara Garcia, MPA, Director of Health  
Richard Lee, MPH, CIH, Acting Director of EH

June 25, 2014

Ms. Rebecca Becker  
Equity Residential  
Two N. Riverside Plaza Suite 400  
Chicago IL 60606

Subject: Site Mitigation Plan and Dust Control Plan Approval  
801 Brannan, San Francisco CA  
SMED 985

Dear Ms. Becker:

In accordance with the San Francisco Maher Ordinance, San Francisco Health Code Article 22A, the San Francisco Department of Public Health, Environmental Health, Site Assessment and Mitigation (DPH SAM) reviewed the following documents:

- Phase I/II Environmental Site Assessment, 801 Brannan Street, San Francisco CA, Stellar Environmental Inc., October 2011
- Soil Gas Investigation Report, 801 Brannan Street, San Francisco CA, Langan Treadwell and Rollo November 11, 2013
- Site Mitigation Plan, 801 Brannan Street, San Francisco CA, Langan Treadwell and Rollo, March 26, 2014
- Dust Monitoring Plan, 801 Brannan Street, San Francisco CA, Langan Treadwell and Rollo, March 26, 2014

**Site Description**

The subject property is a 5.21 acre rectangular lot on the south side of Brannan Street between 7<sup>th</sup> and 8th Streets. The property is identified as San Francisco Block 3783 Lot 001. Current site use consists of an exhibition hall and parking lot surrounding land uses include auto repair, office building, parking, apartment building and other commercial and retail uses.

**Planned Use**

The proposed project is demolition of the existing building and construction of a new six story residential building with ground floor parking, retail and public space. The planned depth of excavation or grading for foundation elements and planned elevator pits is 5 feet below the current ground surface.

**Site History**

The Phase I report describes the property as developed from at least 1887. The site was occupied by wooden product manufacturer and warehouses. The property operated as a railroad freight depot from 1913 to 1980. The current building was constructed in 1980. The building incorporated the freight loading platforms, removed the central area tracks and installed a concrete floor in the central area

between the former freight platforms. The building has operated as an exhibition hall since this construction in 1980. A section of the property farthest from Brannan Street is a parking lot extending from 8th Street to 7<sup>th</sup> Street.

### Subsurface Investigation

Subsurface investigations were performed by Treadwell and Rollo in 2000 and Stellar Environmental in 2011. The 2000 investigation involved soil and groundwater sampling from 10 borings in the parking lot area of the subject property. Boring depths were 20 to feet below ground surface (ft bgs). Analyses included Total Petroleum Hydrocarbons as motor oil (TPHmo), diesel (TPHd), and gasoline (TPHg), volatile organic compounds (VOC), semi volatile organic compounds (SVOC), and the California Title 22 list of 17 metals. Two groundwater samples were analyzed for the above constituents, using the LUFT 5 list of metals.

The Stellar 2011 investigation sampled soils within the building interior, both the former freight platform and track areas. Soil samples were analyzed for TPH and gasoline components benzene, toluene, ethyl benzene and xylenes (BTEX) and methyl tert butyl ether (MTBE). The platform areas contained fill to three to four feet above the central track area. The track area contained more gravel indicative of the former track bed. Vertically composited soil samples were collected from each boring. Two composite soil samples were collected from the platform borings, one of the fill beneath the elevated platform and one from the fill material below street level.

The analytical results showed lead to be the primary contaminant of concern. Eight samples from five borings contend lead at concentrations exceeding the federal and state Toxic Threshold Limit Concentration (TTL) defining a hazardous waste, 1000 milligrams per kilogram (mg/kg) lead. Lead concentrations exceeding the TTL were measured in borings along Brannan Street, in the parking lot and beneath the eastern platform at depths of 2.5 to 12 ft bgs. The maximum lead concentration was 16,000 mg/kg in boring B3 (eastern platform) at 10 ft bgs. Some samples containing lead at less than the TTL were analyzed using the California Waste Extraction Test (WET). The results of the WET were compared to the California Soluble Threshold Limit Concentration (STLC), which is also used to define a hazardous waste in California. Seven of the eight samples analyzed exceeded the STLC value of 5 milligrams per liter (mg/L).

