

## 1.0 EXECUTIVE SUMMARY

### 1.1 PROPERTY DESCRIPTION

The Subject Property consists of the Cotton Mill Apartment Complex and a Downtown Parking parcel (parking lot) located in the Warehouse District of New Orleans, Louisiana. The Cotton Mill Apartments occupies approximately 3.5 acres, and is located on the city block bounded by Poeyfarre Street to the north, Annunciation Street to the east, John Churchill Chase Street (formerly Calliope Street) to the south, and Constance Street to the west. The parking lot is located north of the complex, on the north side of Poeyfarre Street, and occupies approximately 0.15 acres. PSI understands that Prudential Real Estate Investors is seeking to acquire the apartment complex, including an attached restaurant portion, as well as the parking lot portion located north of the complex.

The Subject Property is developed with one building that surrounds a centrally located open courtyard, with an access to Constance Street. The Subject Property contains 269 apartment units, and a restaurant, the Sun Ray Grill. The Sun Ray Grill is situated on the southeast corner of the subject property. For discussion purposes within this report, the apartment complex has been divided into five buildings: Building A located along John Churchill Chase Street; Building B located along Annunciation Street; Building C located along the east half of Poeyfarre Street; Building D located on Poeyfarre Street; and Building E that continues west along Poeyfarre Street to Constance Street. The buildings are connected by continuous hallways.

### 1.2 PROPERTY VICINITY DESCRIPTION

Current use of adjoining properties is described below:

- North:** Several businesses adjoin the Subject Property to the north. From the apartment complex, running east to the west along Poeyfarre Street, the businesses are: Dixie Machine Welding & Metal Works (northwest corner of Annunciation Street and Poeyfarre Street); an abandoned metal fabrication shop at 925 Poeyfarre Street (east of the parking lot on the subject property); Downtown Parking, located north of the parking lot; and an abandoned building west of the parking lot Parcel.
- East:** Several businesses adjoin the Subject Property to the east. From the north to the south along Annunciation Street are: Deanies Restaurant, the intersection of Poeyfarre Street and Annunciation Street; a parking lot for Deanies Restaurant; 1038 and 1040 Annunciation Street (possible residences); Contech International; an abandoned building (no address); the intersection of John Churchill Chase Street and Annunciation Street; and the former Lengsfield Brothers building (currently vacant).
- South:** Several businesses and residences adjoin the Subject Property to the south. From the east to west along John Churchill Chase Street are Dependable Storage; three residential duplexes; Mermaid Lounge (bar); and a grass covered lot used for parking.
- West:** The Con-o-Pac building adjoins the Subject Property to the west.

### 1.3 HISTORICAL RECORDS REVIEW

On-Site: Historical research indicates the Subject Property, prior to being an apartment complex, a restaurant, and a parking lot, was previously developed with various historical businesses. The main use of the apartment complex was by various clothing manufacturers (pre 1885-1995) occupying most of the buildings currently occupied by Cotton Mill Apartments on the Subject Property. The remaining portion of the Subject Property was leased for warehouse space and storefronts to a variety of businesses (i.e., General Mill's Supplies, Inc., various clothing companies, West Indies Liquor Corp., Bay Chemical Co., Myles Salt Co. LTD., Hardin Bag and Burlap Co., a lumber yard and various other businesses). The parking lot area, prior to being developed by Downtown Parking, was used as parking for neighboring businesses and was previously residential.

A review of historical information indicates that a minimum of three and potentially four petroleum underground storage tanks (USTs) have historically been reported on the apartment complex portion of the Subject Property. Based on information obtained and reviewed, there was one potential gasoline tank of an unknown size, one 8,531-gallon #6 fuel oil UST, one 7,775-gallon #6 fuel oil UST and one 10,000-gallon #6 fuel oil UST.

The three fuel oil USTs were reportedly removed; however, closure documentation and reports of confirmatory sampling conducted at the Subject Property for each of the UST removals was not available in the Louisiana Department of Environmental Quality's (LDEQ) UST files.

