Fact Sheet

Middle River, Maryland

Middle River Complex and Martin State Airport

Environmental Studies and Cleanup

April 2015

Lockheed Martin Middle River Complex
2323 Eastern Boulevard
Middle River, Maryland

History

In 1929, the Glenn L. Martin Company, a predecessor to Lockheed Martin Corporation, purchased land in Middle River, Maryland, to build and test aircraft. This land is now part of the Middle River Complex, known locally as Plant 1, and Glenn L. Martin State Airport. In 1975, the airport was sold to the State of Maryland for the use of the Maryland Department of Transportation. The Maryland Aviation Administration (MAA), a unit of the Maryland Department of Transportation, currently operates the airport. Other land parcels also were sold around the same time, including the properties now occupied by Johnson & Towers, Tilley Chemical, North American Electric, the U.S. Post Ofýce and a gas station with a convenience store.

In 1995, Martin Marietta Corporation merged with Lockheed Corporation to form Lockheed Martin Corporation, which today conducts engineering and research at the Middle River Complex. The complex is owned by LMC Properties, Inc., which provides global real estate and asset management services to Lockheed Martin business units. Lockheed Martin Mission Systems and Training currently operates at the facility, as does Lockheed Martin Applied NanoStructured Solutions. Aircraft components are assembled and tested in Buildings A, B and C by MRA Systems, Inc. (MRAS), a subsidiary of General Electric Company.

Beginning Environmental Studies

In the early 1990s, two developments occurred that prompted environmentally related inquiries at Lockheed Martin's Middle River Complex and Martin State Airport. First, china, papers and other items apparently associated with the former Glenn L. Martin Company were found by the Maryland Aviation Administration in excavations for utility work on the Martin State Airport site. Second, Baltimore County developed an economic revitalization plan for the Middle River community and inquired about Lockheed Martin's plans for vacant waterfront parcels at the Middle River Complex.

Newsletters updating the community on timely information and Citizen's Guides covering groundwater and sediment can be found at lockheedmartin.com/middleriver or lockheedmartin.com/martinstate

Since that time, Lockheed Martin has conducted extensive environmental studies at Martin State Airport in an area between Taxiway T or "Tango" and Frog Mortar Creek (the Dump Road Area) in cooperation with the Maryland Department of the Environment's (MDE) Land Management Administration, Controlled Hazardous Substance Enforcement Division (also known as the State Superfund Program). Additional environmental investigations have been performed around the Main Terminal, Strawberry Point, in Frog Mortar Creek and in Stansbury Creek. Environmental studies also have been conducted at the Middle River Complex to determine what contamination exists around the plant. Lockheed Martin entered the MDE's Voluntary Cleanup Program when investigations began at the Middle River Complex. At the present time, Lockheed Martin is moving the Middle River Complex Remediation Project from the Voluntary Cleanup Program to the Controlled Hazardous Substance Enforcement Division.

Environmental Sampling

Lockheed Martin has now collected thousands of soil, sediment, groundwater, soil vapor and indoor air samples at the Middle River Complex and Martin State Airport. All samples were tested for chemicals known to have been used during aircraft manufacturing and assembly and related industrial operations. Chemicals used in the Middle River Complex were found beneath pavement and buildings, in fenced-off areas with limited access and near storm water outfalls along Cow Pen Creek and Dark Head Cove. Sampling at Martin State Airport identiýed the Dump Road Area as the primary area of concern and revealed a groundwater plume containing contaminants moving

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removed effectively by the recently installed groundwater bioremediation treatment system. A high vacuum extraction system has been temporarily installed in this area to remove the highest concentrations of trichloroethene from groundwater and soil. The extracted groundwater is treated prior to discharge to the Balton-7.1 exd

Air samples collected while the Building A system was shut down in March 2013 for maintenance revealed that concentrations of volatile organic compounds (VOCs)

Frog Mortar Creek in the Dump Road Area. Consequently, following a public information meeting, in April 2012 the Maryland Department of the Environment issued a water contact advisory for a 2,000-foot long stretch of shoreline next to the airport, recommending that swimming within 200 feet of the shoreline be limited to 4 hours per day and approximately 20 days per year. Lockheed Martin and the Maryland Department of the Environment have established an on-going surface water monitoring program for Frog Mortar Creek where 40 water samples are collected 6 times a year, focusing on the summer swimming months. Results are published for individual sampling events (monthly in the

