

BT Td [(B)T Td [(B)2(C620 >>BDC Tecg1i(,)-4(MD)]TJ 0 Tc 0 Tw 6.0 Td-4.28/MCID 1
Lockheed Martin Corporation
6801 Rockledge Drive MP: CCT246
Bethesda, MD20817
Telephone 301

Concentrations ranging from zero ppm to 3.2 parts per million (ppm) were detected in areas surrounding SV-136-A. The highest PID reading detected during the two surveys was in an open walkway west of SV-136-A. This concentration was greater than the PID results (0.3 ppm and 0.4 ppm) detected immediately adjacent to SV-136-A. The PID measured no detectable readings (0) at the MRAS excavation area north of the former plating shop. Indoor air sampling locations and ratios are in Table 1. Sampling locations and PID survey results are shown on Figure 1.

Summa[®] canister sampling during downtime—Following the PID surveys, Summa[®] canisters were used to collect nine samples on November 1, 2016, as follows:

Indoor air quality (eight-hour samples):

- two samples (EXC-1 and EXC-2) adjacent to the MRAS excavation area north of the former plating shop
- one near SV-018-A, in the fire pump room in Building A basement
- one near SV-015-A/SV-99 near Indoor

comparison of the TCE concentrations detected in indoor air at the three sampling events at locations 015A, 018A, 079A, and 136A.

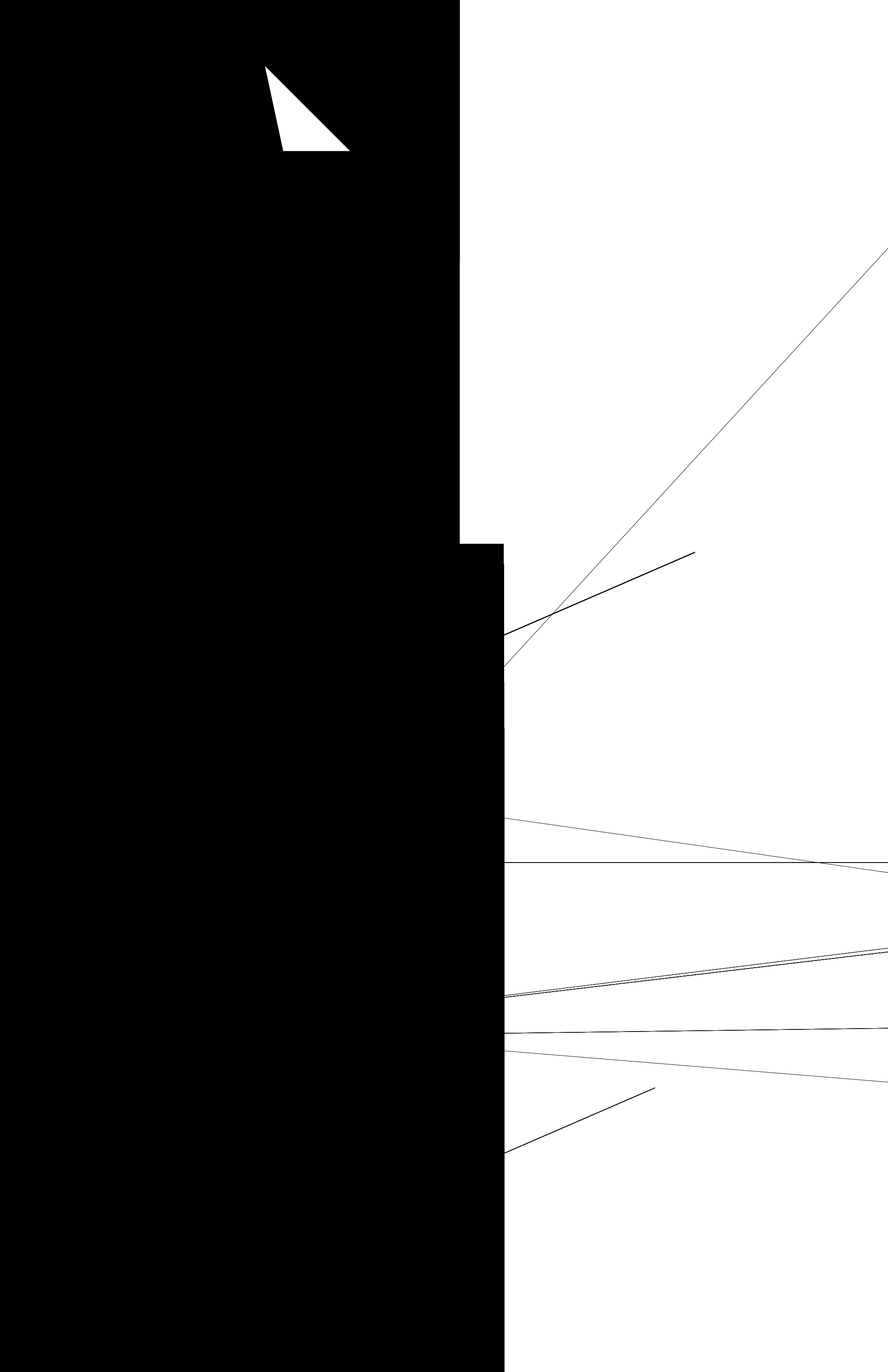
Conclusions—No exceedances of the TCE indoor air screening level were detected in the laboratory analytical results. The PID survey and Summa canister sampling results suggest that the shutdown of the SSDS caused significant subslab-vapor or indoor-air-quality issues within the buildings.

