

RECEIVED
Land Protection Branch

MAR 12 2019

Hazardous Waste

Lead Contaminated Soil Compliance Status Report

Howard Coffin Park
Brunswick, Georgia

March 2019

I. Site History

Howard Coffin Park in Brunswick, Georgia, is a city-owned park located in the southeastern portion of the city. The park is approximately 18 acres in size, and includes four baseball fields, tennis courts, swimming pool, and soccer fields. The park is bordered on the north by Gloucester Street (GA State Route 25 Connector), on the east by US Highway 17, on the west by Lanier Boulevard, and on the south by salt water marsh.

Phase I and Phase II Environmental site assessments of the site have reported the disposal, burning, and burial of debris at the site in the 1930's and the use of dredged material to fill the site in the 1950's. Several soil sampling and analysis projects were conducted between 2006 and 2010 in order to determine the extent, contaminants, and severity of any soil impacts. A Phase II Environmental Site Assessment was completed in 2008 by Qore Property Sciences, and is attached as Appendix B. Section 3.2 of the Qore report (dated February 20, 2008) states that none of the samples from an August 2006 groundwater sampling event exceeded Georgia EPD reporting/action levels for metals. The same section of the report also states that two groundwater samples were taken in July 2007 from areas of fill material which contain the highest soil lead concentration. These groundwater samples also indicated no detectable lead content. As a result of these soil and groundwater tests, a letter was issued by the Georgia Environmental Protection Division (EPD) dated September 15, 2011, requiring a surface soil assessment for lead. In response to the discovery and required remediation activities of lead-impacted soil at the site, a Lead Surface Soil Assessment was completed by Edwards Engineering in 2012. A copy of that report is attached as Appendix E. The assessment identified an additional quantity of contaminated soil in need of source removal by excavation. During the months of September to December of 2013, Stantec Consulting Services assisted the City of Brunswick in completing a project to excavate and remove approximately 1,340 cubic yards of lead contaminated soil from Howard Coffin Park.

II. Current Status of Lead Impacted Soil

The Stantec project in 2013 removed a significant amount of lead-impacted soil from several areas of the park. One of the areas of contamination listed in the project (Area A2) was located immediately south of the access driveway for the Howard Coffin Park walking trail and fitness site. A copy of the 2013 Stantec report text is attached to this plan as Appendix F.

As mentioned on Page 6 of the 2013 Stantec report, Area A2 was located immediately south of the asphalt-paved access driveway into the park. The X-Ray Fluorescence (XRF) screening in the north wall of Area A2 indicates that the contaminated soil may extend

underneath the asphalt pavement. Hand auger samples were collected at four locations on the north side of the access driveway in an attempt to determine if the lead impacts do extend underneath the roadway. Samples were collected at depths of one, two, three, and four feet at each location for a total of 16 hand auger samples. Of the 16 samples collected and screened, only one indicated any lead impacts in excess of the threshold. It should be noted that the one sample that exceeded the threshold was at a depth of four feet below ground surface, which is below the depth of removal. These XRF screening results and the hand auger samples indicated that lead contaminated may be present underneath the asphalt driveway adjacent to Area A2.

III. Remediation Plan

In order to avoid the expense of removal and replacement of the asphalt driveway as well as the inconvenience to daily park users, the asphalt driveway will be left in place to act as an engineering structural control measure to restrict exposure to the lead contaminated soil. The attached survey exhibit (Appendix G) defines the limits of the existing asphalt pavement. At the time of this report (March 2019), the asphalt is in good condition with no significant cracks or holes exposing the soil beneath the asphalt. The asphalt driveway will serve as a sufficient control measure to prevent any contact with potentially contaminated soils below the driveway.

As previously mentioned, the 2008 Phase II ESA indicated that the groundwater at the site was clean. There has been no other indication that there is any contamination associated with the site groundwater. Therefore, this compliance status report focuses solely on soil contamination.

