

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

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4150 Clement St. (138),
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Subject: Draft Environmental Impact Statement (DEIS), San Francisco Veterans Affairs Medical Center (SFVAMC) Long Range Development Plan (LRDP), San Francisco, California (CEQ # 20120279)

Dear Mr. Federman:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. Our detailed comments are enclosed.

The Draft Environmental Impact Statement (DEIS) evaluates the impacts of the San Francisco Veterans Affairs Medical Center (SFVAMC) Long Range Development Plan (LRDP). The SFVAMC LRDP involves retrofitting existing buildings to the most recent seismic safety requirements and the development and construction of additional building space, including patient care buildings, research buildings, business occupancy buildings, and parking structures to meet the needs of San Francisco Bay Area and Northern California Coast veterans over the next 20 years.

Based on our review, we have rated the DEIS's Proposed Action as Environmental Concerns – Insufficient Information (EC-2) (see enclosed "Summary of Rating Definitions"). It is not clear that all reasonable alternatives have been evaluated for the long-term projects since no alternative selection criteria are identified in the DEIS. Additionally, we have concerns regarding construction noise impacts, and request additional information on noise, aesthetics, air quality, stormwater management, and transportation.

EPA appreciates the opportunity to review this DEIS. When the Final EIS is released for public review, please send one copy to the address above (mail code: CED-2). Please note that, as of October 1, 2012, EPA Headquarters no longer accepts paper copies or CDs of EISs for official filing purposes. Submissions on or after October 1, 2012, must be made through the EPA's new electronic EIS submittal tool: e-NEPA. To begin using e-NEPA, you must first register with the EPA's electronic reporting site - https://cdx.epa.gov/epa_home.asp. If you have any questions, please contact me at (415) 972-3521, or contact Karen Vitulano, the lead reviewer for this project, at 415-947-4178 or vitulano.karen@epa.gov.

Sincerely,

/s/

Kathleen Martyn Goforth, Manager
Environmental Review Office (CED-2)

Enclosure: Summary of EPA Rating Definitions
EPA's Detailed Comments

cc: Brian Aviles, Golden Gate National Recreation Area (GGNRA)

Purpose and Need and Alternatives

The range of alternatives evaluated in the Draft Environmental Impact Statement (DEIS) is limited. In addition to the Proposed Action (Alternative 1), the DEIS evaluates Alternative 2, and the required No Action Alternative. The near-term projects for Alternatives 1 and 2 are identical and evaluated at a project level; the long-term projects are evaluated at a programmatic level and differ only in the location of a new ambulatory care center and the inclusion of an additional research building in Alternative 2.

No criteria for evaluating potential alternatives against the purpose and need are identified in the DEIS. The DEIS states that the San Francisco Veterans Administration Medical Center (SFVAMC) has identified a deficiency of 589,000 square feet of building space needed to adequately serve San Francisco Bay Area and North Coast veterans through the year 2030 (p. 1-3). This would appear to offer a criterion for screening potential alternatives, yet it does not appear to have been so used, since the square footage under the Proposed Action totals 455,600 gross square feet. Alternative 2 has an additional research building as well as a larger ambulatory care center, both located at Mission Bay, and totals 955,600 gross square feet, well over the identified deficiency.

It is not clear why alternatives locating other facilities at Mission Bay or other off-site locations were not deemed feasible. The DEIS does not identify the benefits of locating all facilities on the Fort Miley campus under the Proposed Action, nor the feasibility of locating some functions, such as research, administrative or educational functions, offsite. Identification of these factors could have provided the information needed to determine whether all reasonable alternatives have been evaluated. Providing planning criteria would also help the reader understand what factors the decision-maker will use in making the decision. For example, since the Proposed Action under Alternative 1 does not meet the 589,000 square foot space deficiency identified, it is not clear whether this alternative would meet the goals of serving veterans well into the future, as identified in the DEIS' Purpose and Need statement (p. 1-4).

We understand, based on personal conversation with VA staff, that this EIS was prepared in response to litigation and a subsequent settlement agreement signed by the VA and a neighborhood group. It is common practice for a NEPA document to disclose such legal history.

Recommendation: We recommend providing additional information in the Final EIS regarding the criteria used to screen potential alternatives. If alternatives other than those identified in the DEIS would meet these criteria, they should be considered and discussed.