Sincerely,

Lynnette M. Drake
Remediation Project Lead, Environmental Remediation
Lockheed Martin Corporation

cc: (via email)
Christine Kline, Lockheed Martin
Norman Varney, Lockheed Martin
Scott Heinlein, Lockheed Martin
John Morgan, LMCPI
Michael Martin, Tetra Tech
Cannon Silver, CDM Smith
Steve Winston
Jann Richardson, Lockheed Martin
Mike Musheno, LMCPI
Doug Mettee, Lockheed Martin MST

FIGURES



TABLES

Table 1

**PID Survey Sample Locations and Rational, Buildings A and B
Lockheed Martin Middle River Complex, Middle River, Maryland**

Sample ID	Sample Locations and Rationale
PID-1	Along western wall of Building A main floor monitoring within the immediate area of the Middle River Aircraft System (MRAS) excavation.
PID-2	Along the eastern side of the MRAS excavation area monitoring the area just outside of the plastic sheeting inside the building.
PID-3	In Building A near sub-slab monitoring point SV-018-A to monitor breathing zone in the basement area.
PID-4	In Building A basement monitoring large rectangular sump that has shown elevated trichloroethene (TCE) concentrations during previous monitoring events
PID-5	In the former plating shop (current expanded Bond Layup Room) to monitor the location of the sub-slab depressurization system (SSDS) trench and monitoring points on the main floor of Building A
PID-6	On the eastern side of the Building A main floor near the autoclaves monitoring the area of SV-079-A that has shown elevated sub-slab concentrations of TCE
PID-7	At the major intersection in the central portion of Building A, on the main floor monitoring area, halfway between former plating shop and new rout and trim area (SV-136-A) that has shown elevated sub-slab TCE concentrations.
PID-8	In western portion of Building B just across the Building A/B divide monitoring outside Aero Tooling workshop south of the SV-136-A area
PID-9	At intersection of open walkways at the Building A/B divide monitoring area immediately southeast of SV-136-A
PID-10	Located in open walkway just behind sanding booths in new rout and trim area monitoring area south of the SV-136-A.
PID-11	In central portion of Building A in open walkway heading toward and monitoring area southwest of SV-136-A.
PID-12	In north-central portion of Building A in open walkway monitoring area west of SV-136-A
PID-13	In northeastern portion of Building A, in open walkway monitoring area north of SV-136-A
PID-14	Adjacent to the SV-136-A area monitoring, in an area of elevated sub-slab TCE concentrations, and where new vertical extraction points were recently added to the SSDS
PID-15	In open walkway at the Building A/B divide monitoring area, just northwest of SV-136-A
PID-16	In open walkway at the Building A/B divide monitoring area, just northwest of SV-136-A

Abbreviations:

MRAS - Middle River Aircraft Systems
 PID - photoionization detector
 ppm - parts per million
 SSDS - sub-slab depressurization system
 TCE - trichloroethene

Table 2
Comparison of Indoor Air Quality (Summa[®] Canister) and Sub- Slab Soil Vapor
TCE Concentrations to PID Survey Results
Lockheed Martin Middle River Complex, Middle River, Maryland

Sample ID	IA ^(1,3)	SV ^(1,2)	PID (10/28/16)	PID (10/31/16)
-----------	---------------------	---------------------	----------------	----------------