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SUPPLEMENTAL REPORT

OFF-BASE AREAS OF
POTENTIAL ENVIRONMENTAL CONCERN
IN THE VICINITY OF
PITTSBURGH INTERNATIONAL AIRPORT

HQ AFESC/TIC (FL 7050)
Technical Information Center
Bldg 1120/C
Tyndall AFB FL 32403-0001

DECEMBER 1984

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SECTION 1

INTRODUCTION

1.1 Introduction

The history of military activities at the Greater Pittsburgh Airport includes use of the sites by the U.S. Air Force Reserve, the Pennsylvania Air National Guard and the U.S. Air Force. During various periods of activity the military have used several sites for storage and disposal of waste. These properties are not currently owned or leased by the U.S. Air Force, U.S. Air Force Reserve or the Pennsylvania Air National Guard.

The U.S. Air Force Installation Restoration Program does not apply to sites which are currently owned by the Air Force. However, the WESTON team investigated the off-base properties during the Phase I record search conducted at the U.S. Air Force Reserve and Pennsylvania Air National Guard facilities at the Greater Pittsburgh Airport in Pittsburgh, Pennsylvania. The results of this investigation are discussed in this supplemental report.

Table 1

Recommended Analysis for
Groundwater Samples

pH
Total Dissolved Solids
Oil and Grease
Volatile Organic Constituents (VOC)
Total Organic Halogens (TOH)

SECTION 2

FINDINGS

2.1 Introduction

This section presents information on the waste disposal practices related to the activities at the off-base sites.

2.2 Waste Disposal

During the period the U.S. Air Force Reserve base was used by the active duty Air Force, wet municipal type was removed from the site and reportedly sold to area farmers. From 1965 to 1969, the Air Force Reserves transported "wet" trash to an off-base contractor. Until approximately 1969, the Reserves provided their own trash hauling. Until 1965, a landfill (Landfill 1) southwest of the base (on county property) was used for disposal. The landfill was also used by the county hospital during the same period and after that time. From 1965 to 1969, the Reserves took waste to the Allegheny County landfill. Since 1969, removal and disposal has been by outside contractor.

Liquid wastes were taken to an area called the "Cabbage Patch"; this area is now beneath the main runway for the commercial airport. Liquid wastes were collected at various points on the base. Sometimes the wastes were pumped out of drums by an outside contractor at the collection points. Wastes were also taken from the collection points to the Cabbage Patch and taken from that point by an outside contractor. Waste liquids were also taken directly from the generation points to the Cabbage Patch. Some of the wastes that were taken to the Cabbage Patch were burned in the nearby Fire Training Area. This practice was stopped in approximately 1974 when the Fire Training Area was closed.

The disposal of industrial wastes has been handled in a variety of ways over the years at the PaANG. During the early period of the base activities (50's to early 60's), all oils, solvents and fuel were burned in offsite landfill No. 1 that was also used by the Reserves. This practice was halted in the early 60's by a county ban on the dumping of trash. After this period until about the early 70's, the "Cabbage Patch" was used for fire training in which the wastes were burned. It has been reported that burns took place two

to three times a week, with no estimate of quantity involved, but a maximum of 75 drums from both the Reserves and the Guard were located there at one time. This is also a possibility that waste oil may have been spread to control dust in this area. Use of this area was stopped due to complaints of the unsettling effect of fires so near a commercial airport.

2.3 Waste Storage

The largest waste storage site has been the Cabbage Patch area which was used from the 50's to early 70's. The predominant use was during 60's and early 70's. The area had a gravel base which held up to 70 drums at one time. Oil was occasionally spread in the area for dust control. The location was exclusively used by AF, ANG, and AFR.

2.4 Landfills

2.4.1.1 Landfill No. 1

Landfill No. 1 was located on county owned property NW of the ANG base. It was in operation from the early 50's to about 1963. The area was used the active duty Air Force, Air Force Reserves and PaANG for normal

refuse. In addition to government use, it appears that the county hospital was also sending refuse there. Open aburning of garbage took place along with the burning of waste oils, solvents, and fuel generated by both bases. Because this site was noted used solely by the military and is on County property it will not be considered further in this report.

