

DEPARTMENT OF TRANSPORTATION

DIVISION OF AERONAUTICS – M.S.#40

1120 N STREET

P. O. BOX 942873

SACRAMENTO, CA 94273-0001

PHONE (916) 654-4959

FAX (916) 653-9531

TTY 711



FEB 1 2008

*Flex your power!
Be energy efficient*

February 7, 2008

Mr. Dan Frazee, Director
Airport Noise Mitigation
San Diego County Regional Airport Authority
P. O. Box 82776
San Diego, CA 92138-2776

Dear Mr. Frazee:

In August 2007, the Department of Transportation (Department) received your submission of a proposed Noise Monitoring Plan (Plan) pursuant to the State's Airport Noise Standards (California Code of Regulations Title 21, Section 5000 et seq.) for the San Diego International Airport. On October 4, 2007, Department staff met with you and Garret Hollarn to discuss areas of the Plan that need clarification or supplemental documentation. Following is a synopsis of what we discussed (all quotes are excerpts from the Noise Standards):

Section 5070

1. Memo states data is from Noise Monitoring Terminal (NMT) #18, but data is from NMT #1.
2. Table needs further explanation. For instance, it is not readily clear the data is from NMT #1 or what information is being presented in the first column. Table shows noise levels for 24 hours in a day but does not include "identification of the hour."

Section 5072

1. Memo refers to a previous submittal dated June 25, 2007, that the Department did not receive.
2. There is no assurance regarding obstructions within a conical space above the monitors as described in the regulation.
3. NMT sites "shall be chosen whenever possible, such that the [Community Noise Equivalent Level] CNEL from sources other than aircraft in flight is equal to or less than 55 [decibel] dB." Information in Section 5080.3(c)(1) shows CNEL from sources other than aircraft typically exceeds 55dB at the NMTs. Noise Standards Section 5001(i) requires a threshold level of 55dB (10dB below CNEL standard of 65 specified in Section 5012). When sources other than aircraft noise contribute to the CNEL, Section 5001(i) allows the Department to grant a waiver to increase the threshold noise level "where the airport proprietor can demonstrate that the accuracy of the CNEL measurement will remain within the required tolerance as specified in Section 5070," which is +/- 1.5dB (emphasis added). While the graphs are excellent illustrations of the need for higher threshold settings, they do not demonstrate accuracy will remain within the required tolerance.

Section 5073

✓ Map of "Current SDIA Noise Monitor (RMTs) Locations" does not have a NMT #5 even though noise events for NMT #5 are used to support Section 5080.3(c)(3)(A)1 ("Daily HNLA Summary" for July 16, 2007).

Section 5075

✓ Amendments to the Noise Standards in 1990 renumbered and moved section entitled "Variances" to Section 5050, which is not applicable to noise monitoring plan approvals.

✓ **Section 5080.3(b)(1)**

Certificates do not document conformance with amendments of ANSI S1.4A-1985.

Section 5080.3(b)(3)

✓ Supporting document entitled "Repeat of Linearity Test" identified in Harris Miller Miller & Hanson's "Summary Analysis of Technical Requirements for Title 21 Certification of SDCRAA's Airport Noise Monitoring System" is missing.

Section 5080.3(c)(1)

1. Comments regarding the August 8, 2007, memo entitled "Section 5080.3(c)(1) – Threshold Comparator" and accompanying graphs are in bullet 3 for Section 5072 above.
2. The July 23, 2007, memo entitled "Section 5080.3(c)(1) – Threshold Comparator" adequately addresses the requirement for an adjustable threshold level, but it does not demonstrate repeatability of threshold triggering.

Section 5080.5(b)

✓ Microphone specifications show humidity range of 1% to 98% relative humidity, but the Noise Standards require specific accuracy in the range of 5% to 100%.

We hope this synopsis is helpful. If you have questions, or would like to further discuss this matter, please do not hesitate to contact us at (916) 654-5203.

Sincerely,



ELIZABETH D. ESKRIDGE
Airport Environmental Specialist

SAN DIEGO COUNTY
REGIONAL AIRPORT AUTHORITY

P. O. BOX 82776, SAN DIEGO, CA 92138-2776
619.400.2405 619.400.2406 FAX WWW.SAN.ORG

August 8, 2007

Ms. Betsy Eskridge
Department of Transportation
Division of Aeronautics – M.S. #40
P.O. Box 942873
Sacramento, CA 94273-0001

Subject: State Certification for San Diego International Airport Noise Monitoring Plan

Dear Betsy,

The San Diego County Regional Airport Authority (SDCRAA), as owner and operator of San Diego International Airport (SDIA), hereby submits our proposed Noise Monitoring Plan pursuant to California Code, Title 21, Subchapter 6, and Article 3 (Title 21). As required in paragraph 5033, the locations of SDIA's twenty-four (24) Remote Noise Monitoring Terminals in relation to our latest State accepted 65db CNEL aircraft noise exposure contour are shown in an attached diagram. Lochard Corporation has upgraded SDIA's Airport Noise and Operations Monitoring System (ANOMS) with their latest hardware and software, ANOMS8. The Lochard-provided remote noise monitors are EMU2100's with 41DM-2 G.R.A.S. Outdoor Microphones.

SDCRAA also submits background information and test results that show compliance with relevant Articles of Title 21. The SDCRAA Noise Mitigation Department has assembled from the system provider, Lochard Corporation, of 1050 Fulton, Suite 213, Sacramento, CA 95825, documentation to support CALTRANS- Division of Aeronautics' acceptance of the EMU 2100s in use at SDIA for this noise monitoring plan. The SDCRAA Noise Monitoring Department has also verified in the field that all microphone installations meet Title 21 requirement (Section 5072) that requires microphones "... be placed 20 feet above the ground level, or at least 10 feet above neighboring roof tops, whichever is higher and has a clear line of sight to the path of aircraft in flight."

SDCRAA believes that the system clearly meets or exceeds the requirements of Title 21, as validated by the enclosed documentation and test results provided by the system provider, Lochard. Please contact me at (619) 400-2785 with any questions, clarifications or concerns.

Sincerely,


Dan Frazee
Director, Airport Noise Mitigation

Enclosure:

SDIA ANOMS8 State Certification Binder (replaces existing binder)



SAN DIEGO
INTERNATIONAL
AIRPORT

May 6, 1994

Ms. Danette M. Lake, Manager
Airport Noise Information Office
Port of San Diego
P. O. Box 488
San Diego, CA 92112-0488

Dear Ms. Lake:

This letter responds to your request for approval of your new Airport Noise and Operations Monitoring System (ANOMS) under the requirements in the Noise Standards (California Code of Regulations, Title 21, Section 5000 et seq.).

The quarterly report of noise monitoring filed by the County of San Diego for the fourth quarter of 1993, contains full documentation of the specific location of the 24 continuously operating Remote Monitoring Stations (RMS) for your system. That documentation originated from your office, and it satisfies the requirement for a monitoring system layout plan. The microphones used (the same as used for several years) meet the requirements of the Noise Standards.

The ANOMS specifications and performance tests for the central processing unit were also reviewed. The system is designed to meet the requirements of the State Noise Standards, and the performance tests indicate it is performing well within the required accuracy tolerances. The system is considerably more extensive than the minimum requirements of the Noise Standards.

This letter constitutes the approval by this Department of your monitoring plan (actual monitoring locations currently in place) and the new noise monitoring system (ANOMS) in accordance with Section 5043 of the Noise Standards.

Sincerely,

Richard G. Dyer
RICHARD G. DYER (ESKridge)
Airport Environmental Specialist