Clarify the nature of decision-making at this stage. We also recommend including a brief discussion of the history that lead to the development of the EIS, including a discussion of the settlement agreement and if/how its terms are relevant to the actions identified in the DEIS.

Construction Noise Impacts

Construction noise impact assessment

The DEIS predicts substantial noise increases, especially to on-site receptors, during the construction phase of the near-term projects. For on-site receptors, exterior construction noise could reach as high as 84.6 A-weighted decibels (dBA) equivalent sound level (Leq) (1-hour), which is 20 dBA in excess of existing noise levels (p. 3-10-15). The DEIS utilizes, as a significance threshold for on-site receptors, the EPA-recommended noise levels to protect public health and welfare with an adequate margin of safety (p. 3.10-13), and presents these levels in Table 3.10-5, which indicates that outdoor residential or other areas should be less than or equal to 55 dB Leq₂₄ (24 hours) or 55 dB day-night average (DNL) to avoid annoyance and interference with outdoor activity. With the predicted 84.6 dBA Leq 1-hour noise level for on-site receptors, the document concludes that the potential exists for on-site receptors to be exposed to 24-hour (DNL) noise levels in excess of the noise levels established by EPA, and the impacts would be potentially adverse (p. 3.10-15). The predicted noise level is expressed in Leq (1 hour) however, so there is some uncertainty in comparing it to the 24-hour averaging metric of the significance criterion (DNL or Leq₂₄).

It is not clear why noise levels at off-site receptors were not assessed against the same EPA-recommended levels that were used as significance criteria for on-site receptors. Instead, the DEIS utilizes the City of San Francisco's Noise Ordinance sound level for construction equipment as the significance criterion for off-site receptors during the construction phase. The SF Noise Ordinance (Section 2907 of the Police Code) specifies that construction equipment must not exceed 80 dBA Leq when measured at a distance of 100 feet. The DEIS estimates the noise levels at nearby receptors to be 73.8 dBA Leq (1 hour) for the Proposed Action and, therefore, concludes that impacts to off-site receptors would be minor (p. 3.10-16). It is not clear whether the potential also exists for the off-site receptors to be exposed to 24-hour (DNL) noise levels in excess of the noise levels established by EPA, as is stated for on-site receptors.

The locations of the on-site and off-site predicted noise levels are not identified. For off-site receptors, page 3.10-16 states that existing residential structures are located approximately 175 feet south of the anticipated limits of construction. Page 3.10-21 states that the shortest distance between the proposed locations of Phase I and II components and off-site receptors is 100 feet. Nevertheless, the predicted off-site noise level of 73.8 dBA Leq is substantially greater than the existing ambient daytime noise levels in the project vicinity, which range from 51.8 – 62.2 dBA Leq (Table 3.10-4). An increase of 10 dBA is subjectively heard as a doubling of loudness. While construction noise is temporary, the project is expected to continue for 32 months for short-term projects (p. 2-4), and an additional 45 months (23 plus 22 - p. 3.13-34) for the Proposed Actions' long-term projects – a total of approximately 6.4 years. When construction activity lasts for years, the impact on the community might be viewed in terms of a long-term noise source. Because of this, disclosure of noise impacts in the form of additional measures would be helpful to reveal the context and intensity of this impact and to inform mitigation.

Recommendation: Provide noise level estimates in the same units as the significance criteria being used. Explain why impacts to off-site receptors are not evaluated against the same criteria as on-site receptors. Discuss additional noise thresholds, such as the noise levels identified in the

VA's Temporary Environmental Controls¹, and the noise levels agreed to by the VA in the Settlement Agreement². Consider discussing predicted noise impacts in terms of community response (e.g. annoyance), e.g., by relating them to the ISO 1996-1:2003 standard that characterizes the effects of noise on people, or by other measures of annoyance. Because noise impacts will occur over a period of years, the VA should consider comparing noise predictions to thresholds used for long-term noise sources, such as those identified in the 1980 Federal Interagency on Urban Noise (FICUN) "Guidelines for Considering Noise in Land Use Planning and Control".

Clarify the location of the predicted noise levels for on-and off-site receptors. If noise predictions were modeled for other locations, identify them in the FEIS (for example, include a table for construction noise predictions for different locations, similar to Table 3.10-4 used for ambient noise). If there is a supporting noise analysis document, include it as an appendix to the FEIS so assumptions used in the analysis are disclosed.