An Environmental Covenant will be executed and recorded at the Glynn County Superior Court Clerk's office. In summary, this covenant will require that the asphalt driveway remains in place and in satisfactory condition to serve as a control measure. In the event that the asphalt driveway is to be removed for any reason in the future, the soil below the driveway (up to four feet below ground surface) will be excavated and removed from the site. If the driveway is to be removed and an excavation is necessary, Georgia EPD shall be notified prior to any demolition or excavation at the site.

IV. Inspections and Maintenance Plan

At the time of the approval of this compliance status report, the asphalt driveway is in good condition and provides a sufficient structural cap for any lead contaminated soil that may remain below the driveway. It will be necessary to inspect the driveway on a regular basis to insure that it remains intact and continues to serve as needed. The driveway shall be inspected annually, and the inspection shall be documented on the inspection form

attached as Appendix H. The annual inspections shall be completed by a Georgia licensed professional engineer (P.E.) or professional geologist (P.G.), and the inspection results shall be forwarded to Georgia EPD.

The inspection of the asphalt driveway is to visually determine the adequacy of the asphalt to:

- Prevent direct contact between humans and the underlying soil;
- Minimize surface water infiltration;
- Provide positive drainage;
- Prevent ponding.

In the event that the annual inspection reveals a need for maintenance of the driveway, all maintenance activities shall be completed within 30 days of the annual inspection. The maintenance activities shall be recorded on the maintenance log attached in Appendix H and shall be forwarded to Georgia EPD. Major damage requiring repairs to the asphalt driveway includes the following:

- Large cracks (>1/2 inch width);
- Any subsidence resulting in ponding water;
- Holes in the pavement or removed sections of pavement which expose the underlying soil.

V. Summary and Conclusion

The subject site was used as a location for disposal and incineration of debris around the 1930's. Soil testing and sampling in the early 2000's indicated the presence of lead-impacted soil at the site, but a Phase II Environmental Site Assessment indicated that the groundwater at the site was not contaminated. A project was completed in 2013 to remove the lead impacted soil from the site. However, there is some indication that lead impacted soil may remain underneath the asphalt paved access road. An environmental covenant will be executed so that the paved roadway may remain in place acting as a cap over any remaining lead impacted soil. According to the covenant, any future removal or disturbance of the roadway will result in the necessary removal of the lead impacted soil underneath the roadway.

Appendix A

**Voluntary Remediation Plan Application
And Tax Map**

Voluntary Investigation and Remediation Plan Application Form and Checklist

VRP APPLICANT INFORMATION					
COMPANY NAME	City of Brunswick				
CONTACT PERSON/TITLE	Garrow Albersen / City Engineer				
ADDRESS	601 Gloucester Street, Brunswick, GA 31520				
PHONE	912-267-5540	FAX		E-MAIL	galberson@cityofbrunswick-ga.gov
GEORGIA CERTIFIED PROFESSIONAL GEOLOGIST OR PROFESSIONAL ENGINEER OVERSEEING CLEANUP					
NAME	Garrow Albersen	GA PE/PG NUMBER	PE 32180		
COMPANY	City of Brunswick				
ADDRESS	601 Gloucester Street, Brunswick, GA 31520				
PHONE	912-267-5540	FAX		E-MAIL	galberson@cityofbrunswick-ga.gov
APPLICANT'S CERTIFICATION					
In order to be considered a qualifying property for the VRP:					
<p>(1) The property must have a release of regulated substances into the environment; (2) The property shall not be: (A) Listed on the Federal National Priorities List pursuant to the federal Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. Section 9601. (B) Currently undergoing response activities required by an order of the regional administrator of the federal Environmental Protection Agency; or (C) A facility required to have a permit under Code Section 12-8-66.</p> <p>(3) Qualifying the property under this part would not violate the terms and conditions under which the division operates and administers remedial programs by delegation or similar authorization from the United States Environmental Protection Agency.</p> <p>(4) Any lien filed under subsection (e) of Code Section 12-8-96 or subsection (b) of Code Section 12-13-12 against the property shall be satisfied or settled and released by the director pursuant to Code Section 12-8-94 or Code Section 12-13-6.</p>					
In order to be considered a participant under the VRP:					
<p>(1) The participant must be the property owner of the voluntary remediation property or have express permission to enter another's property to perform corrective action. (2) The participant must not be in violation of any order, judgment, statute, rule, or regulation subject to the enforcement authority of the director.</p>					
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.					
I also certify that this property is eligible for the Voluntary Remediation Program (VRP) as defined in Code Section 12-8-105 and I am eligible as a participant as defined in Code Section 12-8-106.					
APPLICANT'S SIGNATURE (PRINT)					
APPLICANT'S NAME/TITLE (PRINT)	Garrow Albersen / Dir. of Env & Tr. wks				
DATE	3/5/19				