Off-Site: Reviews of aerial photographs, Sanborn fire insurance maps, historical United States Geological Survey (USGS) topographical maps and city directories, indicate the Subject Property vicinity has historically been developed for mixed-use purposes. Property to the north of the Subject Property has historically been developed with a multipurpose building, parking garages, manufacturing ice, and metal shops back to the late 1800's. Property to the east of the Subject Property has been developed with residential homes, restaurants, and mixed businesses since at least the late 1800's. Property to the south of the Subject Property has been developed with residential homes, a restaurant and various businesses circa 1885 to present; property to the west has been developed with residences and businesses at least back to the late 1800's.

Prior Reports: The following reports have been provided to PSI for review to date:

PSI obtained copies of the following reports for the Subject Property that were provided by Historic Restoration Incorporated (HRI) management company. A summary of each of these reports is provided below.

**Phase I Environmental Site Assessment for The Orleanian Terminal prepared by G&E Engineering, Inc. for Historic Construction, Inc. dated October 1995**

This assessment identified environmental conditions associated with the Subject Property prior to the development of the Cotton Mill Apartments. The assessment includes: a site history of the property; a lead based paint screening; an asbestos-containing material (ACM) inspection, sampling and analysis; interviews; and ownership review. The site assessment identified the following significant findings and recommendations:

- G & E recommended the further investigation of the potential on-site USTs.

- Lead-based paint was identified on both the interior and exterior surfaces of the building. This assessment recommended properly addressing the lead based paint according to the "recent guidelines".
- ACM was discovered in the pipe insulation, transite panels in bathrooms, boiler insulation, and thermal system. The assessment recommended that the ACM be removed prior to any renovation by a qualified inspector.
- Properly dispose the various chemicals found on site from previous businesses on-site.
- Determine the presence of PCBs in light ballasts, florescent bulbs and fixtures and properly dispose of any containing PCBs.

*Underground Storage Tank Investigation for the Orleanian Terminal prepared by G&E Engineering, Inc. for Historic Construction, Inc. dated January 12, 1996*

Following the Phase I ESA dated October 1995, an Underground Storage Tank Investigation was performed to determine more information on the contents, locations, sizes and depths of the USTs. Samples were also collected to determine if subsurface impact had occurred from releases associated with the USTs. Based on limited soil and groundwater sampling, the report concluded that no "gross" impact from USTs was present on the Subject Property; however, there was evidence of a release near one of the fuel oil USTs. The Underground Storage Tank Investigation report recommended that the landowner report the release to LDEQ's Underground Storage Tank Division and properly register the USTs. Based upon file review conducted by PSI at the LDEQ, the former USTs do not appear to have been registered and no reporting to the LDEQ appears to have occurred.

*Environmental Investigation Volume I-Findings & Volume II-Solutions for the Proposed Cotton Mill Apartments prepared by G&E Engineering, Inc. for Historic Restoration, Inc. dated September 27, 1996.*

The Environmental Investigation report is divided into two volumes containing Volume 1-Findings and Volume 2-Solutions. Volume 1-Findings, identifies the environmental concerns identified on the property and the corresponding information about the potential environmental problems. Volume 2-Solutions provides recommendations for the Subject Property. The nine sections for each of these reports are combined and presented as follows:

- 1 LBP was found both inside and outside the building. Test results and a plan for encapsulating were included in the report.
- 2 ACM was found in the pipe insulation, transite panels in bathrooms, boiler insulation, and thermal system; however, the brick and mortar came back negative for ACM. Test results and a plan for encapsulating and removal were included in the report.
- 3 A Termite Investigation was done on the property that concluded that termite activity was noticed in 19 locations, and that structural damage was observed in 21 locations. Creosote was also noticed in the wooden support beams of Building A, B and C; information on the remaining buildings was not provided. No solution was given to access the creosote beams, however treatment of the termite infestation was suggested.
- 4 The USTs located near the Constance Street entrance were investigated using a conductivity meter, a metal detector and a probe. No UST was discovered and further investigation was not considered warranted. The building containing the two fuel oil USTs was to be removed by Ranger Environmental, and the report states that LDEQ's Underground Storage Tank Division was notified