Noise impacts to children

The DEIS identifies Executive Order 13045 - Protection of Children from Environmental Health Risks and Safety Risks, and its requirement, to the extent permitted by law and appropriate, that federal agencies make it a high priority to identify and assess environmental health and safety risks that may disproportionately affect children (p. 3.11-6); however, the DEIS does not discuss construction noise impacts, which are expected to last for years, on children in the on-site child care center.

A 2007 review article³ that summarizes studies from the National Library of Medicine database on the adverse health effects of noise concludes that children are particularly vulnerable to noise interference with spoken communication, and that the evidence is strong enough to warrant monitoring programs in schools and elsewhere to protect children from noise exposure.

Recommendation: Disclose construction noise impacts to children in the on-site child care center, including potential health impacts and impacts to learning. Identify potential mitigation measures, as required by 40 CFR 1502.16(h). Clarify whether children in the child care center use outdoor areas on the campus.

Noise mitigation

The DEIS states that construction activities would adhere to the requirements for noise control outlined in VA Specification Section 01568, "Environmental Protection" which includes such requirements as providing sound-deadening devices on equipment, using shields or other physical barriers to restrict noise transmission, providing soundproof housings or enclosures for noise-producing machinery, and monitoring construction noise levels once a week while work is being performed such that construction noise may exceed 55 dBA. Construction activities would mainly be limited to between the hours of 7:30 a.m. and 6:00 p.m. and would abide by City of San Francisco noise ordinances, unless otherwise permitted. The DEIS also states that the project will comply with the VA Specification Section 015719,

¹ This states that repetitive impact noise on the property shall not exceed specific dB limitations.

<http://www.cfm.va.gov/TIL/spec/015719.doc>.

² The Settlement Agreement states that noise levels associated with the finished Building 16 Annex, measured at the southern property line, will not exceed 50 dBA from 10 p.m. to 7 a.m. and 55 dBA from 7 a.m. to 10 p.m.

³ Goines, Lisa RN and Hagler, Louis MD. 2007. "Noise Pollution: A Modern Plague", *Southern Medical Journal*: Volume 100 - Issue 3 - pp 287-294.

“Temporary Environmental Controls” (p. 4-43). This document directs the VA to “minimize noise using every action possible”, but it is not clear if the measures identified under VA specification 01568 include all possible measures. The DEIS identifies two mitigation measures for noise impacts, both for onsite receptors: the VA will monitor construction noise and implement attenuation measures if levels are measured above 55 dBA DNL (p. 3.10-15); and the VA will employ a noise disturbance coordinator to address noise complaints received by hospital or clinic staff (p. 3.10-16). No monitoring or noise complaint process is identified for off-site receptors, the closest of which is 100 feet from the proposed construction locations (p. 3.10-21).

The construction noise impact assessment assumes that, due to space restrictions at the existing SFVAMC Fort Miley Campus, the amount of construction that could occur simultaneously would be limited. Therefore, for this analysis, it was assumed that no more than one loader and one dozer would operate simultaneously on-site during any phase (p. 3.10-15). It is important to verify predicted noise levels during construction, both on and off-site, to confirm that these assumptions were appropriate.

Recommendation: The FEIS should clarify whether the requirements for noise control outlined in VA Specification Section 01568 (p. 3.10-15) include every action possible to minimize noise impacts as required in VA Specification Section 015719 or whether additional measures are available. Because noise was an issue raised by the public, we recommend that a noise monitoring and mitigation plan be prepared. The plan should identify all mitigation measures to which the VA is committing as part of the project, as well as construction noise monitoring efforts and thresholds that would be used to trigger mitigating actions. We recommend that off-site noise levels be monitored as well as on-site levels to confirm modeling assumptions used to predict noise impacts. The DEIS states that the VA requires monitoring every 5 days (p. 3.10-10) but it does not indicate where monitoring would occur.

The following are possible additional noise mitigation measures that could be considered:

- Prohibit unnecessary idling of internal combustion engines.
- Avoid staging of construction equipment within 200 feet of residences and locate all stationary noise-generating construction equipment, such as air compressors and portable power generators, as far as practical from existing noise sensitive receptors.
- Utilize "quiet" air compressors and power equipment by electricity rather than using portable generators.
- Route all construction traffic to and from the project site via designated truck routes.
- Notify residents adjacent to the project site of the construction schedule in writing.
- Designate a "noise disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. Post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule.

