



February 16, 2014

Ditto Residential
2217 14th Street, NW
Suite 300
Washington, DC 20009

Attention: Mr. Brian Burke, CFO

Subject: Phase II Environmental Investigation Report
Former Hessick Oil Property
1124 & 1126 Florida Avenue
Northeast, Washington, DC

Reference: ICOR Project No. 14-DR.01

Dear Mr. Burke:

This letter report summarizes the findings of the environmental investigation activities conducted by ICOR, Ltd. (ICOR) in February 2014 at the Former Hessick Property located at 1124 and 1126 Florida Avenue in Northeast, Washington, DC (herein referred to as the SITE). It is ICOR's understanding that the SITE is being considered for redevelopment as residential apartments/condominiums (with one or two subsurface parking levels). The SITE is currently improved with several structures including automobile repair/service garages, and associated office areas and a vacant row house. In the past, the SITE was used for bulk petroleum/fuel storage. Historical records demonstrate that the SITE was used for gasoline and oil service from the mid 1940s through the mid 1950s. Hessick, Inc. started fuel storage operations at the SITE in the mid 1970s. Sroul Partnership (current owners) purchased the property from Hessick Inc. in 1988. As many as eighteen underground storage tanks (USTs) ranging from 550 gallons to 25,000 gallons were reported to have been utilized at the SITE. Figure 1 depicts the general layout of the SITE.

This investigation was conducted at the request of Ditto Residential (Ditto) to identify potential environmental conditions present at the SITE which would require abatement and/or remediation during proposed redevelopment and/or would be the subject of regulatory enforcement actions or consent orders. Ditto is currently considering purchasing the SITE and redeveloping it for residential use.

To accomplish these tasks, ICOR conducted the following activities:

- Reviewed previous assessment reports for the SITE, EDR database and Sanborn Fire Insurance Maps; and,
- Conducted a Limited Subsurface Investigation (SI) at the SITE

The following documents were reviewed by ICOR

Comprehensive Site Assessment, 1124-26 Florida Avenue, Washington, DC, prepared by FEA, dated November 20, 2006

Report of Comprehensive Site Assessment Update, 1124-26 Florida Avenue, NE, prepared by FEA, dated March 28, 2007

Corrective Action Plan, 1124-1126 Florida Avenue, Washington, DC, prepared by EDC, dated October 21, 2009

Corrective Action Monitoring Report, March 25, 2010 Field Event, 1124-1126 Florida Avenue, Washington, DC, prepared by EDC, dated April 29, 2010

No Further Action Letter, prepared by DDOE, dated July 21, 2010

The areas investigated included areas where underground storage tanks (USTs) were reported to have been or are present. The SI was performed to determine if current and/or past operations at the SITE have resulted in adverse impact to soil and groundwater. If adverse impact to soil and groundwater was identified, the potential impact to Ditto's proposed redevelopment plans, project cost, and project schedule was also evaluated.

The SI consisted of collecting soil samples from the SITE for field and laboratory analysis. The investigation activities and findings are summarized in the following sections. Photo-documentation of the SI activities is included as Attachment 1.

SITE DESCRIPTION

The SITE is located at 1124 and 1126 Florida Avenue, in Northeast, Washington, DC. The SITE is comprised of two lots and is improved with one row house style structure (1126), an L shaped building used as service garages and offices (1124) and associated asphalt and concrete-paved parking lots and driveways. The SITE is comprised of approximately 12,900 square feet of land. The SITE is currently used for automobile servicing. There is no evidence of current uses of USTs at the SITE.

Topography at the SITE is generally flat. The SITE is bound to the north by a public alley, beyond which residential properties are located. The SITE is bound to the east and west by residential properties and to the south by Florida Avenue, NE (beyond which are row houses and commercial properties are present). The SITE and vicinity are serviced by public water and sewer.

BACKGROUND

Information obtained in this section was derived from previous reports, DDOE files and review of EDR Database.

The EDR Database showed the 1124 Florida Avenue SITE to be occupied by a gasoline and oil service station operated by Judith and Irvin Schuman in 1940 and 1943, by Manuel Rice in 1948, by Leppard Esso Station in 1954 and by Rashead Auto in 1995. The database shows the SITE to be occupied by Lobos Discount Car Center in 2006, 2008 and 2009.

The 1904 Sanborn Fire Insurance Map (SFI) show the SITE to be vacant. The 1928 SFI shows the SITE to be a coal yard with a filling station shown on the south portion of the property. The 1959 through 1998 SFIs show the SITE to be a filling station and auto repair facility. USTs are depicted in the central portion of the property.

Based in information obtained from the EDC and FEA reports, the SITE was acquired by Hessick Oil (Hessick) in 1973. Hessick started operation of the SITE as a fuel storage facility at that time. Based on information obtained from DDOE, eighteen USTs were registered to the SITE. The tanks are listed as being 25,000 gallons (2), 20,000 gallons (2), 15,000 gallons (2), 12,000 gallons (3), 10,000 gallons (3), 8,800 gallons (1), 5,000 gallons (1), and unknown sizes (4) in capacity. The DDOE lists the tanks as formerly being used for diesel or kerosene storage. Reportedly, thirteen (13) tanks were removed from the ground and five (5) tanks were closed in place.

