

January 30, 2012

Mr. Richard Smith, Division Chief  
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Gina Marie Lindsey  
Executive Director

Re: Van Nuys Airport Compliance with California Code of Regulations, Title 21,  
Subchapter 6, Noise Standards, Section 5012

Dear Mr. Smith:

Enclosed is the Van Nuys Airport (VNY) Title 21 Compliance Report documenting the attainment of a zero noise impact area pursuant to California Code of Regulations, Title 21, Section 5012. This report is a follow-up to the quarterly report for the Second Quarter 2010, which depicts the zero noise impact area within the 65 dB CNEL noise contour.

The changes in operations at VNY over the last few years have resulted in a smaller 65 dB CNEL noise contour especially compared to the Third Quarter of 1998, which was used to establish the VNY Soundproofing Program eligibility boundary. The sound insulation program is in its last phase to mitigate the remaining 53 dwellings within the program eligibility contour. The fact that the eligibility program boundary is far larger than the area contained within the measured quarterly noise contour provides a buffer for any possible future growth in the current noise impact boundary. This information is fully documented in the enclosed VNY Title 21 Compliance Report.

The variance application submitted by Los Angeles World Airports (LAWA) for VNY on June 3, 2011, indicates that zero airport noise impact area was achieved with the submittal of the quarterly report for the Second Quarter of 2010. LAWA believes this achievement makes the completion of the current variance application process unnecessary.

If you have any questions or concerns, please feel free to contact Scott Tatro or Kathryn Pantoja of my staff at (424) 646-6499 and (424) 646-6501, respectively.

Sincerely,

  
Gina Marie Lindsey  
Executive Director

GML:SMT:kp

Enclosures: Van Nuys Airport Report of Compliance with CCR Title 21,  
Subchapter 6, Noise Standards



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cc : Michael D. Feldman, Deputy Executive Director  
Jess Romo, Airport Manager, Van Nuys Airport  
Scott Tatro, Environmental Affairs Officer  
Phillip Crimmins, Airport Environmental Specialist, Caltrans

**Report of Compliance with  
California Code of Regulations  
Title 21, Subchapter 6  
Noise Standards**



**Van Nuys**

*Los Angeles*

*World Airports*

Los Angeles World Airports  
Environmental Services Division  
Noise Management Section

January 27, 2012

# **Van Nuys Airport Title 21 Compliance Report**

## **Background and Regulatory Requirements**

Van Nuys Airport (VNY) was designated a “Noise Problem Airport” by the County of Los Angeles in 1980 pursuant to the State of California Code of Regulations (CCR), Title 21, Airport Noise Standards (Airport Noise Standards), Section 5020. The proprietor of a noise problem airport is prohibited, in Section 5012 of the Airport Noise Standards, from operating an airport with a noise impact area, unless the airport has applied for or received a variance from the California State Department of Transportation (Caltrans). Since 1986, VNY has applied for or received variances to continue operating while having a noise impact area as defined by the Airport Noise Standards. In August 1988, Caltrans granted VNY the first variance from the Airport Noise Standards for a period of three years. Since that time, VNY has held a valid variance.

The Airport Noise Standards further require airport proprietors to develop and implement programs that will reduce the noise impact area of the airport to an acceptable degree and in an orderly manner over a reasonable period of time. For airports with residents living within the noise impact boundary, the standards require the airport to employ noise monitoring systems to measure and report the noise in the surrounding communities.

Los Angeles World Airports (LAWA), as the owner and operator of VNY, has established a permanent noise monitoring system, as well as many noise abatement procedures, programs and regulations over the years in an effort to minimize aircraft noise. To comply with the Airport Noise Standards, airports must achieve a zero noise impact area. The most effective way to attain this is to implement a land use mitigation program comprised of residential sound insulation and/or residential property acquisition, concurrent with the noise abatement policies, procedures and programs discussed below.

## **Measuring Airport Noise**

LAWA’s first noise monitoring system at VNY was established in 1976 to measure aircraft noise and to validate the location of the noise impact boundary, per the Airport Noise Standards. Permanent noise monitors were installed in 1982, and since that time the system has been expanded and upgraded to the current system – the Airport Noise and Operations Monitoring System (ANOMS) – that was certified for use by Caltrans in 2010. The upgrade of the noise monitoring system doubled the number of noise monitors from seven to fourteen at VNY. LAWA uses ANOMS to prepare the required quarterly reports that include the location of the noise impact boundary, the noise impact area, the measured daily CNEL values, as well as statistical data related to airport operations.

## **Noise Abatement Efforts**

In achieving a zero noise impact area, LAWA used a two-pronged approach: 1) reducing aircraft noise through noise abatement restrictions, procedures and programs, and requiring and encouraging operators to use newer, quieter aircraft, and 2). mitigating incompatible land uses via soundproofing.