Visual Resources

The DEIS's assessment of impacts on aesthetics (views and visual character) is limited, despite the interest expressed by the public on this issue during scoping, including comments received by the National Park Service (Appendix A). The project area is surrounded on three sides by the Golden Gate National Recreation Area, and the DEIS acknowledges that recreational areas are considered to have relatively high sensitivity to visual impacts (p. 3.1-16). The fourth side borders a residential area, which the DEIS identifies as having moderate sensitivity to visual impacts.

While many EIS concerns can be measured in quantitative terms, visual impacts are assessed largely by qualitative judgments. Common tools used in visual impact assessment include models, perspectives and photomontages as viewed from specific points in the landscape (viewpoint analysis). The DEIS appears to incorporate this analysis, since it includes photographs of existing viewpoints, but it does not provide computer simulated views from these same viewpoints that incorporate project structures. Instead, the DEIS relies on text descriptions of likely view impacts and an aerial rendering of new building massing and location. Without visual simulations in the viewpoint analysis; however, support for conclusions that visual impacts are minor for high sensitivity land uses is limited.

In addition, the impact assessment does not appear to account for the effects on visual character and aesthetics from the removal of 70 trees⁴. The DEIS does not identify where these trees are located, and it is unclear whether these trees currently function as visual screens or whether their removal will significantly affect aesthetics and views.

Recommendation: EPA recommends that, to the extent feasible, the visual impact assessment be improved in the FEIS to include visual simulations of new project features from the photographed viewpoints contained in the DEIS. Ensure that the 70 trees that are proposed for removal have been considered in the visual impact assessment.

Air Quality

Air quality impact assessment and mitigation measures

The DEIS describes the health risks associated with diesel particulate matter (p. 3.2-17) and includes a health risk assessment that calculated cancer risk well below the 10 in one million threshold for offsite receptors (p. 3.2-24). The receptors that were chosen included open park areas that could allow for extended recreation, and residential structures that could have windows open for ventilation. The health risk assessment did not include on-site receptors. Based on conversations with VA staff, we understand that this was due, in part, to the fact that on-site receptors would be located almost entirely indoors and, with the high air filtration requirements placed on hospitals, quantitative modeling of on-site receptors was not considered necessary. The DEIS states that temporary environmental controls will be employed during construction activities and will be enumerated as part of construction specifications (p. 3.2-32). It identifies generic mitigation measures for air quality that are not specific to the Fort Miley site (p. 3.2-33).

Recommendations: We recommend including, in the FEIS, the above information regarding the rationale for not including on-site receptors in the health risk assessment. Confirm that the

⁴ The DEIS indicates that under the Proposed Action, 65 trees will be removed because of their fall and limb breakage potential (p. 2-6), and that an additional 5 trees will be removed from the eastern edge of the campus (p. 3.15-16).

children in the private on-site child care center were considered in the model assumptions and appropriately covered in the air quality impact assessment.

We recommend that construction mitigation measures be more specifically identified in the FEIS. We recommend preparing a Construction Emissions Mitigation Plan and adopting this plan in the Record of Decision. Identify all commitments to reduce construction emissions and update the air quality analysis to reflect additional air quality improvements that would result from adopting specific air quality measures.

To reduce impacts associated with emissions of particulate matter (PM) and other toxics from construction-related activities, we recommend:

- Maintaining and tuning engines per manufacturer's specifications to perform at California Air Resources Board (CARB) certification levels, where applicable, and to perform at verified standards applicable to retrofit technologies.
- Employing periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained. CARB has a number of mobile source anti-idling requirements. See their website at: <http://www.arb.ca.gov/msprog/truck-idling/truck-idling.htm>.
- Prohibiting any tampering with engines and requiring continuing adherence to manufacturer's recommendations.
- If practicable, leasing new, clean equipment meeting the most stringent of applicable Federal⁵ or State Standards⁶. In general, commit to the best available emissions control technology. Tier 4 engines should be used for project construction equipment to the maximum extent feasible⁷. Lacking availability of non-road construction equipment that meets Tier 4 engine standards, commit to using CARB and or EPA-verified particulate traps, oxidation catalysts and other appropriate controls where suitable to reduce emissions of DPM and other pollutants at the construction site.
- Where appropriate, using alternative fuels or power sources such as natural gas or electric.
- Developing a construction traffic and parking management plan that minimizes traffic interference and maintains traffic flow.
- Locating construction equipment and staging zones away from sensitive receptors and fresh air intakes to buildings and air conditioners. The DEIS states that construction staging would be in a previously disturbed area (p. 2-3, 2-9) but does not indicate where.