According to the FEA and EDC reports, Hessick operated twelve (12) USTs at the SITE. Presumably the additional six tanks were owned/operated by the former gasoline station occupants. Reportedly, Hessick excavated and removed seven (7) USTs in May 1987. The additional five tanks were closed in place. The Figure depicting the tank locations was provided in the EDR report and is included in this report as Figure 2.

Srour Partnership (current owner) reportedly acquired the property from Hessick in 1988.

Subsurface petroleum contamination was encountered during nearby utility excavation and reported to DCRA on January 15, 1992. DCRA subsequently issued Case#92-032 for the contamination associated with the SITE. DCRA pursued Hessick as the responsible party for the release and requested a subsurface investigation. Reportedly, Hessick hired Clendenin Consultants to conduct the investigation. According the EDC report, Clendenin found diesel range organic (DRO) contamination in soil samples ranging from 81 milligrams per kilogram (mg/kg) to 6,000 mg/kg in 1992. DCRA directed Hessick to perform an extended site assessment to further delineate the extent of contamination identified at the SITE. Hessick did not respond to the directive and DCRA perused Srour Partnership to perform the requested investigation.

Srour contracted FEA to conduct the DCRA requested Comprehensive Site Assessment (CSA) in 1996/1997. FEA's CSA was conducted in two phases. Initially, FEA completed ten (10) borings across the SITE using direct push sampling techniques. Based on the finding of FEA's investigation, DRO was found to be present in soil (ranging from depths of 8 feet below grade to 20 feet below grade) at concentrations ranging from 280 mg/kg to 16,000 mg/kg. Gasoline range organics (GRO) were found to be present in soil at concentrations ranging from 45 mg/kg to 170 mg/kg. FEA's boring locations are depicted on Figure 3.

FEA subsequently installed monitoring wells in five (5) locations within the former tank field. In 1997, groundwater was measured to occur at depths ranging from 3.42 feet below grade to 9.51 feet below grade. DRO was detected in all five monitoring wells at concentration ranging from 157.4 milligrams per liter (mg/L) to 0.54 mg/L in 1997. DRO were detected in all five wells at concentrations ranging from 1 mg/L to 4 mg/L in 2006. Well construction details were not provided in the FEA report.

In their Comprehensive Site Assessment Update Report (2007), FEA requested case closure based on an absence of sensitive receptors at or adjacent to the site.

In 2009, EDC & Mr. Srour met with representatives from DDOE to discuss the SITE. EDC determined that enhance natural attenuation was the most appropriate corrective action to address petroleum contamination present at the SITE. At that time EDC proposed to monitor groundwater (sampling, testing and gauging) on a quarterly basis and to treat (inject/pour into) each well with combination bacteria, nutrient and surfactant (BioStimulator) to enhance aerobic degradation of petroleum hydrocarbons in groundwater.

In their 2010 Corrective Action Monitoring Report, EDC concluded that "dissolved phase contaminant concentrations exhibited significant attenuation from October 2006 to March 2010." EDC further concluded the following:

- No free-phase petroleum was detected during well gauging
- Groundwater elevation data indicates unconfined, shallow ground water flow is east northeast with water discharge from leaking sewers causing water mounding at MW-3
- Dissolved-phase petroleum contaminant concentrations were detected at trace concentrations only, indicating a significant mass of mobile petroleum contamination is not present at the site.
- The dissolved-phase petroleum contaminant concentrations detected were orders of magnitude lower than DDOE risk-based screening levels for residents and commercial /construction workers.
- Dissolved-phase benzene concentrations detected at MW-2 exhibited a significant temporal decrease from October 2006 to March 2010.

In July 2010, the DDOE issued a No Further Action Letter for the SITE. In the letter, the DDOE indicated that it (UST Branch) had reviewed the final closure report and all other information submitted to date by EDC pertaining to the release and cleanup of the release at the SITE. The DDOE determined that presently, the residual contamination left in place at the SITE does not pose a threat to human health and/or the environment. The DDOE determined that no further remedial action is necessary at the SITE **unless** the contaminated soil is removed, disturbed or excavated.

SUBSURFACE INVESTIGATION

The SI consisted of collecting soil samples for field screening and laboratory analysis.

Site Assessment

On January 29, 2014, ICOR completed 8 test borings at the SITE (designated SB1 through SB8) at the SITE. The borings were completed to assess former UST locations across the property. The test boring locations (historic and recent) are depicted on Figure 4.

ICOR's borings were completed using a direct-push sampling rig and were advanced until shallow groundwater was encountered or a target depth of 20 or 25 feet was reached. Groundwater was not encountered during advancement of the direct-push borings.