- of the release by a letter dated June 14, 1996. PSI has not received any correspondence to or from the LDEQ or from HRI regarding the onsite USTs and any associated releases.
- 5 All miscellaneous chemicals found in the building will be disposed of according to the current regulations upon start of renovation.
- 6 All bulbs and ballast found in the building will be disposed of according to the current regulations upon start of renovation.
- 7 Entergy has acknowledged ownership for transformers and will remove any potentially PCB contaminated equipment according to current regulations.
- 8 A 1908 Sanborn map indicated that two water wells located on the Subject Property. G&E contacted Louisiana Department of Transportation and Development (LDOTD) about any known wells on the Subject Property. No records of wells were found by LDOTD and no wells were observed on the property by a G&E environmental specialist.
- 9 Indoor air quality monitoring was performed to assess the potential concerns in the buildings from the previous light industrial uses and gain an understanding about potential biological agents in the building. Findings of this monitoring did not indicate the presence of volatile or semi-volatile compounds, bacteria or fungi present at levels considered a concern in ambient air. Therefore, no solutions were proposed to address indoor air quality.

**Phase I Environmental Site Assessment for The Proposed Cotton Mill Apartments Parking Lot prepared by G&E Engineering, Inc. for Historic Restoration, Inc. dated August 1996**

This assessment identified environmental conditions associated with the current Downtown Parking Lot and the parking lot parcel (located south of the former Pelican Ice & Cold Storage) included in this assessment. The site assessment identified the following significant findings and recommendations:

- The site was formally used for industrial/commercial purposes that presented recognized environmental conditions. The Pelican Ice portion of this assessment had two water wells that had been closed in accordance with regulatory requirements. Additionally, the closure of leaking USTs on the Pelican Ice portion of the property assessed has been accepted by LDEQ.
- Adjacent properties were noted as having the potential to contaminate shallow groundwater on the subject property; however, due to the proposed use being a parking lot, impact through shallow groundwater from off-site sources was not considered to be a significant threat to public health. No further investigations were recommended.
- No recognized environmental conditions were found during on-site reconnaissance.
- The Subject Property portion of the parking lot was historically found to be a parking lot since 1908.

**Two letters dealing with the removal of the fuel oil #6 underground storage tanks prepared by Ranger Environmental for Cotton Mill dated November 21, 1996 and May 19, 1997.**

Two heating oil underground fuel tanks were removed on August 28, 1996. Tank #A contained approximately 8,531 gallons. Tank #B contained approximately 7,775 gallons. A visual inspection of the tanks indicated soil impact and that impact may have spread to the area of the pool excavation. One soil sample was collected on May 16, 1997; however, no results were presented in this letter.

*Two letters discussing the finding and removal of the third fuel oil #6 underground storage tank prepared by Ranger Environmental for Cotton Mill dated May 27, 1997 and July 9, 1997.*

The third underground fuel tank was found and removed on May August 28, 1996. The third tank (Tank #C) was found while over-excavating the contaminated soil surrounding the two previous tanks in the pool area. Tank #C was a 10,000-gallon tank that contained more of the heating oil sludge. The tank was removed and disposed of by Southern Scrap. Prior to the removal of the tank, all heating oil and sludges were removed and properly disposed of. The letter states that the pool was to be located in the excavated area. The remaining clean dirt removed to make room for the pool was to be tested and disposed of properly or used to raise another portion of the subject property if it was clean. No further information on the disposal or use of the dirt was provided. No information on samples taken or LDEQ involvement in the excavation was provided in these letters.

*Laboratory Analysis of the Spent Abrasive Collected on the Exterior Coating of H2O Tank prepared by Industrial Safety and Design Company dated June 6, 1997, including summary on Cleaning and Painting of the Existing; Multi-leg Elevated Water Storage Tank for the Cotton Mill Apartments and Condominiums prepared by A-Way Tank Service, Inc. for Historic Construction and Design, Inc. that was not dated.*

This report, documenting conditions of the 50,000-gallon on-site elevated water tank, indicates that the spent abrasive used on removing the painted surface and interior of the water tank came back with a lead concentration of less than 0.2 milligrams per a liter (mg/l), and that the abrasive can be classified to be disposed of in an industrial landfill. It also discusses the removal of interior and exterior painted surfaces of the water tower with an abrasive.

