

SUMMARY OF ENVIRONMENTAL RECORDS



Phil-Mar Industries, Inc., 1661 Davis Street, Camden, NJ 08103 (Block 1388, Lot 7)

February 24, 2017

Executive Summary

This memo provides a summary of environmental case files for the Phil-Mar Industries, Inc. (a.k.a. “Fast Doors”) site, located at 1661 Davis Street, Camden, NJ 08103. The findings presented herein are based solely on the information on file at the New Jersey Department of Environmental Protection (NJDEP) during a file review conducted on May 9, 2014. CRA and BRS, Inc. make no representation as to the accuracy or completeness of the information or the actual environmental conditions of the sites.

The findings of this review include the following:

- The site is an active case with the NJDEP and is currently being investigated and remediated jointly with the adjoining RF Products site (see attached site diagram). Northrup Grumman is the remediating party conducting the investigation/remediation activities on both sites.
- As the current investigation and future remediation are being controlled by a responsible party that is pursuing a cleanup appropriate for an industrial, ‘restricted’ use, there will likely be challenges if it is decided to have the site remediated for a more restrictive residential or ‘unrestricted’ cleanup standard.
- Soils and groundwater at the site have been found to be impacted with levels of contamination including petroleum, polyaromatic hydrocarbons and volatile organic compounds due to prior industrial operations.
- There are potential vapor intrusion concerns which exist at the site due the presence of groundwater contamination. New construction may mitigate this risk by incorporation of vapor barrier engineering controls in any new facilities.
- There is likely to be protracted timeframes with resolving groundwater contamination issues associated with the site. Additional investigation of possible on-site sources for on-site and regional contamination of groundwater by chlorinated compounds may be required by NJDEP.

Introduction

This memo provides a summary of environmental case file documents reviewed for the Phil-Mar Industries, Inc. (a.k.a. “Fast Doors”) site, located at 1661 Davis Street, Camden, NJ 08103. The site is identified on Camden City tax mapping as Block 1388, Lot 7.

The tax parcel on which the site is located was created by the City of Camden through subdivision of the adjoining parcel (Block 1386, Lot 1) in 1991. Prior to that date, the Phil-Mar site had been owned and operated with the adjoining parcel (a.k.a. “RF Products”) as a single industrial property since the early twentieth century. The Phil-Mar site is currently being investigated and remediated jointly with the RF

Products site under the New Jersey Department of Environmental Protection (NJDEP) Site Remediation Program (SRP) Program Interest (PI) No. 015474. The Licensed Site Remediation Professional (LSRP) of Record for both sites is David J. Russell (License No. 574867) of AECOM Technical Services, Inc. (Trevose, PA).

The entity responsible for conducting the remediation of both the Phil-Mar site and the RF Products site is Northrop Grumman System Corp. of Falls Church, VA. Northrop Grumman is the successor company of Thompson Ramo Wooldridge, Inc. (TRW) a corporation that owned and operated the industrial complex that includes the Phil-Mar site and the RF Products site in the 1960's and 1970's. A site diagram showing the location of the Phil-Mar site and the RF Products site parcels is attached to this memo.

BRS, Inc. completed a review and made electronic copies of all available NJDEP case files for the site at the NJDEP Office of Record Access in Trenton, NJ on May 9, 2014. A list of files accessed by this review is attached to this memorandum. This memo provides a summary of information gathered from review of these files.

Site Description and Background

The Phil-Mar site is located in the Whitman Park neighborhood of south Camden, NJ on an irregularly-shaped parcel approximately 4.1 acres in area. The property is bounded by Davis Street to the west; Copewood Street to the south; Thorne Street to the east; and the RF Products site (Block 1386, Lot 1) to the north. The property is located within a localized area of industrial and commercial development that adjoins a railroad right-of-way (PATCO High Speed Line) to the east across Thorne Street; however the surrounding area is predominantly residential. The Whitman Park, including a recreational playground and ball field, is located west of the site across Davis Street. The Brimm Medical Arts High School is located south of the site at 1626 Copewood Street.