QUALIFYING PROPERTY INFORMATION (For additional qualifying properties, please refer to the last page of application form)					
HAZARDOUS SITE INVENTORY INFORMATION (if applicable)					
HSI Number		Date HSI Site listed			
HSI Facility Name		NAICS CODE			
PROPERTY INFORMATION					
TAX PARCEL ID	01-01461	PROPERTY SIZE (ACRES)	14.22		
PROPERTY ADDRESS	1116 Lanier Boulevard	COUNTY	Glynn		
CITY	Brunswick	ZIPCODE	31520		
STATE	GA	LONGITUDE (decimal format)	81.48 W		
LATITUDE (decimal format)	31.15 N	PROPERTY OWNER INFORMATION			
PROPERTY OWNER(S)	City of Brunswick	PHONE #	912-267-5540		
MAILING ADDRESS	601 Gloucester Street				
CITY	Brunswick	STATE/ZIPCODE	GA 31520		
ITEM #	DESCRIPTION OF REQUIREMENT		Location in VRP (i.e. pg., Table #, Figure #, etc.)	For EPD Comment Only (Leave Blank)	
1.	\$5,000 APPLICATION FEE IN THE FORM OF A CHECK PAYABLE TO THE GEORGIA DEPARTMENT OF NATURAL RESOURCES. (PLEASE LIST CHECK DATE AND CHECK NUMBER IN COLUMN TITLED "LOCATION IN VRP." PLEASE DO NOT INCLUDE A SCANNED COPY OF CHECK IN ELECTRONIC COPY OF APPLICATION.)		To be attached		
2.	WARRANTY DEED(S) FOR QUALIFYING PROPERTY.		No deed; parcel has always been property of the City		
3.	TAX PLAT OR OTHER FIGURE INCLUDING QUALIFYING PROPERTY BOUNDARIES, ABUTTING PROPERTIES, AND TAX PARCEL IDENTIFICATION NUMBER(S).		Attached as Appendix A		
4.	ONE (1) PAPER COPY AND TWO (2) COMPACT DISC (CD) COPIES OF THE VOLUNTARY REMEDIATION PLAN IN A SEARCHABLE PORTABLE DOCUMENT FORMAT (PDF).		included		
5.	The VRP participant's initial plan and application must include, using all reasonably available current information to the extent known at the time of application, a graphic three-dimensional preliminary conceptual site model (CSM) including a preliminary remediation plan with a table of delineation standards, brief supporting text, charts, and figures (no more than 10 pages, total) that illustrates the site's surface and subsurface setting, the known or suspected source(s) of contamination, how contamination might move within the environment, the potential human health and ecological receptors, and the complete or incomplete exposure pathways that may exist at the site; the preliminary CSM must be updated as the investigation and remediation progresses and an up-to-date CSM must be included in each semi-annual status report submitted to the director by the participant; a PROJECTED				