*Limited Lead-Based Paint Assessment for the Cotton Mill Apartments prepared by Calco Lead Hazard Inspectors and Hazardous Risk Assessors for Historic Restoration, Inc. dated September 8, 1998.*

This report was performed to inspect rooms at the Cotton Mill Apartments that had children under the age of six living in the apartment. Apartments units #104, #244, and #252 were inspected for lead based paint, and each came back with positive readings in the three apartments sampled. The inspector recommended encapsulating the lead-based paint with a SAF-T-SHIELD in each apartment. No information was given in regard to potential LBP in the remaining apartments, and no information was received from HRI indicating that the encapsulation was completed.

#### 1.4 REGULATORY RECORD REVIEW

Database Report: Review of the regulatory database report obtained from Environmental Data Resources, Inc. (EDR) indicated no information on the Subject Property.

Based on the separation distance, the inferred regional groundwater flow direction, and/or the case status, the Resource Conservation Recovery Act (RCRA) Generator facilities, UST facilities, and leaking underground storage tank (LUST) facilities reported in the Subject Property vicinity have not likely impacted the Subject Property. These listed facilities are not considered to represent an environmental concern in connection with the Subject Property.

#### 1.5 ADDITIONAL NON-ASTM SERVICES

##### 1.5.1 Limited Mold Evaluation

A limited mold inspection was conducted by Mr. Kyle Walker of PSI on October 31, 2003. The inspection consisted of walking the hallways and the vacant apartments for signs of moisture intrusion or mold. Five vacant apartments were observed. During the walkthrough, two areas of moisture intrusion were observed. These areas were each less than a square foot and noted on the 3<sup>rd</sup> floor hallway between the joint of Building C and Building D and in room 278. A list of known leaks was also provided by the Cotton Mill Apartments. The list of leaks indicates that these areas of leaks pre-dominantly in the living rooms near the windows. Please see additional information in Section 1.7 of this summary.

#### **1.5.2 Asbestos Survey**

A prior ACM report prepared for HRI revealed that ACM was present on the Subject Property in the pipe insulation, transite panels in bathrooms, boiler insulation, and thermal system. ACM was not discovered in the brick and mortar of the boiler room, and a scope of work was provided for the removal of the ACM; however, no documentation of the removal was provided to PSI. An ACM evaluation was not performed in conjunction with this Phase I ESA.

#### **1.5.3 Lead-Based-Paint Survey**

Prior LBP reports prepared for HRI revealed that LBP was present on the property, and a scope of work was provided for containment through encapsulation of the LBP; however, no documentation indicating which surfaces were encapsulated was provided to PSI. A LBP evaluation was not performed in conjunction with this Phase I ESA.

#### **1.5.4 Radon**

According to available information from the U.S. Environmental Protection Agency (EPA) website ([www.epa.gov/iaq/radon/zonemap](http://www.epa.gov/iaq/radon/zonemap)) and review of the EDR database report, Orleans Parish is located in Radon Zone 3, which is defined as "Low Potential" for radon with a predicted average indoor screening level of less than 2 picocuries per liter (pCi/L). The EPA has published an "achievable" recommended limit of 4 pCi/L for airborne levels of radon.

In addition, PSI placed nine radon canisters throughout the building. The results indicated a maximum Radon Gas level of 1.6 pCi/L at the subject site.

#### **1.5.5 Wetlands/Floodplain**

According to the 1991 NWI (National Wetlands Inventory) "New Orleans East" quadrangle, no wetlands are located on or adjacent to the Subject Property. The Subject Property has been developed since at least the late 1800's with residential, commercial and industrial developments. Review of prior reports performed at the Subject Property did not reveal evidence of wetlands at the Subject Property.