Soil analyses for TPH showed concentrations above 10,000 mg/kg in three borings, with a maximum concentration of 29,000 mg/kg in EB-10 (north end of parking lot) at 1 ft bgs. Analyses for VOC and SVOC were performed on 3 to 8 samples from the 2000 investigation. The results showed low concentrations of some chemicals. However, none of the VOC or SVOC chemicals measured exceeded the California Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESL) for the residential scenario or the California Human Health Screening Level (CHHSL) promulgated by the Office of Environmental Health Hazard Assessment (OEHHA).

Two groundwater samples from the 2000 Investigation were analyzed. TPH concentrations ranged from 3000 to 1,900,000 micrograms per Liter (ug/L). VOC, SVOC and metals were analyzed for one of the groundwater samples. None of these constituents exceeded the current California Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESL). The TPH concentrations did not exceed the San Francisco Public Utilities Commission bulk discharge criteria.

Subsurface materials were described as sandy fill, containing brick and other debris to 11 ft bgs. The fill is underlain by saturated silty material with high organic content to 14 ft bgs. The depth to water reported as 6 to 16 ft bgs.

### Site Mitigation Plan

A site mitigation plan (SMP) was submitted to DPH SAM. The SMP outlines the soil management, dust control, stormwater control practices and contingency responses. Excavated and disturbed soils will be handled as Class I California hazardous waste.

Soils will be stockpiled and sampled as needed to meet the criteria of the disposal facilities, approximately one composite sample per 500 to 750 cubic yards of soil. Direct loading of excavated soils is planned. If soils are stockpiled the excavated soils will be placed on visqueen, bermed, and tarped at all times. Construction dewatering is not anticipated. However, if sufficient groundwater is encountered to warrant removal and discharge, the water will be discharged per a permit from the SF Public Utilities Commission (SF PUC).

Confirmation soil sampling will be performed following completion of excavation. The SMP proposes to collect six confirmation samples spaced across the base of the final excavation. The samples will be analyzed for TPH and total lead. Three confirmation samples will be additionally analyzed for SVOC, PCB, CCR list of 17 metals, cyanide, asbestos and sulfide.

An environmental Health and Safety Plan (HASP) will be prepared by the contractor. The HASP will include dust and stormwater controls as part of the effort to protect the public outside the property and workers onsite. A site Health and Safety Officer (HASO) will monitor and oversee implementation of the HASP. The HASO will have the authority to stop work to ensure compliance with the HASP.

Contingency procedures address response to workers encountering contaminated soil, tanks, pipes vaults, wells or other unexpected potentially hazardous materials or items of environmental concern. If any such items are encountered, work will stop and the site superintendent, owner and Langan Treadwell and Rollo will be notified. The area will be covered with plastic until the appropriate procedures are determined and implemented. Any asbestos encountered will be handled in accordance with BAAQMD and other applicable regulations and procedures.

A methane mitigation system (MMS) is planned to address the elevated methane concentrations (up to 12.3%) measured beneath the western section of the proposed building. The western section of the building is separated from the eastern section above the podium style ground level. The podium level will have commercial use. The MMS will include a water/vapor barrier and subgrade passive venting system. A spray applied barrier waterproofing membrane material will be applied directly beneath the foundation slab. The passive venting system beneath the membrane barrier will consist of perforated pipes in the gravel layer beneath the foundation. The horizontal perforated pipes will vent to a vertical riser. The vent riser should extend above the building roof and be topped with a wind turbine. **Designs for the methane mitigation system should be submitted to DPH SAM at least one month prior to installation.**

As built drawings and a statement verifying that the MMS was installed per the design requirements and per the documents submitted to DPH SAM must be signed and stamped by a licensed mechanical engineer and submitted to DPH SAM within six weeks after the mechanical ventilation system installation.