The Phil-Mar site partially contains an industrial complex that covers nearly the entire site and is subdivided by interior walls into six (6) areas designated as Buildings 1, 2, 3, 4, 6, & 7. These buildings range between 12,000 – 45,000 square feet each and are of one-and two-story concrete and masonry, slab-on-grade construction. Buildings 1, 2, 3, 4 & 6 on the Phil-Mar site are currently in a state of severe disrepair and cannot be used for any purpose; these buildings have been vacant and unused since April 1991. The structure that was formerly designated as Building 5, located at the south end of the Phil-Mar site on Copewood Street, was demolished at sometime between 1961 and 1981 and is presently an empty gated lot. Building 8 of the industrial complex is located on the adjoining RF Products site and is the only structure on that parcel. A site diagram showing the layout of the seven buildings of the industrial complex shared by the Phil-Mar site and RF Products site is attached to this memo.

Initial development of the industrial complex that includes the present-day Phil-Mar and RF Products sites began in the early twentieth century when a single tax parcel encompassed both sites. Beginning in the 1920's, the Radio Condenser Company (RCC) operated at the site and eventually came to own and operate the entire complex. RCC manufactured radio condensers and various electronic components. In 1961, Thompson Ramo Woolridge (TRW) acquired the stock of RCC. TRW sold ownership of the site in 1972 but continued to operate at the site until 1979. In 1979 TRW was merged into Northrop Grumman and the TRW facility at the industrial complex was shut down. RF Products, who had operated their radio

frequency components manufacturing business in Building 8 since 1977, purchased the entire industrial complex site in 1988.

Fast Doors Inc. (owned and operated by Phil-Mar Industries) has operated from Building 7 at the industrial complex since January 1991. Fast Doors manufactures steel, industrial security doors and gates. This manufacturing process includes fabrication, mechanical assembly, and some painting. In 1993, following the subdivision of the tax lot that contained the industrial complex, Phil-Mar Industries purchased the newly created sub-divided parcel (Block 1388, Lot 7) including the five vacant buildings and its own manufacturing facility (Fast Doors) in Building 7.

History of Environmental Remediation

ECRA Case No. 91068

The purchase of Block 1388, Lot 7 by Phil-Mar from RF Products triggered the NJDEP Environmental Cleanup Responsibility Act (ECRA) leading to an environmental review of historical and current operations within the industrial complex that identified several Areas of Concern (AOCs) throughout the site. RF Products retained JCA Associates (Mount Laurel, NJ) to develop and implement the sampling plan at identified AOCs.

Two AOCs were identified on the Phil-Mar site, including one (1) 1,500- fuel oil underground storage tank (UST) adjoining Building 7 at Davis Street and one (1) 10,000-gallon fuel-oil UST located in a courtyard between Building 1 and Building 3. The Phil-Mar site was assigned ECRA No. 91068 and PI No. G000012815 by NJDEP regarding the investigation and remediation of the two USTs. (The adjacent RF Products site was assigned ECRA No. 91067).

The 10,000-gallon UST and 1,500-gallon UST at the Phil-Mar site were abandoned in place in 1993. JCA determined approximately 31 cubic yards of TPH-impacted soils associated with the 1,500-gallon UST and approximately 288 cubic yards of TPH and PAH impacted soils associated with the 10,000-gallon UST were present and were to be left in place.

NJDEP issued a "negative declaration letter" regarding the ECRA cases to both R.F. Products and Phil-Mar, Inc. in March 1993 stating the following:

Since the current operation will be continued at this location after completion of the transaction, limited quantities of hazardous substances associated with the ongoing activities will remain on the property. These materials, as specified in your Initial Notice, considered complete by this office on March 16, 1993, are being handled in accordance with appropriate NJDEP regulations and are acceptable under the provisions of ECRA. In addition to this material, it is recognized that contaminant levels above the current NJDEP guidance levels exist at this location. Records relative to these contaminants and the corresponding Site locations can be reviewed with the ECRA case file. Please be advised that remedial measures, contaminant removal, and institutional controls may be required upon cessation of the continuing ECRA operations.

The two cases numbers assigned to the Phil-Mar site, ECRA No. 91068 and PI No. G000012815, were closed by NJDEP with approval of the Negative Declaration letter on March 31, 1993. Please note that an ECRA negative declaration letter pertains to the applicability of the site to the ECRA program. It is NOT indicative of the site being uncontaminated.

Parkside Wells Unknown Source Investigation

In the 1970's and 1980's several of the municipal wells located in the Parkside section of Camden City that provided raw groundwater to the Camden Parkside Water Treatment Plant were discovered to contain levels of chlorinated solvents in excess of US Environmental Protection Agency (EPA) and NJDEP standards for the protection of drinking water. The contaminants of concern included trichloroethene (TCE), tetrachloroethene (PCE), 1,2-dichloroethane (DCA), carbon tetrachloride, and chloroform. The Parkside Wellfield municipal wells are approximately 2,000 feet to the east of the RF Products/Phil-Mar sites and are screened within the Potomac-Raritan-Magothy aquifer.