According to the Federal Emergency Management Agency (FEMA) Federal Insurance Rate Map (FIRM) for Orleans, Louisiana (22071C0160E), the Subject Property is located within the 500-year floodplain of the Mississippi River.

### **1.6 SUMMARY OF FINDINGS**

Based on this Phase I ESA, which was performed in general accordance with the requirements of ASTM Standard E 1527-00 and Prudential Real Estate Investors Environmental Site Assessment Scope of Work dated July 3, 2001, the following environmental concerns in connection with the Subject Property were revealed.

#### **On-Site Environmental Concerns**

- Historical site usage of the Subject Property includes a lumber yard, manufacturing facilities as well as various light industrial and commercial businesses.
- Three fuel oil tanks appeared on the 1940, 1950, 1983, and 1994 Sanborn Maps. PSI has not received the results for the sample collected during the removal of the three fuel oil USTs or any closure information.
- A gasoline UST and pump were observed in a historic photograph and on various Sanborn Maps near the courtyard entrance on Constance Street. Analytical results from an investigation, performed to search for contamination in the soil and groundwater, were below detection limits for both the soil and groundwater samples. Although probes were extended into the ground in search of the former UST; no UST was found.
- PSI has not received information confirming the LBP in apartment units #104, #244, and #252 has been encapsulated. During site reconnaissance, most of the building and apartments appeared to be freshly painted or encapsulated with a clear coat on the brick surfaces; however, areas were observed throughout the building with flaking paint on some of the brick walls. Ms. Lucy Fernandez and Mr. Charles Meyers of HRI told PSI that the encapsulation had been done; however, no confirmation reports were provided to PSI.
- ACM was identified in the pipe insulation, transite panels in bathrooms, boiler insulation, and thermal system. ACM was not identified in the brick and mortar of the boiler room. No information has been received regarding the removal or encapsulation of ACM at the Subject Property. Again, through interviews with Ms. Lucy Fernandez and Mr. Charles Meyers of HRI, ACM had been contained or removed; however, no reports were available on-site, or provided by HRI confirming the abatement and disposal of ACM. No documents were given regarding LDEQs involvement with the renovation or removal of ACM on the Subject Property.

#### **Off-Site Environmental Concerns**

- The Sanborn Maps dated 1940, 1950, 1983 and 1994 illustrate five gasoline tanks located on the north adjoining property. This facility is immediately adjacent to the west of the parking lot portion of the Subject Property. This property was used by Yellow Cab Co. prior to 1952-53. The property is currently a vacant building. No information regarding this property was available at LDEQ. Based on the presence of the five gasoline USTs, this property does represent evidence of an environmental concern in connection with the Subject Property.

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USTs

## 1 EXECUTIVE SUMMARY

Professional Service Industries, Inc. (PSI) has conducted a Phase II Environmental Site Assessment (ESA) of the Cotton Mill Apartments property located in the Warehouse District of New Orleans, Louisiana. The investigation was performed in general accordance with the scope and limitations of the American Society for Testing and Materials (ASTM) Standard E 1903-97 and the contract between PSI and Historic Restoration Incorporated (HRI) Property Management dated April 6, 2004. The assessment was performed for HRI Property Management. Any exceptions or deletions from the scope of work are described in Section 2.4 of this report.

The subject property consists of the Cotton Mill Apartments complex and a portion of the Downtown Parking lot, located in the Warehouse District of New Orleans, Louisiana. The Cotton Mill Apartments complex occupies approximately 3.5 acres, and is located on the city block bounded by Poeyfarre Street to the north, Annunciation Street to the east, John Churchill Chase Street (formerly Calliope Street) to the south, and Constance Street to the west. The parking lot portion is located north of the complex, on the opposite side of Poeyfarre Street, and occupies approximately 10,000 square feet of space. PSI understands that HRI Property Management is seeking to sell the apartment complex property, including an attached restaurant portion, as well as the parking lot portion located north of the complex. For discussion purposes within this report, the apartment complex has been divided into five buildings: Building A located along John Churchill Chase Street; Building B located along Annunciation Street; Building C located along the east half of Poeyfarre Street; Building D located on Poeyfarre Street; and Building E that continues west along Poeyfarre Street to Constance Street. The buildings are connected by continuous hallways.