For fugitive dust source controls, we recommend:

- Stabilizing open storage piles and disturbed areas by covering and/or applying water or dust palliative where appropriate, on both inactive and active sites, and during workdays, weekends, holidays, and windy conditions.

⁵ EPA's website for nonroad mobile sources is <http://www.epa.gov/nonroad/>.

⁶ For ARB emissions standards, see: <http://www.arb.ca.gov/msprog/offroad/offroad.htm>.

⁷ Diesel engines < 25 hp rated power started phasing in Tier 4 Model Years in 2008. Larger Tier 4 diesel engines will be phased in depending on the rated power (e.g., 25 hp - <75 hp: 2013; 75 hp - < 175 hp: 2012-2013; 175 hp - < 750 hp: 2011 - 2013; and \geq 750 hp 2011- 2015).

- Installing wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions.
- When hauling material and operating non-earthmoving equipment, preventing spillage and limiting speeds to 15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph.

General conformity – minor comment

The DEIS (p. 3.2-20) cites the general conformity rule incorrectly. The general conformity rule was revised April 5, 2010 (75 FR 17257). The EPA deleted the provision in 40 CFR 93.153 that required Federal agencies to conduct a conformity determination for regionally significant actions where the direct and indirect emissions of any pollutant represent 10 percent or more of a nonattainment or maintenance area's emissions inventory for that pollutant.

Stormwater Pollution and Management

The DEIS discusses the stormwater runoff requirements for federal projects under Section 438 of the Energy Independence and Security Act (EISA) and states that they would be applicable to the project site (p. 3.8-11), but it does not describe how the project would comply with EISA. Page 3.14-13 states that stormwater is currently collected in gutters and drainpipes and conveyed to the City's combined sewer interceptors and that this method of discharge would generally continue with implementation of the project (p. 3.14-13). The DEIS also states that new facilities would include sustainable features such as green roofs and bioswales, would be designed to minimize stormwater runoff (p. 2-6), and that best management practices (BMPs) may include: bioretention and rain gardens; rooftop green roof gardens; sidewalk storage; vegetated swales, buffers, and strips; rain barrels and cisterns; permeable pavement, and soil amendments (p. 3.8-16). The DEIS does not specify which or how these techniques will be utilized. Land is restricted at the Fort Miley site; some low-impact development (LID) techniques, such as rain gardens and other bioretention features, require a space commitment and, therefore, should be integrated into siting decisions and development plans.

Recommendations: The FEIS should provide more details on how the project intends to comply with EISA Section 438. Indicate which LID features would be utilized, and for bioretention features, where they would be located.

Transportation and Parking

The DEIS indicates that the net addition of 263 spaces under the Proposed Action would not meet the long term parking demand of 730 spaces under 2023 conditions (p. 3.13-38). The DEIS concludes that drivers would seek alternatives and shift to other modes of travel and the parking impacts would be minor. The DEIS does not identify mitigation measures to help ease the parking burden. The DEIS states that the Fort Miley campus currently contracts with a major transportation service to provide free bus and shuttle service to staff and patients daily from major transportation hubs (p. 3.13-8); however, no increased shuttle service is proposed as part of the Proposed Action. Additionally, the DEIS states that the Proposed Action would generate new bicycle trips (p. 3.13-32), but no information regarding current bicycle facilities/parking is included, nor are new bicycle facilities proposed under the Proposed Action.

During the construction phase for short term projects, the Proposed Action would eliminate 214 existing parking spaces and replace them with a 477-space parking structure (p. 3.13-32). It is not clear whether

there would be a period when the existing parking spaces are eliminated and the parking structure is not yet available.

Recommendation: EPA recommends increasing the shuttle service under both short-term and long-term projects to help reduce the parking burden on the surrounding neighborhood. Identify current bicycle transportation facilities on the Fort Miley campus and whether new bicycle facilities/parking are proposed.

In the FEIS, clarify whether there would be a period when existing parking spaces would be eliminated before the parking structure is available and if so, how long that period would be and whether those impacts have been disclosed. If additional impacts are identified, additional mitigation measures may be warranted.