In 2000, NJDEP began a groundwater investigation to delineate and to determine the source and/or sources of the Parkside Wellfield contamination. Following several phases of intensive groundwater and soil vapor investigations at multiple potential sources for the Parkside Wellfield contamination, including the RF Products/Phil-Mar sites, NJDEP published two reports that documented the investigation and findings at the RF Products/Phil-Mar industrial complex including the "Unknown Source Investigation Summary, Camden City Parkside Wellfield Groundwater Contamination" (November 2007) and "Expanded Site Investigation, RF Products, Inc." (September 2007). Both of these reports identified the RF Products/Phil-Mar site as a source of the chlorinated solvent contamination. The reports identify operations conducted during the period of site ownership and operation by Thompson Ramo Woolridge (TRW) between 1961 and 1979 as the potential source of the chlorinated solvent contamination emanating from that site¹.

Preliminary Assessment and Site Investigation (2010-2011)

In February 2009, an NJDEP Directive and Notice letter was issued to R F. Products, Phil-Mar Industries, Inc. and Northrop Grumman (as the successor company to TRW). The letter required that a Remedial Investigation be conducted and an approved remedial action be implemented under an Administrative Consent Order at the site, as necessary. The three Directive recipients submitted good faith defense letters to the NJDEP. Northrop Grumman agreed to "opt-in" to the New Jersey Licensed Site Remediation Professional (LSRP) program to conduct a Preliminary Assessment and Site Investigation and groundwater RI at the site.

A Preliminary Assessment (2010) and Site Investigation (2011) was performed by AECOM Technical Services, Inc. on behalf of Northrop Grumman under oversight of the LSRP of Record. Based on the results of the PA and SI, nine (9) AOCs were identified at the RF Products/Phil-Mar sites that required additional remedial investigation including the following four (4) AOCs located at the Phil-Mar site:

- AOC 2A (10,000-gallon Fuel-Oil UST) to delineate concentrations of extractable petroleum hydrocarbons (EPH) and benzo(a)pyrene above NJDEP Residential Direct Contact Soil Remediation Standards (RDCSRS), Non-Residential Direct Contact Remediation Standards (NDCSRS), and default Impact to Groundwater Soil Screening Levels (IGWSSL);
- AOC 3 (Former Railroad Tracks) to delineate and develop a site-specific impact to groundwater soil remediation standard (IGWSRS) for arsenic;

¹ It should be noted that Northrop Grumman has vigorously refuted the assertion made by NJDEP that chlorinated solvent contamination at the RF Products site has acted as a source for contamination at the Parkside Wellfield. See summary in this memo of the Remedial Investigation (2012-2013) conducted by Northrop Grumman.

- AOC 6B (Building 2, Plating Room) for further delineation of cadmium and arsenic concentrations above the RDCSRS and development of a site-specific IGWSRS for arsenic, beryllium, cadmium and TCE;
- AOC 10A (Building 2, Boiler Room) to develop a site-specific IGWSRS for cadmium.

Due to previous detections of groundwater impacts at the site identified by the NJDEP during their Unknown Source Investigation, on-site and off-site groundwater was identified as a separate area of concern (AOC 14).

Remedial Investigation (2012-2013)

AECOM completed remedial investigation activities at the RF Products/Phil-Mar sites between 2012 and 2013. According to the AECOM Remedial Investigation Report (August 2013), investigation activities were successful in delineating the horizontal and vertical extents of soil and groundwater contamination. The soil RI activities indicated that there are no direct contact issues at the site for the current industrial use of the properties; however there were exceedances for the residential direct contact soil standards. If the site use remains industrial, soil impacts requiring remedial actions are therefore limited to impact-to-groundwater exceedances at isolated AOCs. Groundwater impacts include limited PAH exceedances of the NJDEP Groundwater Quality Standards (GWQS) in the area of a former heating oil UST (AOC-2A) and dissolved TCE exceedances in the southern portion of the site (adjoining Building 7 in monitoring well MW-2A) and extending off-site to the east-southeast. Background metals and additional TCE derivative compounds and other chlorinated volatile organic compounds (VOCs) are also present in this area of the site at lower concentrations that exceed the GWQS.