Historical research conducted during a Phase I ESA (PSI Project No. 865-3E062, dated November 20, 2003) revealed that the subject property, prior to being an apartment complex and a restaurant, was previously developed with various historical businesses. The main use of the building was by various clothing manufacturers (pre 1885-1995) occupying most of the buildings currently on the subject property. The remaining portion of the subject property was leased for warehouse space and storefronts to a variety of businesses (i.e., General Mill's Supplies, Inc., various clothing companies, West Indies Liquor Corp., Bay Chemical Co., Myles Salt Co. LTD., Hardin Bag and Burlap Co., a lumber yard and various other businesses).

A review of historical information indicates that a minimum of three and potentially four petroleum underground storage tanks (USTs) have historically been reported at the Subject Property. Based on information obtained and reviewed, there was one potential gasoline tank of an unknown size, one 8,531-gallon #6 fuel oil UST, one 7,775-gallon #6 fuel oil UST, and one 10,000-gallon #6 fuel oil UST.

According to letters provided by HRI Property Management, from Ranger Environmental, the three fuel oil USTs were reportedly removed; however, closure documentation and reports of confirmatory sampling conducted at the subject property



for each of the UST removals was not available in the Louisiana Department of Environmental Quality's (LDEQ) UST files. Prior to conducting this Phase II ESA, a previous site investigation was conducted, titled Environmental Investigation Volume I-Findings & Volume 2-Solutions for the Proposed Cotton Mill Apartments, prepared by G&E Engineering, Inc. for HRI, Inc., dated September 27, 1996. During this investigation, evidence of a potential gasoline UST was investigated using a conductivity meter, a metal detector, and a probe. No UST was discovered and no further investigation was considered warranted by G&E Engineering, Inc. In addition, soil samples were collected during this investigation. Soil sample analytical results indicated elevated concentrations of petroleum hydrocarbons in soils. Excavation information and tank removal information of the fuel oil tanks was also provided by G&E Engineering.

### 1.1 SCOPE OF WORK

PSI developed the following scope of work based on findings presented in PSI's Phase I ESA (PSI Project No. 865-3E062, dated November 20, 2003). The recommendations presented in the Phase I ESA included further investigation at the subject site in regards to the potential impact from the three removed fuel oil USTs, and the potential impact from the unconfirmed gasoline UST.

A total of four borings were installed using direct-push techniques. Three borings, B-7, B-8 and B-9, were drilled near the on-site smokestack in the current pool area, in the former location of the fuel oil USTs. One boring, B-10, was drilled between buildings A and E, in the courtyard area on the west side of the apartment complex, to investigate potential impacts from the unconfirmed gasoline UST.

Field screening of collected soil samples for organic vapors was performed using an organic vapor analyzer (OVA)-photoionization detector (PID). One soil sample from each borehole location was submitted for laboratory analysis based on field screening results, visual observations, evident odors, and subsurface conditions encountered.

The soil borings were then converted to four temporary groundwater sampling wells (TW-7 through TW-10). The wells were constructed of 0.75-inch PVC casing with the lower five feet of slotted well screen. Groundwater samples were then collected using low-flow techniques. The total depth of the wells ranged from 9 to 14 feet below ground surface (bgs), with groundwater encountered from 4 to 10 feet bgs.

Laboratory analysis of selected soil and groundwater samples included the following: total petroleum hydrocarbons (TPH) as diesel range organics (TPH-DRO), TPH as gasoline range organics (TPH-GRO), and TPH as oil range organics (TPH-ORO) using EPA Method 8015B; VOC by EPA Method 8260; semi-volatile organic compounds (SVOC) by EPA Method 8270; poly-aromatic hydrocarbons (PAH) by EPA Method 8310; benzene, toluene, ethylbenzene, and total xylenes (BTEX) and methyl tert-butyl ether (MTBE) by EPA Method 8260; and lead by EPA Method 6010.