Remaining contaminated soils will be mitigated by capping. The cap will consist of the building, paved walkways, or two feet of soil and permeable pavers in landscaped areas. Operations and maintenance (O&M) of the MMS and capping systems will continue long term. Maintenance work plans and records will be kept onsite. Employees and contractors who will perform below grade construction will be

informed of the environmental conditions, soil management concerns and safety requirements. The MMS maintenance manual will be prepared for the building engineer. Proposed O&M manual contents are summarized in the SMP. Copies of O&M manuals for the capping systems and for the MMS shall be provided to the property owners and must be appended to the deed restriction.

A final project closure report that summarizes the excavation, implementation of the SMP and any mitigating or contingency measures implemented will be submitted to DPH SAM. The report will include copies of any analytical reports, permits and disposal documents.

#### Dust Control Plan

A Dust Control Plan (DCP) for construction was submitted to comply with San Francisco Public Health Code Article 22B. Several dust control items are also listed in the SMP. Dust controls during development will include wetting of surface soils and soil piles, control of excavation techniques to minimize dust generation, covering stockpiles with visqueen or membrane covers. Truck loads will be covered. The site will be fenced and locked during non-construction hours. Construction equipment and trucks will be cleaned prior to leaving the site. Methods are to include brushing and /or vacuuming to remove loose dirt on equipment and washing wheels. Truck will be inspected prior to leaving the active work area. Open excavation areas will be watered as needed to control dust, drop heights will be kept to a minimum, soil removal, handling and movement, grading or truck loading will not be conducted when wind speeds exceed 25 mph. Wind screens will be installed on all fences along the site boundary as needed. Air monitoring to measure total particulate levels in the work area will be performed upwind and downwind as specified in the Dust Control Plan. Dust monitoring records will be maintained and submitted to DPH SAM. Work will shut down if dust (particulate) concentrations exceed specified limits. A community hotline telephone number will be posted at the site and on the fence where it will be visible to the community. The DCP appears to meet Article 22B requirements.

#### Maher Program Activities

**Designs for the methane mitigation system should be submitted to DPH SAM at least one month prior to installation.**

An Activities and Use Limitation-type deed restriction will be required for this property because contaminated soil, groundwater and methane gas remain in the subsurface. The deed restriction should be recorded in the property title. The deed restriction is to ensure that current and future developers and owners are aware of residual contaminants, the methane mitigation system and required operation and maintenance of the cap and methane mitigation system. The deed restriction shall include:

- a. A copy of the site mitigation plan including amendments and addenda
- b. A copy of the environmental health and safety plan
- c. A copy of the methane mitigation system design
- d. A copy of the methane mitigation system and capping system operations and maintenance (O&M) manuals.

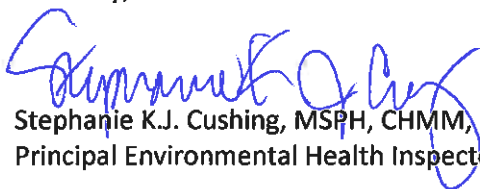
- e. Identify the position responsible for system inspections and maintenance, the person or position authorized to approve any needed system modification or repairs, and periodic testing for vapors and reporting to DPH SAM.

A draft deed restriction will be emailed to you. Minor modifications to this document may be considered by DPH SAM and the SF City Attorney. Modifications to the indemnification section are not accepted. DPH SAM and the SF City Attorney must accept the final wording of the Deed Restriction. The Deed Restriction must then be recorded by the property owner or their representative, with the City and County of San Francisco Assessor-Recorder Office.

DPH SAM will consider issuing a final No Further Action Letter upon review and acceptance of the final project report, submittal of documents verifying filing of the deed restriction and receipt of payment of any outstanding invoices. The SF DPH SAM case will be considered completed and closed (with continued compliance with the deed restriction) upon issuance of the No Further Action Letter.

Should you have any questions or wish to discuss details of the work plan, please contact Elyse Heilshorn at (415) 252-3885 or [elyse.heilshorn@sfdph.org](mailto:elyse.heilshorn@sfdph.org), or Stephanie Cushing at (415) 252-3926.

Sincerely,



Stephanie K.J. Cushing, MSPH, CHMM, REHS  
Principal Environmental Health Inspector

cc: Jeanie Poling, SF Envir Planning  
Edward Sweeny, SF DBI  
Veronica Tiglao, LTR