Based on the results of the RI, AECOM concluded that the groundwater investigation of site and regional conditions indicated that there is no evidence of a connection between site groundwater impacts and the Parkside Wellfield; no obvious point source of TCE impacts to groundwater, according to AECOM, were identified during the RI. AECOM indicated that a Remedial Action Workplan documenting a proposed approach to remediating delineated soil and groundwater impacts will be prepared and submitted to the NJDEP at a future unspecified date and that a Classification Exception Area application will be submitted with the RAW.

Vapor Intrusion Investigation (2010-2013)

An initial receptor evaluation was submitted to the NJDEP by AECOM in August 2011 that identified vapor intrusion (VI) as both a potential on-site and off-site concern warranting further investigation due to the concentrations of volatile organic compounds that exceeded the VI groundwater screening levels in on-site groundwater. The VI assessment included sampling and analysis of sub-slab soil gas and indoor air quality at the on-site Fast Doors and RF Products facilities and Brimm Medical Arts High School.²

The results of the VI assessment indicated the presence in sub-slab soil gas of TCE, PCE, chloroform, carbon tetrachloride and 1,1,2-TCA at concentrations in excess of NJDEP non-residential screening

² IAQ samples collected at Brimm Medical Arts High School in 2010 did contain concentrations exceeding the NJDEP indoor air screening levels (IASLs) triggering a response from Northrop Grumman to remediate the identified vapor concern (VC). The VC identified at Brimm Medical Arts High School was addressed as part of the Vapor Mitigation Plan dated January 31, 2011 and the Vapor Mitigation Remedial Action Report dated May 31, 2011.

levels. Subsequent analytical results for Building 7 indicated that a vapor concern potentially existed for the building and mitigation activities were therefore deemed necessary. A Vapor Intrusion Mitigation Plan was submitted to the NJDEP on January 31, 2013. Several cracks were sealed in the northeastern area of Building 7. Ventilation enhancement approaches were evaluated; however, no permanent methods for increasing ventilation were deemed necessary.

Following completion of the vapor mitigation response actions, confirmatory indoor air samples were collected in April 2013. None of the compounds analyzed in the indoor air and ambient samples were detected at concentrations that exceeded their respective NJDEP non-residential indoor air screening levels. As a result, AECOM concluded that the vapor mitigation response actions were proven to be effective at the Fast Doors facility. A Vapor Intrusion Mitigation Response Action Report that documents the mitigation actions was submitted by AECOM to NJDEP in June 2013. This report presents the data collected during the vapor remedial investigation and response action activities conducted from October 2010 through April 2013.

AECOM proposed ongoing monitoring of indoor air at the Fast Doors facility until associated sub-slab gas sample data indicates a significant drop in concentrations. Moreover, AECOM proposed to continue indoor air monitoring on an annual basis during the heating season (November - March) to confirm that indoor air concentrations of contaminants remain below their respective non-residential indoor air screening levels.

Conclusions and Recommendations for Further Actions

As per the requirements of the Site Remediation Reform Act of 2009, N.J.S.A. 58:10C-1 et seq. (SRRA) and the NJDEP Technical Requirements for Site Remediation, N.J.A.C 7:26E, the person responsible for remediating the RF Products/Phil-Mar site (Northrop Grumman) has retained a New Jersey Licensed Site Remediation Professional (LSRP) to continue and complete the remediation. According to NJDEP case files submitted in 2013, Northrop Grumman plans on completing all required remedial actions within regulatory time frames and under an Administrative Consent Order at the site, as necessary.

It should be noted that all work conducted at the site is being performed to standards appropriate for its ***current industrial usage*** which include non-residential standards for soil, groundwater and vapor contaminant pathways. As the CRA's re-use strategy for this site is to maintain industrial site use, continued environmental investigation and remediation to achieve a full-site Response Action Outcome (RAO) by Northrop Grumman is warranted based on the information reviewed for this assessment. Such activities may include additional investigation of soil and groundwater. Further, additional investigation for potential point sources for contamination of local and regional groundwater by chlorinated solvents may be required by NJDEP. Demolition or partial demolition of existing structures may be expedient to complete investigation and remediation and prepare for site re-use.

The potential presence of chlorinated solvent contamination in site groundwater may also pose elevated risks to potential users of the site. An additional vapor intrusion study will be required should elevated levels of organic constituents continue to be identified in groundwater beneath the site. New construction may mitigate this risk by incorporation of engineering controls in design and construction of new facilities.