ADDITIONAL QUALIFYING PROPERTIES (COPY THIS PAGE AS NEEDED)

PROPERTY INFORMATION	
TAX PARCEL ID	PROPERTY SIZE (ACRES)
PROPERTY ADDRESS	
CITY	COUNTY
STATE	ZIPCODE
LATITUDE (decimal format)	LONGITUDE (decimal format)
PROPERTY OWNER INFORMATION	
PROPERTY OWNER(S)	PHONE #
MAILING ADDRESS	
CITY	STATE/ZIPCODE

PROPERTY INFORMATION	
TAX PARCEL ID	PROPERTY SIZE (ACRES)
PROPERTY ADDRESS	
CITY	COUNTY
STATE	ZIPCODE
LATITUDE (decimal format)	LONGITUDE (decimal format)
PROPERTY OWNER INFORMATION	
PROPERTY OWNER(S)	PHONE #
MAILING ADDRESS	
CITY	STATE/ZIPCODE

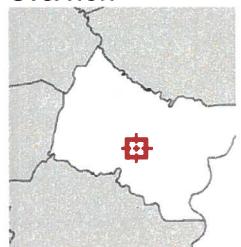
PROPERTY INFORMATION	
TAX PARCEL ID	PROPERTY SIZE (ACRES)
PROPERTY ADDRESS	
CITY	COUNTY
STATE	ZIPCODE
LATITUDE (decimal format)	LONGITUDE (decimal format)
PROPERTY OWNER INFORMATION	
PROPERTY OWNER(S)	PHONE #
MAILING ADDRESS	
CITY	STATE/ZIPCODE

<p>MILESTONE SCHEDULE for investigation and remediation of the site, and after enrollment as a participant, must update the schedule in each semi-annual status report to the director describing implementation of the plan during the preceding period. A Gantt chart format is preferred for the milestone schedule.</p>	<p>The following four (4) generic milestones are required in all initial plans with the results reported in the participant's next applicable semi-annual reports to the director. The director may extend the time for or waive these or other milestones in the participant's plan where the director determines, based on a showing by the participant, that a longer time period is reasonably necessary:</p>	<p>5.a. Within the first 12 months after enrollment, the participant must complete horizontal delineation of the release and associated constituents of concern on property where access is available at the time of enrollment.</p>	<p>5.b. Within the first 24 months after enrollment, the participant must complete horizontal delineation of the release and associated constituents of concern extending onto property for which access was not available at the time of enrollment.</p>	<p>5.c. Within 30 months after enrollment, the participant must update the site CSM to include vertical delineation, finalize the remediation plan and provide a preliminary cost estimate for implementation of remediation and associated continuing actions; and</p>	<p>5.d. Within 60 months after enrollment, the participant must submit the compliance status report required under the VRP, including the requisite certifications.</p>	<p>SIGNED AND SEALED PE/PG CERTIFICATION AND SUPPORTING DOCUMENTATION:</p>	<p>"I certify under penalty of law that this report and all attachments were prepared by me or under my direct supervision in accordance with the Voluntary Remediation Program Act (O.C.G.A. Section 128-101, et seq.). I am a professional engineer/professional geologist who is registered with the Georgia State Board of Registration for Professional Engineers and Land Surveyors/Georgia State Board of Registration for Professional Geologists and I have the necessary experience and am in charge of the investigation and remediation of this release of regulated substances.</p> <p>Furthermore, to document my direct oversight of the Voluntary Remediation Plan development, implementation of corrective action, and long term monitoring, I have attached a monthly summary of hours invoiced and description of services provided by me to the Voluntary Remediation Program participant since the previous submittal to the Georgia Environmental Protection Division.</p> <p>The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."</p> <p>6.</p> <p><u>Garrison</u> <u>PE 32180</u> <u>3/19</u></p> <p>Printed Name and GA PE/PG Number Date</p> <p><u>[Signature]</u></p> <p>Signature and Stamp</p>
--	---	---	--	--	--	---	---





