UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

July 20, 2022

Mr. Joshua Nandi
Northrop Grumman
One Space Park Mail Stop: NGC CER-XE6D21
Redondo Beach, CA 90278

SENT VIA EMAIL

Re: Northrop Grumman Response to EPA Technical Comments on the Passive SSDS O&M Plan and SSDS Evaluation, 825 Stewart Avenue Sunnyvale, CA, TRW Microwave Superfund Site (CERCLIS ID# CAD009159088)

Dear Mr. Nandi:

Thank you for submitting the Northrop Grumman written response to EPA's technical comments and to agreeing to collect indoor air samples at the subject building. As stated in the EPA's letter, the objective of collecting the indoor air is to document protectiveness, under a normal building HVAC operation, while the modifications to the building passive sub-slab ventilation (SSV) system are being addressed.

Based on the uncontrolled and unpredictable nature of many weather variables that could potentially affect the vapor intrusion into a building, an approach to evaluate vapor intrusion in any site, is to collect multiple lines of evidence. Based on that, EPA requires Northrop Grumman to evaluate the current sub-slab soil gas concentrations as well as the building-slab pressure differential at the time of the indoor air sampling, and regardless of the indoor air results. The sampling plan should include outdoor air measurements at the intake of the HVAC. The data from the sub-slab soil gas samples and the pressure differential will assist in determining whether the passive SSV should be converted to active or not. Additionally, this data will provide information on the current conceptual site model. Please submit a sampling plan that includes indoor air sampling with building-slab pressure differential monitoring, and sub-slab soil gas sampling.

Regarding the limitations to change vents height due to the Building codes, EPA can't evaluate the impact on air dispersion and re-entry through the HVAC intakes without outdoor air data, nevertheless the results of the sub-slab soil gas samples that will be collected, may assist in this evaluation. Two possible scenarios are: 1) low sub-slab concentrations with low emissions to the out-door air through the SSV. 2) High sub-slab concentrations with low emissions to the out-door air duo to the low capacity of the SSV to remove soil gas from the sub-slab. Northrop Grumman states on response #3 that the design drawings are correct in relation to the overall exterior building layout, in this case EPA request Northrop Grumman to perform the modifications to the SSV as proposed.

Regarding response #2, the results of the sub-slab soil gas concentration and will inform the potential for weather inversions be of concern based on potential emissions through the roof.

EPA requests that NGC provide a sampling and analysis plan for the collection of indoor air and sub-slab soil gas samples and monitoring of the building-slab pressure differential within 30-days from the receipt of this letter. Please feel free to contact me anytime at [HYPERLINK "mailto:abreu.lilian@epa.gov"] or 415-972-3010 if you have any questions or comments.

Sincerely,

Lilian Abreu, PhD
Remedial Project Manager
Superfund and Emergency Management Division

cc: Holly Holbrook, AECOM
Mark Riley, AECOM

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