LAWA established mandatory and voluntary noise abatement measures to comply with the Airport Noise Standards, as follows.

- Quiet Jet Departure Program
- No Early Turn Program
- Noise Abatement and Curfew Regulation
  - Partial Curfew
  - Non-Addition Rule
  - Noisier Aircraft Phase Out
- Helicopter and Route Deviation Program
- Run-Up Restrictions

Because the loudest of the jet operations have largely determined the extent of the noise impact boundary, it is clear that the formal restrictions on the loudest aircraft from operating at VNY, and particularly during the most noise sensitive hours of operations at night, have resulted in significant reductions in the noise impacted area. It is less clear that the informal noise abatement programs listed above have resulted in actual lower noise levels, although a formal study of the Quiet Departure Program for jets showed a measurable noise benefit as a result of that program implementation.

Despite these significant efforts to reduce noise at the source through the various noise abatement measures, there still remained a significant number of residential properties within the noise impact boundary at VNY. Therefore, for LAWA to realize its goal of a zero noise impact area, the mitigation of these residences through sound insulation was the key tool.

### **Sound Insulation Program**

In 1999, in accordance with Article 5 of the Airport Noise Standards, LAWA implemented a residential sound insulation program to reduce the VNY noise impact area, with the intent of eliminating all incompatible land uses within the noise impact boundary. LAWA modeled the VNY Residential Soundproofing Program after the existing LAX Soundproofing Program. LAWA has funded 100% of this program for VNY through the revenue budget and set forth an annual funding commitment of up to \$3 million based on budget availability.

LAWA chose to utilize the Third Quarter 1998 (3Q98) annual average 65 dB CNEL noise contour to establish the Soundproofing Program boundary. This allowed LAWA to implement the program based on a static group of identified residences, thereby avoiding the variation in program eligibility from quarter to quarter using the current quarterly noise contour. The VNY Soundproofing Program prioritized the mitigation of homes by working on the most impacted areas first then out to the lesser impacted areas.

The program was set up to reduce the noise impact area by providing sound insulation to residential dwelling units to achieve the interior noise level of 45 dB CNEL or lower in habitable rooms, in accordance with the Airport Noise Standards.

To report on the program and track the progress, LAWA created a Geographic Information System (GIS) database using the Los Angeles County Assessor's records. This information included property owner name, street address, land use description and whether or not the use was compatible under the Airport Noise Standards. Specific program research was done via land records, physical surveys and site visits to verify the information.

LAWA also set up a community office where the general public could obtain information on the soundproofing program. This community office included a showroom highlighting many of the products used in the sound insulation program. Eligible property owners were sent letters inviting them to attend an evening community outreach and presentation to facilitate participation in the VNY Soundproofing Program. Property owner were able to visit the community office during normal business hours (8:00am to 4:30 p.m.), and in some cases homebound property owner were provided an in-house presentation. A video of the program was also made available for viewing in an effort to reach all the eligible property owners. Throughout the program, LAWA staff was available to provide information in both English and Spanish.

During the program, three mailings were sent out to all eligible property owners inviting them to participate in the program. As a final effort, LAWA sent a letter by certified mail with the return receipt requested. This letter informed owners that their properties were eligible for the VNY Soundproofing Program and that they needed to respond within 30 days if they wanted to participate in the program as it was coming to an end. The letter further stated that failure to respond within 30 days would constitute their refusal to participate in the insulation program. This letter also contained information notifying the property owner that if this information was needed in Spanish it was available.

Based on the 3Q98 contour used for program eligibility, 1,048 single family or multi-family dwelling units were determined to be eligible for the program. Since 1999, LAWA has disbursed \$8,794,310 to sound insulate 726 dwelling units. On August 15, 2011, the LAWA Board of Airport Commissioners approved an additional \$1,133,000 to sound insulate 53 dwelling units, which represent the last group of incompatible land uses within the Soundproofing Program eligibility contour. This will bring the total sound insulated dwelling units to 779 at a cost of \$9,927,310. The property owners of 113 dwellings have been non-responsive or have expressed an interest in the program but did not sign up. Property owners for another 17 dwellings declined participation in the program. The remaining 139 units were determined to be ineligible due to either being vacant lots, commercial buildings, or multi-family residences that already meet the interior noise level of 45 dB in all habitable rooms as required by CCR Title 24.

All actions taken to mitigate incompatible land uses, obtain easements, and make a genuine effort are documented in the VNY Soundproofing Program files. Table 1 summarizes these actions and the results of the program implemented to achieve compliance with a zero noise impact area as defined by the Airport Noise Standards.