Soil samples were collected continuously from the direct-push test borings using 5-feet long acetate-lined barrel samplers. The entire length of each sample core generated during drilling was inspected for lithological characterization and evidence of impact (visual & olfactory). Each soil core was also screened in the field with a photo-ionization detector (PID) to check for the presence of volatile organic compounds (VOCs).

A total of 11 samples were selected for laboratory analysis. Based on field observations and readings, one soil sample was selected for laboratory analysis from each boring. Additional soil samples were collected from both shallower and deeper depths from select borings. The soil samples were submitted to Caliber Analytical Services (CAS) for analysis of diesel and gasoline range total petroleum hydrocarbons (THP-DRO and TPH-GRO, respectively) using EPA Method 8015. Select soil samples were also analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) using EPA Method 8021B.

After collecting the samples, ICOR backfilled each direct-push boring to grade with its respective cuttings or bentonite slurry, and resurfaced each disturbed location with asphalt patch.

Findings

Based on field observations, two general categories of lithology were noted beneath the SITE. Within the central portion of the SITE where USTs were removed, the upper 13 to 15 feet of the SITE consists of fill (silty sand, gravel, brick and concrete fragments and clay). This materials is underlain by red to brown, tight, dry, clay. Inside the structures along the south, west and north

perimeter of the SITE where UST were closed in place, silty sand was observed to a depth of approximately 5 to 6 feet below grade. This material is underlain by beige to brown or grey to orange silty sand and gravelly clay to a depth of approximately 12 to 13 feet below grade. A Quartz vein was noted at a depth of approximately 13 to 14 feet below grade. This material is underlain by brown to reddish, tight, dry clay to maximum explored depth of 25 feet below grade. Petroleum odors and elevated PID readings were noted in all of the borings. PID readings ranged from 35 to 40 units to greater than 500 units in all locations at most depths. In general, the impacted soil was encountered at depths ranging from approximately 2 to 20 feet below grade beneath the structures along the west, north and south perimeter of the property and at depths ranging from 7 to 20 feet within the central portion of the SITE where tanks were removed. Groundwater was not encountered during this investigation.

TPH-DRO were detected in all of the samples except SB4 (14-15) at concentrations ranging from 27 mg/kg to 5,800 mg/kg. The concentration of TPH-DRO detected in eight (8) of the samples are above DDOE Soil Quality Standard of 100 mg/kg.

TPH-GRO were detected in all of the samples except SB8 (19-20) at concentrations ranging from 0.39 mg/kg to 1,100 mg/kg. The concentration of TPH-DRO detected in four (4) of the samples are above DDOE Soil Quality Standard of 100 mg/kg.

BTEX constituents were not detected above regulatory reporting limits in any of the samples analyzed.

The laboratory results (recent and historical) are summarized on the attached Table. The laboratory reports of analysis are included as Attachment 3.

CONCLUSIONS AND RECOMMENDATIONS

Based on the investigation findings, ICOR's review of historical documents and the UST assessment findings, ICOR concludes the following:

- The SITE has a long history of onsite petroleum storage
- As many as eighteen (18) UST were registered to the SITE
- Thirteen (13) USTs were reported to have been removed and five (5) UST were reportedly closed in place prior to 1987 with no closure documentation
- Perch water appears to present within the former tank field
- Diesel and Gasoline impacted soil is present beneath the SITE

ICOR believes that the above-referenced environmental conditions will affect the proposed redevelopment costs for the SITE.

Specifically, excavation for subsurface parking will disturb impacted soil and require some dewatering. Dewatering will likely require pretreatment prior to discharge (public sewer), or if

feasible/practical removal and disposal. Although not considered hazardous, all petroleum-impacted soil generated during redevelopment will require special handling and proper disposal/treatment at a permitted facility.

To address the impacted media identified at the SITE, and meet District of Columbia regulatory requirements, ICOR recommends the following:

- The SITE owner and DDOE be provided a copy of this report. After the DDOE is notified, Ditto's redevelopment plans for the SITE and proposed plans to address the environmental conditions during redevelopment of the SITE should be discussed with the DDOE.
- A Corrective Action Plan and/or Hazardous Materials Management Plan should be prepared for the SITE prior to development. The plan should address removal of all remaining USTs (if encountered) and associated impacted media during redevelopment of the SITE. The SITE should be considered for entrance into DDOE's Voluntary Cleanup Program or Voluntary Remediation Action Program.
- Appropriate engineering controls (i.e. vapor barrier) be incorporated into the proposed building design to adequately prevent petroleum vapors from migrating into the building.
- Appropriate health and safety measures and oversight by an environmental professional be implemented during construction to adequately protect the health of SITE workers ensure proper management of contaminated media.
- All required DDOE and other regulatory agency permits and approvals be obtained before redevelopment (construction) is initiated.

If you have any questions concerning this report, please feel free to contact me at (703) 980-8515.

Sincerely,



Ike L. Singh
Program Manager