In addition, one soil sample (B-7/6-8) and two groundwater samples (TW-7 and TW-9) were later analyzed for individual aliphatic and aromatic carbon fractions contained within the TPH extractable range (>C<sub>10</sub>-C<sub>35</sub>), by the Massachusetts Department of Environmental Protection (MADEP) Extractable Petroleum Hydrocarbons (EPH) method. The carbon fraction analyses were performed due to elevated levels of TPH-DRO and/or TPH-ORO discovered in select samples during the initial investigation, described further in the following sections.

## 1.2 FINDINGS

Laboratory analytical results indicated that concentrations of all soil samples submitted for analysis of TPH-GRO, BTEX/MTBE, and SVOC were below the laboratory reporting limits. Select soil samples submitted for analysis of TPH-DRO, TPH-ORO, VOC, total lead, and individual aliphatic and aromatic carbon fractions, revealed levels above the laboratory reporting limits.

Laboratory analytical results indicated that all sampled groundwater parameters submitted for analysis of TPH-GRO, BTEX/MTBE, dissolved lead, and individual aliphatic and aromatic carbon fractions, revealed levels below the laboratory reporting limits. Select groundwater samples submitted for analysis of TPH-DRO, TPH-ORO, SVOC, and total lead revealed levels above the laboratory reporting limits.

The LDEQ developed applicable environmental regulatory standards that are contained in the Risk Evaluation/ Corrective Action Program (RECAP) publication dated October 20, 2003. A comparison of the analytical data for soil and groundwater samples obtained from the subject property to the applicable RECAP standards indicates that the soil and groundwater concentrations are below applicable RECAP standards.

## 1.3 CONCLUSIONS AND RECOMMENDATIONS

A comparison of the analytical data for soil and groundwater samples obtained from the subject property to the applicable RECAP standards serves as the basis for the following conclusions:

- As specified in the RECAP publication, dated October 20, 2003, if both soil and groundwater TPH fractionation and TPH mixture data have been obtained, management decisions are to be based on fractionation data since the fractionation method yields more specific information regarding the TPH constituents present.
- Total lead concentrations in groundwater were detected in the groundwater sample analyzed from TW-10. However, PSI believes that the elevated concentration of total lead is due to the presence of suspended solids in the groundwater sample, and that the results for dissolved lead in groundwater are representative of actual conditions.

Based on the findings of this Phase II Environmental Site Assessment, PSI recommends the following:

- No further investigation of the subject site appears to be warranted at the subject site at this time.
- If a higher level of confidence is required for the lead level detected at TW-10, a permanent monitor well can be installed for analysis of total and dissolved lead.
- PSI recommends that this report be submitted to the LDEQ UST Division to secure a regulatory determination regarding the former USTs located on the Subject Property. Since the disposition of the former gasoline UST remains unknown, additional testing may be required depending on LDEQ requirements.

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## EXECUTIVE SUMMARY

PSI has completed an Asbestos and Lead-Based Paint Survey for the Cotton Mills Apartment Complex in New Orleans, Louisiana. The subject property is developed with a single, multi-floor building containing 126 units with a centrally located open courtyard. The survey was performed in accordance with signed PSI Proposal Number 865-3A0008 between PSI and Prudential Real Estate Investors and the Prudential Asbestos Scope of Services for Asbestos Bulk Services and applicable Federal Guidelines.

### ASBESTOS SURVEY

Asbestos surveys have been previously completed at the Subject Property. The surveys were completed in 1995 and 1996 by G&E Engineering, Inc. During these surveys, asbestos was found in insulation on 1, 2, and 4-inch water lines, transite panels and associated mastic in first floor bathrooms, fireproofing on beams in the boiler room, insulation on the boiler, and floor tile. The surveys were reviewed by PSI, and field verified to have been abated during this asbestos survey of the Subject Property.

Bulk samples of the suspect ACM were collected and transported to PSI's NVLAP-certified laboratory for analysis by Polarized Light Microscopy (PLM). Three samples were taken from suspect ACM containing plaster not previously documented in the historical Asbestos Surveys. This plaster is located on a hallway wall east of Room 321 near a section of pink paint.

