July 9, 2025

Mr. Gerardo Rios
Permits Office Chief
United States Environmental Protection Agency Region 9 Air-3-1
75 Hawthorne Street
San Francisco, CA 94105

Dear Mr. Rios:

This is to inform you that the Air District has issued a revision to the Synthetic Minor Operating Permit for the following facility:

Facility	Facility Name	NSR/SMOP Application	Permit Engineer	City	County
B0861	Northrop Grumman Systems Corporation	32164/691904	Thuya Maw	Sunnyvale	Santa Clara

A/N 32164- Boiler Upgrade S-1001 Wickes Boiler, Commercial/Institutional Boiler, 151 MMBtu/hr maximum capacity, equipped with Ultra Low NOx Burners and Flue Gas Recirculation, Natural Gas fired only

Abated by A-160 Selective Catalytic Reduction System (SCR) with Oxidation Catalyst for S-1001

to replace
S-5 Wickes Boiler, 124 MMBtu/hr, abated by A-55 Selective Catalytic Reduction System (SCR)

The primary purpose of this revision is to replace the aging, inefficient S-5, Wickes Boiler with a much more efficient and clean-burning S-1001, Wickes Boiler. Northrop Grumman recently noticed that the efficiency of the S-5 boiler is not as efficient as it was eleven years ago, and the boiler requires frequent upgrades to improve the efficiency further, reduce fuel consumption, and improve NOx and CO emissions. Northrop Grumman will decommission S-5, a 124 MMbtu/hr boiler, and replace S-5 with a larger ultra low NOx burner boiler (151 MMBtu/hr) with a much-improved Selective Catalytic Reduction System (SCR) with an oxidation catalyst, frequency driven air blower motor to control combustion air and dilution air, and mechanized modulating flue gas recycling system. The new S-1001 boiler will be required to achieve 2.5 ppmv NO_x and 50 ppmv CO at 3% oxygen at the exhaust atmospheric outlet, which will reduce air pollution significantly and improve energy efficiency. However, the upgrade S-1001, Wickes Boiler, will slightly increase emissions from the increase in burner capacity. The new Condition 100379 was added to the SMOP for S-1001 and A-160, and the permit condition 14049 was modified to reflect the decommissioning of S-5, Wickes Boiler, and A-55, abating S-5.

Enclosed for your information is a copy of the engineering evaluation report for this application. If you have any questions regarding this permit, please email Xuna Cai, Supervising Air Quality Engineer, at xcai@baaqmd.gov.

Very truly yours,

Pamela Leong
Digitally signed by Pamela Leong
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Pamela J. Leong, Director of Engineering