To complete the investigation and remediation with a goal to receive a full-site RAO, the current remediating party, Northrup Grumman, and the active business on site would likely need to be involved with negotiations. The CRA could engage their own LSRP as well as experienced environmental legal counsel to review the existing environmental record to determine what additional remedial actions, if any, are required to achieve remediation goals for re-use as industrial. A scope of work to complete this final phase of investigation and remediation would include the following:

1. Completion of a Remedial Investigation Workplan (RIW) for soil and groundwater including Case Inventory Document (CID), site-specific Quality Assurance Project Plan (QAPP) and Health and Safety Program. The RIW should also include requirements for a vapor study if required by groundwater findings and a pre-demolition survey to identify and quantify the various hazardous waste streams that would be generated by demolition of the existing buildings and subsurface structures.
2. Pre-acquisition site access would need to be arranged.
3. Following the completion of the Remedial Investigation and Pre-Demolition Survey, a Remedial Action Workplan (RAW) may be developed to implement the final phase of remedial action required at the site in conformance with expected site re-use goals. If final remediation includes the use of engineering or institutional controls such as capping or a Groundwater Classification Exception Area (CEA), remedial permits, long-term biennial inspections and certifications, and deed restrictions may be required.
4. Engineering controls may need to be incorporated into subsequent design elements for new construction at the site, such as vapor barriers and ambient air monitoring and ventilation systems.

Given that Northrup Grumman is the remediating party conducting the investigation and remediation activities on the Phil-Mar site, coupled with NJDEP's assertion that they are a responsible party for the Parkside Wellfield groundwater contamination, the ability to redevelop the Phil-Mar site for non-industrial uses will likely be difficult and time consuming.

**Phil-Mar Industries, Inc., 1661 Davis Street, Camden, NJ
NJDEP Case File Document Inventory**

Date	Document Type	Prepared By	Prepared For	Comments
2/15/2005	Work Plan for Site Investigation – City of Camden Parkside Wellfield Contamination	NJDEP	File Document	Workplan for investigation of potential industrial sources for chlorinated contamination detected in the Camden municipal wells at the Parkside Wellfield.
07/17/2006	Site Investigation – RF Products Inc.	NJDEP	File Document	Results of Site Investigation of the RF Products site in connection with NJDEP’s region-wide investigation of potential industrial sources for chlorinated contamination detected in the Camden municipal wells at the Parkside Wellfield.
09//2007	Expanded Site Investigation – RF Products Inc.	NJDEP	File Document	Results of and Expanded Site Investigation of the RF Products site in connection with NJDEP’s region-wide investigation of potential industrial sources for chlorinated contamination detected in the Camden municipal wells at the Parkside Wellfield.
11/2007	Unknown Source Investigation Summary – Camden City Parkside Wellfield Groundwater Contamination	NJDEP	File Document	Results of NJDEP’s region-wide investigation of potential industrial sources for chlorinated contamination detected in the Camden municipal wells at the Parkside Wellfield.

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NJDEP Case File Document Inventory**

11/8/2007	Correspondence	Riker Danzig Attorneys at Law	New Jersey Department of Law and Public Safety	Protest letter from counsel for RF Products disputing the findings of the NJDEP 2007 Expanded Site Investigation that named RF products as a potential responsible party for chlorinated contamination detected in the Camden municipal wells at the Parkside Wellfield.
8/30/2010	LSRP Notification of Retention – RF Products	AECOM Technical Services, Inc. (Trevose, PA)	NJDEP	Executed Notification of LSRP Retention form for NJDEP PI No. 015474 (RF Products/Phil-Mar sites). Northrop Grumman is identified as person responsible for conducting the remediation.
01/2012	Preliminary Assessment Report	AECOM Technical Services, Inc. (Trevose, PA)	NJDEP	Standard NJDEP report and forms.
01/2012	Site Investigation Report	AECOM Technical Services, Inc. (Trevose, PA)	NJDEP	Standard NJDEP report and forms.
01/2013	Vapor Intrusion Mitigation Plan	AECOM Technical Services, Inc. (Trevose, PA)	NJDEP	Standard NJDEP report and forms.

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NJDEP Case File Document Inventory**

06/2013	Vapor Concern Mitigation Response Action Report	AECOM Technical Services, Inc. (Trevose, PA)	NJDEP	Standard NJDEP report and forms.
08/2013	Remedial Investigation Report	AECOM Technical Services, Inc. (Trevose, PA)	NJDEP	Standard NJDEP report and forms.