The results of the analysis indicated that no samples collected for laboratory analyses contained asbestos.

### LEAD BASED PAINT (LBP) SURVEY

PSI assessed LBP on the painted and/or coated surfaces of various structures and components located at the interiors and exteriors of the buildings that remained from the original building construction. The painted surfaces were analyzed using a portable x-ray florescence (XRF) device. The analyses were performed to determine the lead content of the components analyzed. Additionally, the state of encapsulation of surfaces identified to contain lead-based coatings was assessed.

A total of 106 XRF readings were recorded during the survey. Components tested included:

- Various colors on interior brick walls, columns, window frames, widows, concrete walls, ceiling beams and ceilings boards
- Various colors on exterior brick and concrete walls, windows and window frames.

A positive classification indicates lead is present on the tested component at or above the Housing and Urban Development (HUD) standard. The "HUD standard" for lead in paint is  $>1.0 \text{ mg/cm}^2$  by XRF analysis. Although this facility is not governed by HUD, the "HUD standard" is the standard used in the industry to determine an exposure hazard due to lead.

Concentrations of lead in samples of materials equal to or greater than  $1.0 \text{ mg/cm}^2$  by XRF analysis were detected on concrete and brick walls, window frames, wooden columns, wooden ceiling boards, and wooden ceiling beams located throughout the complex. Approximately 55,000 square feet of brick walls, 200 square feet of concrete walls, 4,000 square feet of window frames, 16,000 square feet of wooden columns, 230,000 square feet of ceiling boards, and 100,000 square feet of wooden ceiling beams contain lead greater than  $1.0 \text{ mg/cm}^2$  by XRF analysis.

Concentrations of lead in samples of material from  $0.5$  to  $1.0 \text{ mg/cm}^2$  by XRF analysis are considered inconclusive according to the HUD standard. Approximately 55,000 square feet of brick walls, 1,000 square feet of window frames, 2,000 square feet of wooden columns, and 50,000 square feet of wooden ceiling beams contain lead from  $0.5$  to  $1.0 \text{ mg/cm}^2$  by XRF analysis.

## CONCLUSIONS AND RECOMMENDATIONS

### Asbestos-Containing Materials

- No asbestos containing materials were identified.
- If suspect asbestos containing materials (ACM) are encountered during subsequent investigations that could not be identified during the limited asbestos survey, the material should be handled in accordance with Louisiana Department of Environmental Quality (LDEQ) regulations.
- An AAC-2 "Notification of Demolition and Renovation Form" must be completed and submitted to the LDEQ prior to commencing any future renovation activities. A copy of the form is included in the Appendix.
- No Asbestos Operations & Management (O&M) plan is required.

### Lead-Based Paint

Due to lead being detected in amounts greater than  $1.0 \text{ mg/cm}^2$  by XRF analysis in paint on components located on interior and on exterior surfaces of the Cotton Mills Apartments, and due to inconclusive results on additional surfaces, PSI recommends the following:

- The LDEQ promulgates lead-based paint regulations for residential properties that are

planned for child occupation (under 6 years old). Development of a Lead Management Plan that meets current EPA and OSHA regulations is recommended, under which the identified lead-based paint coatings may be monitored and controlled by either abatement or encapsulation.

- During the Assessment, approximately 45% of the assessed brick wall surfaces containing LBP, all window frames, and all wooden columns were observed to be encapsulated. The total estimated square footage of LBP-painted brick wall surfaces within the complex is 200,000 square feet. Based on the estimate of 110,000 square feet of brick wall surface that is not encapsulated, the cost for encapsulation of these surfaces is estimated to be approximately \$500,000. Based on the estimate of 110,000 square feet of brick wall surface that is not encapsulated, the cost for abatement of these surfaces is estimated to be approximately \$800,000. Please note that this estimate does not include encapsulation or abatement of the ceilings or wooden beams.

This summary does not contain all the information that is found in the full report. The report should be read in its entirety to obtain a more complete understanding of the information provided, and to aid in any decisions made or actions taken based on this information.