Residential Sound Reduction Program (RSRP) for Helicopter Operations: Program Basics

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Overview

The UCSF Medical Center at Mission Bay, an integrated hospital complex opened on February 1, 2015 serving children, women, and cancer patients. Comprised of 289 inpatient beds and outpatient services, the medical center includes a children’s hospital, women’s specialty hospital, and a hospital for cancer patients.

The helipad provides more immediate access for the most critically ill children and women with serious pregnancy complications. Patients are transported from other hospitals that are not able to provide the resources, level of care, and numbers of pediatric specialists available at UCSF Benioff Children’s Hospital. We estimate an average of 1.4 transports per day. The primary flight path will be from the east over the bay. To address the potential impact of helicopter noise resulting from the helipad use, UCSF has developed the Residential Sound Reduction Program (RSRP) in consultation with the community. See the 2009 RSRP Community Process Summary for information about this community process.

For more information about the UCSF Medical Center at Mission Bay and the helipad, please see go to www.ucsf.edu/childrens-helipad

Measuring Potential Impact

The UCSF Medical Center at Mission Bay Environmental Impact Report (EIR) included analysis of helicopter noise using two key metrics:

- **Community noise equivalent level (CNEL)** considers a 24-hour period. The Federal Aviation Administration (FAA) uses 65 dB CNEL to identify impact areas near airports. Using this metric, the area of potential impact for the UCSF helipad is largely contained on the hospital site and the UCSF research campus, and includes no neighboring residences.

- **Single event noise exposure level (SENEL)** relates to a single event such as helicopter arrival or departure. In most instances, the area of potential impact (95 dB SENEL) remains on the hospital site. However, for only the noisiest helicopter model, when tested in 2007, this area extended about one block south of the site to 18th Street, generally between 3rd and Indiana Streets.

Following FAA regulations, airports use CNEL (24-hour average) metric to determine noise impact. Most hospitals surveyed by UCSF have not studied noise impacts. Of peer hospitals and Northern California hospitals surveyed, only UC Davis Medical Center has offered nominal compensation for sound insulation—using the 65 dB CNEL contour.
Out of concern for nearby neighbors, UCSF has chosen to use the SENEL metric as a basis for this program, going above and beyond standards and requirements to address potential noise effects.

Elements of the Residential Sound Reduction Program for Helipad Operations

Start-up Period

1. During the first eight weeks of operations, UCSF will address noise complaints, if any, by revising helicopter operations where feasible. If helicopter activity does not reach the expected average of 1.4 transports per day during the start-up period (40 per month), the start-up period will be extended to a maximum of 12 weeks.

2. At the end of the start-up period, UCSF will conduct a test flight and redraw the 95 dB SENEL (single-event) RSRP noise contour to reflect the noise environment that exists at that time. In addition, UCSF may take measurements during the course of the start-up period to supplement the data.

Qualifications

3. Property is located in the blocks within or touched by the redrawn 95 dB SENEL (single-event) RSRP noise contour.

4. Property is a legal residential or live/work unit, as of the date of helipad approval by Caltrans Aeronautics (September 18, 2013).

5. Noise level in interior sleeping area is at or greater than 80 dB SENEL with windows closed, as measured by UCSF’s sound consultant. (If unit is a loft with no separate sleeping area, entire unit will be considered a sleeping area.)

Implementation

6. UCSF sends notification about the RSRP to residential property owners in the blocks within or touched by the redrawn 95 dB SENEL RSRP noise contour, plus 2 blocks beyond the contour.

7. Property owners have 12 months after the date of notification about the RSRP to apply for the program (UCSF will send a reminder to those notified at least 3 months before the end of the application period).

8. UCSF determines if property meets qualifications.

9. UCSF will compile, for property-owner reference, acoustical specifications identifying standard acoustical installations, such as acoustical windows and doors.
   a. If a property qualifies for the RSRP, UCSF consultants will contact the property owner to schedule a time to conduct noise measurements in sleeping areas. UCSF consultants will
also assess the types and dimensions of the windows and doors, room dimensions and ventilating systems.

10. Qualified UCSF consultant recommends sound reduction measures in sleeping areas, which may include:
   - Standard acoustical windows;
   - Standard acoustical doors;
   - Weather stripping around doors and other openings;
   - Insulate or double pane skylights;
   - Ventilation improvements.

11. Property owners will be required to get three estimates from a list of approved vendors. Each estimate will include the cost of recommended acoustically designed sound reduction measures in sleeping areas, which includes labor and materials costs, permit fees, and City inspections.

12. UCSF pays qualifying property owner amount of the lowest estimate:
   - Costs will be based on “like-for-like”, that is, for replacement of existing materials similar in quality or appearance;
   - Qualifying property owners who have existing vinyl or aluminum windows can be given a choice of vinyl or aluminum and color options;
   - San Francisco Planning Code requirements within historic districts or regarding historic structures will apply. Wood windows may be required. Related costs will be included in the estimate.

13. UCSF will establish an ad hoc working group of neighbors to develop a dispute and mediation process.

14. Qualifying property owner, on her/his behalf and on behalf of tenants and future property owners, releases UCSF from future claims for UCSF helicopter noise at the property; this release shall be in the form of a permanent easement in exchange for compensation per item #12 above. The easement may be modified by written agreement executed by both parties.

15. Qualifying property owner is responsible for implementing acoustically designed sound reduction improvements.
Flight Paths for Helicopters using the Helipad

- There will be no arrivals from or departures to the south toward Dogpatch neighborhood residences.
- Primary arrival and departure route – helicopter arrives from the east and departs to the east over the Bay.
- Alternative departure routes – helicopter arrives from the east and departs to the north before turning east; or helicopter arrives from the east and departs to the west before turning north and then east.
• Secondary arrival and departure route – helicopter arrives from the east and departs to the west; used only in unusual circumstances when wind patterns require departure to the west.

Additional Program Elements

• Limit landings to critically ill patients where time is of the essence
• Limit landings to patient transfers from other hospitals
• Require UCSF physician approval for helicopter transport
• Prepare a Helicopter Operations Plan that requires UCSF to:
  o Use flight paths described in EIR, unless diversion necessary for safety
  o Use primary approach/departure path as much as feasible
  o Use alternate and secondary flight paths only if necessary for safety
  o Contracts with air medical companies will require pilots be trained about flight paths
  o Maintain a log of UCSF helicopter activity
• Respond to and investigate noise complaints
• Establish a UCSF committee, including community members, to address UCSF helicopter noise issues.

Next Steps

If your property is located within the redrawn RSRP sound contour zone, you may be eligible for the program. Only the legal owner(s) of a residential property within the official RSRP 95 dB SENEL RSRP sound contour from the helipad (as determined by UCSF) is qualified to submit this application for the UCSF RSRP in accordance with the program. Completing the application does not ensure eligibility for the program or payment for improvements. The application will be available June 1, 2015.

UCSF will be conducting outreach on the helipad and the RSRP Program Basics to provide updates during the first year of helipad operations. The best way to make sure that you receive notice of these meetings is to be on our Mission Bay email notification list. If you would like to be on a UCSF email notification list, please email community@cgr.ucsf.edu, specifying the campus site(s) of interest: Parnassus, Mission Bay, Laurel Heights, Mount Zion, San Francisco General Hospital.

If you do not have access to the internet and would like additional information currently available on our website, please contact UCSF at 415.476-3024.