2.4.1.2 Landfill No. 2

Landfill No. 2 is located by the old alert hangar area SW of the ANG base. The land was leased to the Air Force and is now owned by Allegheny County. This area was used exclusively by the active duty Air Force in the 50's. It was reported that the AF used this area for drum and scrap metal disposal and upon a site inspection this was confirmed. At the time of the WESTON on-site visit there were about 30 rusted drums spread throughout the area and a number of scrap metal piles including some aircraft sections.

SECTION 3

CONCLUSIONS

3.1 Introduction

Review of past operations and waste management practices has resulted in the identification of three off base sites of environmental concern. These sites are seen on Figures 1 and 2.

3.2 Landfill No.2

Landfill No. 2 was used exclusively by the Air Force in the 1950's for disposal of scrap metal and drums. The presence of rusted drums with areas of heavy vegetative stress surrounding them appear to indicate the drums were not empty when placed at the site. The area has been graded flat and information indicates possible burial of waste material. The area also contains a number of scrap metal piles and there are numerous small patches of tar or asphalt on the surface. There

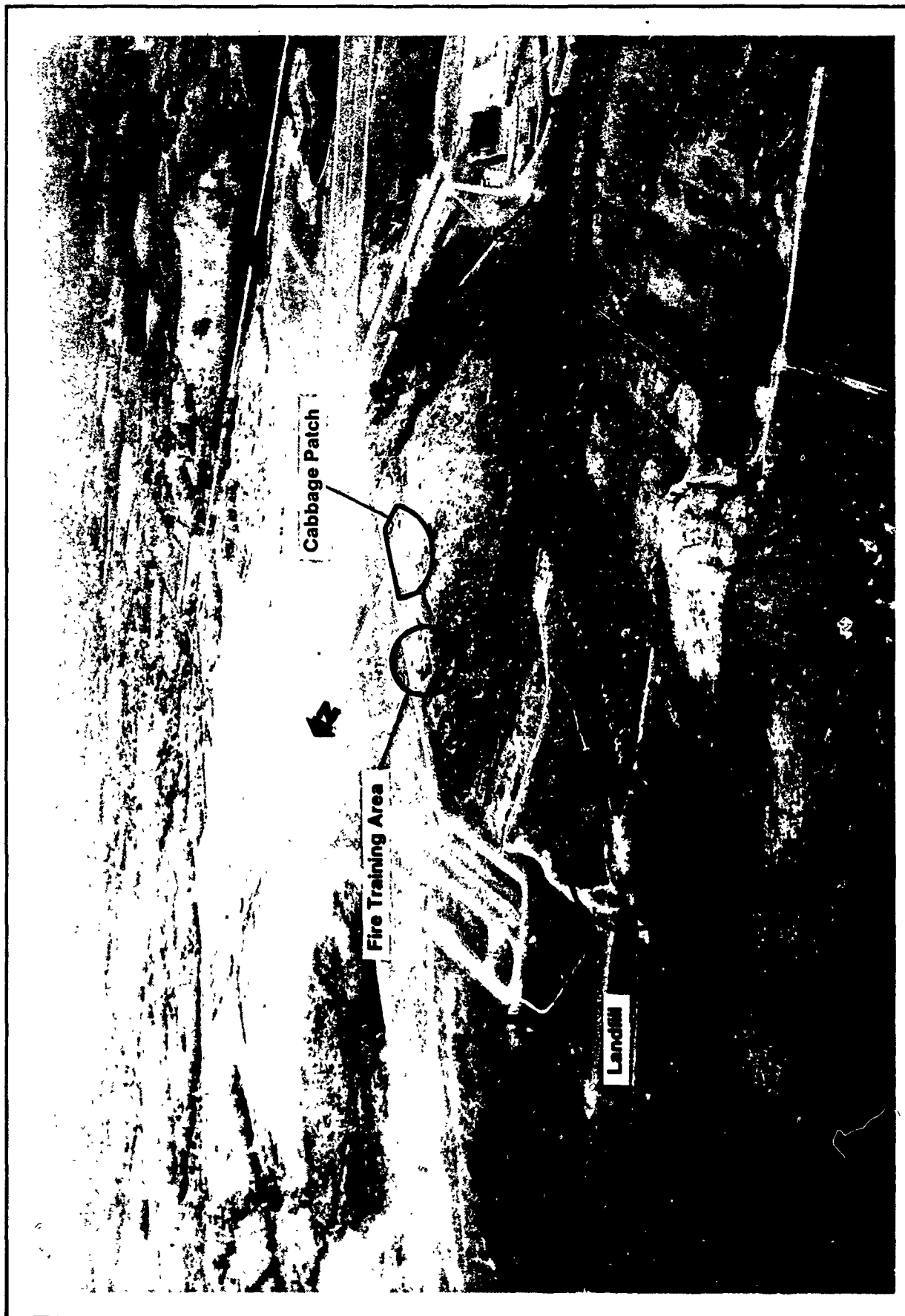


FIGURE 1 GPIA - AIR PHOTO, MAY 1956



FIGURE 2 LANDFILL 2 AREA - DATE UNKNOWN

are also areas where the vegetation is uncharacteristically sparse or stunted. These areas are rounded (ten to fifteen feet in diameter) with distinct boundaries with respect to normal vegetation areas. Such areas may have been waste burial sites or past drum storage sites.

Figure 2 shows the site in the early 1950's. The appearance of the site as a whole suggests that it was a general uncontrolled disposal and scrap area. In the vicinity of the site empty drums were seen in positions indicating that they were rolled off the commercial runway down the embankment. The condition of the drums indicated that they were placed no longer than one or two years ago. Markings on the drums, when visible, showed that they had most probably related to construction and repair activities on the runway.

Their presence, however, does point to the possibility that this site may have been used more recently. The site is remote and although there is a fence on the boundary, easily accessed.

3.3 Fire Training Area

The FTA was used from the 1980's until the early 1970's on a regular basis. During which time a significant quantity of waste oil, fuel, solvent and other combustible chemicals were deposited on the site for burning.