### **Achievement of a Zero Noise Impact Area**

Since 1998, the noise contour has decreased in size primarily due to a decrease in aircraft operations from 1998 to 2010 (551,747 to 335,156 operations) and a change in aircraft fleet mix to more new, quieter jet aircraft. The reduction in aircraft operations and noisier aircraft, as well as the continued implementation of various noise abatement procedures, such as the Fly Friendly and No-Early-Turn Programs, and formal restrictions including the VNY Curfew, the Non-Addition Rule, and the Noisier Aircraft Phase-out, has resulted in a much smaller noise impact boundary at VNY. Figure 1 depicts the decrease in the noise impact boundary from 3Q98 to the current 2Q10.

LAWA attained final compliance with the Airport Noise Standards through the residential sound insulation program since there are no other incompatible land uses (schools, hospitals, and churches/places of worship) within the noise impact boundary for VNY, which included the following efforts:

1. Acquisition of signed noise easements from residential property owners of dwellings built after January 1, 1989.
2. Sound insulation of residential dwellings to meet interior CNEL standard of 45 dB or less for single-family dwellings, apartments and condominium dwelling units constructed prior to January 1, 1989, including the installation of an air conditioning system.
3. Existence of an interior CNEL of 45 dB or less in all habitable rooms of multi-family dwellings, such as apartments or condominiums, as required under CCR Title 24 (CA Building Standards Code).
4. Implementation of genuine efforts to insulate residences, but the property owners declined to take part in the sound insulation program for reasons stated below.
  - No response from property owners to mailings and phone calls from soundproofing.
  - Failure to sign installation agreement.
  - Failure to sign participation agreement.
  - Failure to return certified mail receipt; owner could not be located even after extensive record search and door-to-door canvassing by LAWA staff.
  - Condominium association failed to respond and provide approval for homeowners to participate in program.
  - No response from property owners who signed certified mail receipt of notification letter – failure to act within the 30-day period of the invitation to participate in the soundproofing program.

The submittal of the Second Quarter 2010 (2Q10) quarterly report demonstrates LAWA's achievement of a zero noise impact area. Of the four residential dwellings within the 2Q10 65 dB Annual CNEL noise contour, one dwelling was mitigated through sound insulation and the two owners of the three remaining dwellings did not respond to certified mail receipts (final notification made 2/17/2010) as shown in Table 2.

As stated above, compliance with the Airport Noise Standards was accomplished through a reduction in both the noise impact area and the noise impact boundary. The VNY Soundproofing Program was the key method used to convert residential dwellings from incompatible to compatible land uses. The decrease in the size of the current noise impact boundary, along with the success and near completion of the Soundproofing Program using the 3Q98 contour, account for LAWA's ability to comply with the Airport Noise Standards.

Completion of the VNY Soundproofing Program using the 3Q98 Soundproofing Program eligibility boundary provides a sizable buffer for any possible future growth in the noise impact boundary at VNY. LAWA will continue to measure and report on aircraft noise pursuant to the requirements of the Airport Noise Standards.

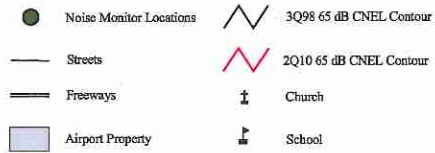
**Table 1. Summary of VNY Sound Insulation Program**

City	Incompatible Residential Dwellings	Sound Insulation		Declined	No Response		Not Subject to Title 21		Compatible Residential Dwellings
		726	53		108	No response to Mailings or Phone	124	Interior Noise Level <45 dB (Title 24 Compliance)	
Van Nuys	1048	Completed	To be completed	Failed to sign Installation Agreement	No response to Certified Notification within 30 days	Commercial Building			
				Substandard construction (not to code)	No response to Participation Agreement	Vacant Parcel			
<b>Total</b>	<b>1048</b>	<b>779</b>		<b>17</b>	<b>113</b>		<b>139</b>		<b>1048</b>

**Table 2. List of Compatible Residential Parcels within 2nd Quarter 2010 Noise Impact Boundary**

Block Address	LU Code	Land Use Type	Dwelling Units	Year Built	Title 21 Compliance	
16000 Gault St Van Nuys CA 91406	110 SFR		1	1948	No response to final Certified Notification 2-17-10	
7000 Sophia Ave Van Nuys CA 91406	110 SFR		1	1948	No response to final Certified Notification 2-17-10	
7000 Sophia Ave Van Nuys CA 91406	110 SFR		1	1948	No response to final Certified Notification 2-17-10	
7000 Hayvenhurst Ave Van Nuys CA 91406	126 APARTMENT		9	1959	Sound Insulated	





**Figure 1. Comparison of 2Q10 and 3Q98 Contours**

