

PUBLIC NOTIFICATION OF PUBLIC HEALTH RISKS UNDER THE AIR TOXICS "HOT SPOTS" PROGRAM

Why this notice:

A limited number of homes in your area are receiving this notice because Naval Air Station (NAS) North Island releases chemicals (air pollutants) to the atmosphere that are considered toxic by the State of California. Under a state law called the Air Toxics "Hot Spots" Information and Assessment Act of 1987, facilities that emit toxic air pollutants are required to study possible health effects from their emissions.

NAS North Island has prepared a report evaluating possible health effects resulting from estimated public exposures to the toxic air pollutants emitted from its facility. This report is called a public health risk assessment and is available at the Air Pollution Control District (District) for review.

This health risk assessment is based on estimated levels of these pollutants in the community, not on actual measurements of pollutant concentrations. Emissions from NAS North Island were estimated for 1989, 1993, 1998, and 2005. Computer models approved by the state were then used to estimate the concentrations of these pollutants in the air. The procedures used are designed to overstate potential pollutant levels to prevent public health risks from being underestimated. Therefore, your actual exposure to these contaminants may be less than the health risk assessment predicts.

What chemicals are emitted by NAS North Island?

The chemicals in the most recent health risk assessment (approved in 2009 based on 2005 emission inventory data that contribute to cancer risk include:

benzene (160 lbs/yr)
polycyclic aromatic hydrocarbons (34 lbs/yr), and
hexavalent chromium (0.4 lbs/yr).

Emissions of benzene are generated through operation of the Naval Exchange gasoline service station located near Alameda Blvd. Most of these emissions occur weekdays from 6:00 AM to 8:00 PM, Saturdays from 8:00 AM to 8:00 PM and Sundays from 8:00 AM to 6:00 PM. Emissions of polycyclic aromatic hydrocarbons are generated from fuel combustion in jet engine test cells that operate Monday through Saturday from 6:00 AM to 4:00 PM. Testing of jet engines is done periodically during these operating hours. Emissions of hexavalent chromium are generated from coating (use of paints and primers) and welding activity that occurs Monday through Friday, 6:00 AM to 11:00 PM. Emissions from these sources are released periodically during their operating schedule and often significantly reduced with proper management and disposal practices.

What are the potential health effects?

The health risk assessment estimates that people in the area could face some increased risk of developing cancer due to NAS North Island emissions. The estimated increased risk could range from zero to 14 in a million. The higher risk estimate is for a hypothetical person exposed continuously to the highest concentrations of these pollutants for a lifetime.

The risk assessment study is intended to overestimate risks for the public so that decisions will be more likely to protect children and individuals more sensitive to toxic air pollutants. However, the study does not include exposure to toxic air pollutants for which there are no established health effects values, nor the cumulative health effects from other nearby air pollution sources. These sources can include motor vehicles, paints, solvents, other industries, and household products.

How serious is this risk?

To help put these estimated health risks into perspective, consider that about four out of ten people get cancer for one reason or another during their lifetime. In other words, the odds of getting cancer in your lifetime are 400,000 in one million. The average risk of contracting cancer from breathing toxic air contaminants in the ambient air in San Diego County (and other metropolitan areas) is about 100-200 chances in one million. The majority of this risk is due to motor vehicle emissions.

Diesel particulates also contribute significantly to ambient risk levels. Although a method does not exist to directly monitor diesel particulate concentrations, Air Resources Board (ARB) has suggested methods that can be used to estimate diesel concentrations. Based on ARB estimates, diesel particulate emissions could add an additional 420 in one million to the ambient risk levels, in San Diego County. ARB estimates that risk from diesel particulate has decreased by about 50% from 870 in one million since 1990.

Based on the health risk assessment estimate, this background risk could be increased from zero to 14 chances in a million as a result of exposure to emissions from NAS North Island.

What are NAS North Island and the District doing about this risk?

The Air Pollution Control District does not consider these estimated potential increased cancer health risks to be significant nor to warrant mandatory emission controls at this time. However, NAS North Island is being encouraged to voluntarily reduce their emissions. You will receive this notice every two years until NAS North Island's estimated health risk of 14 in a million drops below the District cancer risk threshold of 10 in one million. In addition, the District will re-study NAS North Island emissions every four years, and each time any new or modified equipment that emits toxic air pollutants is proposed. NAS North Island has taken a number of steps in reducing emissions and will continue to reduce toxic emissions.

What can I do about these health risks?

If you would like more information or would like to attend a public meeting about this issue, please complete the enclosed post card and mail it back to the District. You may contact the District's Toxic Engineering Division at (858) 586-2738 or the Public Affairs Office of NAS North Island at (619) 545-8136; nbcpaio@navy.mil if you have questions, want to discuss this notice, or have comments or requests for either the District or the facility.

You can also contact NAS North Island to discuss how and when it will reduce its emissions of toxic air pollutants. Many facilities have already taken voluntary steps to reduce their emissions of toxic air pollutants as a result of this program.

Besides the emissions from NAS North Island, there are many other sources of toxic air pollutants, including motor vehicles, paints, solvents, household products and other industries. Federal, state and local programs are reducing emissions from these sources, but you can help by reducing your driving by carpooling, combining errands, and keeping your car tuned and maintained, and by reducing use of paints and products containing solvents.

There are many other causes of cancer (smoking, diet, over-exposure to the sun, etc.). The San Diego Chapter of the American Cancer Society can provide you with information on how to reduce your overall risk of cancer. They can be reached at (800) 227-2345.

Where can I review the health risk assessment for NAS North Island?

Health risk assessments are available for public review at the District's offices located at 10124 Old Grove Road, San Diego. Please call (858) 586-2600 to make an appointment.