No waste collection, or separation system was operated at the site. This area was buried during construction of a new runway.

3.4 Cabbage Patch Area

The site was used in conjunction with the Fire Training Area as a storage location. There are reports of intentional oil spillage to control dust and general drum leakage. The area was buried during runway construction.

SECTION 4

RECOMMENDATIONS

4.1 Introduction

Follow-on investigations are recommended for the three off-base sites. The investigations are designed to determine if contamination does exist and to assess the potential for contaminant migration at each site.

The recommended actions are described in the following subsections.

4.2 Landfill 2

This site has been determined to have the potential for causing environmental contamination and follow-on action is recommended. Because there is very little documentation regarding the exact practices used at the site, it is suggested that geophysical techniques, such as E-M Conductivity, Ground Penetrating Radar or Magnetometer surveys, be used initially to determine if there are buried wastes at the site. It is recommended that a fifty foot grid be laid out over the entire site and that the survey(s) be conducted on this grid.

Following completion of the geophysical survey(s), three downgradient monitor wells be installed and sampled. An upgradient well shall also be installed and sampled. The analysis parameters for the ground water samples are shown on Table 1.

4.3 Fire Training Area

This site has been determined to be a potential source of contamination. The site is also under the runway and, therefore, as at the Cabbage Patch, installation of two downgradient monitoring wells is recommended. The wells should be as close to the runway as reasonable. An upgradient/background location shall be selected for installation of a well to obtain background water quality samples. All wells shall be analyzed for the parameters shown on Table 1.

4.4 Cabbage Patch

This site has been identified as having the potential for causing environmental contamination. The media of concern are soil and ground water. Since the site has been covered by a runway, it is not feasible to conduct soil sampling activities. Therefore, the recommended investigation focuses on ground water. Installation and sampling of two downgradient monitoring wells immediately south of the runway (28C) are recommended. A background location shall be selected for collection of background water samples. A recommended location is southwest of the runway. This location could also be used as the background sampling point for the Fire Training Area. All wells shall be sampled and analyzed for the parameters shown on Table 1.