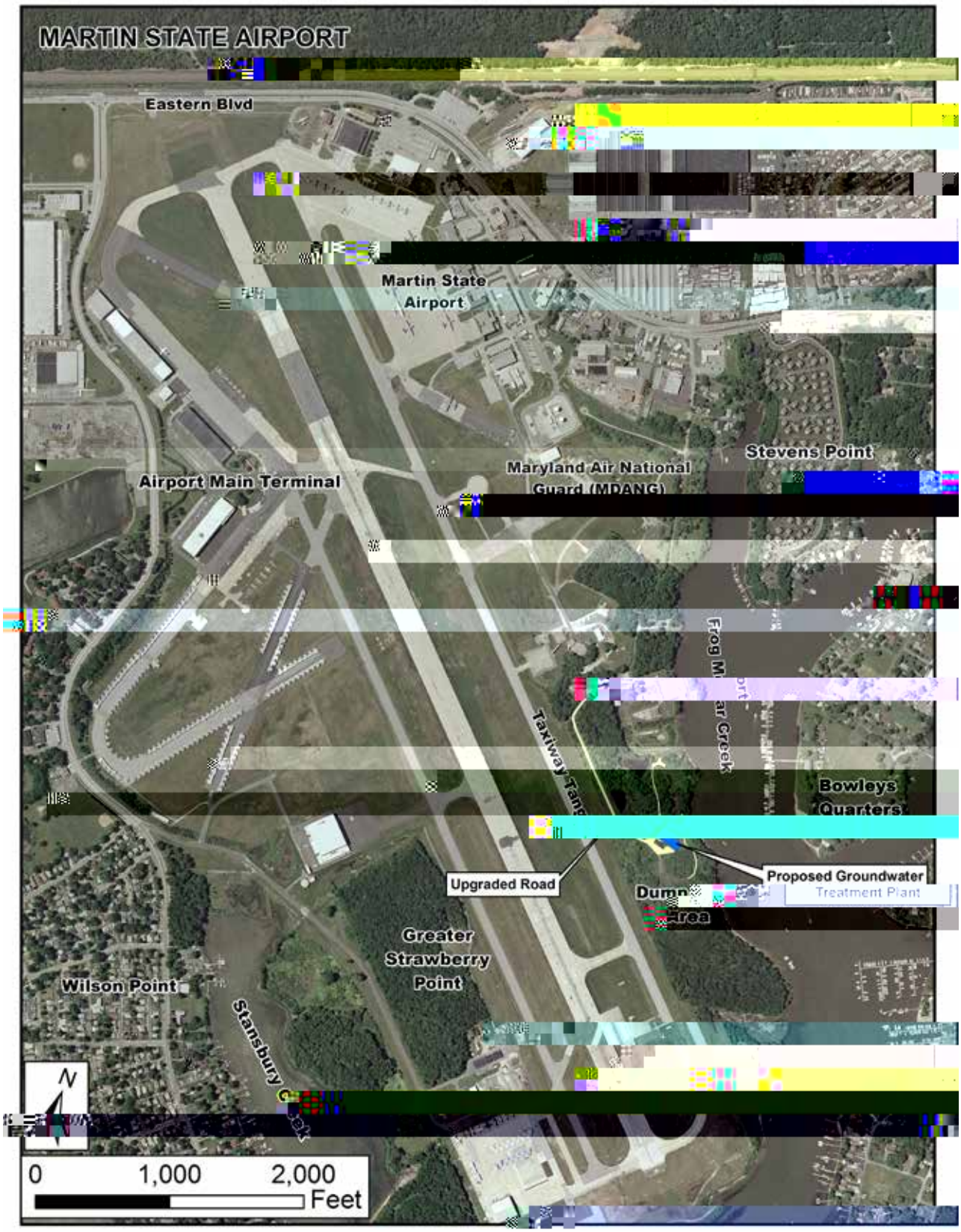

Figure 2

summer), and in an annual report. A summary of average summer Frog Mortar Creek Surface Water Conditions is available as a poster that is updated annually and can be found on the project website at: lockheedmartin.com/martinstate. The groundwater Interim Remedial Action system described above is being installed to remedy this situation.

Stansbury Creek

Lockheed Martin collected sediment samples in Stansbury Creek in 2009 to identify and characterize the nature and extent of possible contamination result

Glossary and Acronym List

of terms used in this Fact Sheet or other site-related documents.

Applied NanoStructured Solutions, LLC — a subsidiary of Lockheed Martin located in the Middle River Complex.

Arsenic — an odorless and tasteless semi-metal that enters bodies of water naturally from the earth and from industrial processes.

AWQC — Ambient Water Quality Criteria; numeric values limiting the amount of chemicals present in our nation's waters to help protect human health and the environment.

Background radiation — radiation that comes from natural sources and is always present in the environment. This includes solar and cosmic radiation as well as radioactive elements in the ground, building materials and the human body.

Benzene ð a colorless, þammable, liquid aromatic hydrocarbon derived from petroleum and used in or to manufacture a wide variety of chemical products.

Cadmium — an element found naturally in soil and rocks. Cadmium is also found in some foods and in man-made consumer products such as batteries, plastics, pigments, paints and metal coatings. Cadmium does not break down in the environment and generally does not dissolve in water. In the ground, cadmium typically clings to soil and sediment.

Chlorinated solvents — chemicals that include methylene chloride, perchloroethylene, trichloroethene, 1,1,1-trichloroethane, 1,1,2-trichloroethane and carbon tetrachloride.

Chromium — a mineral found naturally in the earth's soil and water and all plants. Ore reýning, chemical, and refractory processing, cement plants, automobile and aircraft parts production, tanning and chrome pigments add chromium to the environment.

EPA — U.S. Environmental Protection Agency

In situ — in place

IRA — Interim Remedial Action

Lead — used in the manufacture of batteries, metal products and ammunition. Exposure can occur from breathing contaminated air in or near workplaces that process lead, as well as chips from lead-based paint. Lead can effect the blood, nervous, immune, renal and cardiovascular systems.

MAA — Maryland Aviation Administration

MDANG — Maryland Air National Guard

MDE — Maryland Department of the Environment

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