Overview



Legend

<input type="checkbox"/>	Parcels
Yearly Sales	
<input type="checkbox"/>	2015
<input type="checkbox"/>	2016
<input type="checkbox"/>	2017
<input type="checkbox"/>	2018
<input type="checkbox"/>	2019
<input type="checkbox"/>	Roads

Parcel ID	01-01980	Owner	CITY OF BRUNSWICK BRUNSWICK, GA 31521-0550	Last 2 Sales
Class Code	Commercial	Physical Address	1408 SONNY MILLER WAY #15000	Date Price Reason Qual
Taxing District	01-Brunswick BRUNSWICK	Market Value	\$712300	n/a 0 n/a n/a
Acres	28.49			n/a 0 n/a n/a

Date created: 3/1/2019
 Last Data Uploaded: 2/23/2019 4:12:25 AM

Developed by  Schneider Geospatial



Overview



Legend

<input type="checkbox"/>	Parcels
Yearly Sales	
	2015
	2016
	2017
	2018
	2019
	Roads

Parcel ID	01-01461	Owner	CITY OF BRUNSWICK BRUNSWICK, GA 31521-0550	Last 2 Sales
Class Code	Commercial			Date Price Reason Qual
Taxing District	01-Brunswick BRUNSWICK	Physical Address	1116 LANIER BLVD #13001	n/a 0 n/a n/a
Acres	14.22	Market Value	\$756000	n/a 0 n/a n/a

Date created: 3/1/2019
Last Data Uploaded: 2/23/2019 4:12:25 AM

Developed by  Schneider
GEOSPATIAL

Appendix B

Phase II Environmental Site Assessment
Qore Property Sciences, 2008

Appendix C

Corrective Action Report, Young, 2009

Appendix D

Response to EPD Comments, Young, 2010

Appendix E

Lead Surface Soil Assessment

Edwards Engineering, 2012

Appendix F

Lead Impacted Soil Excavation Report

Stantec Consulting Services, 2014

Appendix G

Existing Pavement Limits Exhibit

EMC Engineering, 2018

Appendix H

Pavement Inspection Form

Pavement Maintenance Log

HOWARD COFFIN PARK

BRUNSWICK, GEORGIA

PAVEMENT INSPECTION FORM

DATE: _____

ARE THERE ANY LARGE CRACKS IN THE PAVEMENT?
(GREATER THAN $\frac{1}{2}$ INCH IN WIDTH) YES _____ NO _____

ARE THERE ANY AREAS OF SUBSIDENCE WHICH ALLOW PONDING OF WATER ON THE SURFACE OF THE PAVEMENT?

YES _____ NO _____

ARE THERE ANY HOLES IN THE PAVEMENT OR SECTION OF PAVEMENT WHICH HAVE BEEN REMOVED, EXPOSING THE UNDERLYING SOIL?

YES _____ NO _____

ARE THERE ANY OTHER PAVEMENT DEFICIENCIES WHICH WILL EXPOSE THE UNDERLYING SOIL AND/OR ALLOW HUMAN CONTACT WITH THE SOIL BENEATH THE PAVEMENT?

YES _____ NO _____

IF YES TO ANY OF THE ABOVE QUESTIONS, PROVIDE DETAILS OF THE DEFICIENCY, A SKETCH TO IDENTIFY THE LOCATION OF DEFICIENCY, AND PHOTOS OF THE DEFICIENCY.

NOTES: _____

INSPECTOR'S NAME: _____

SEAL:

**GEORGIA PROFESSIONAL ENGINEER OR PROFESSIONAL
GEOLOGIST LICENSE NUMBER:** _____

HOWARD COFFIN PARK

BRUNSWICK, GEORGIA

PAVEMENT MAINTENANCE LOG

DATE OF INSPECTION: _____

DATE OF MAINTENANCE PERFORMED: _____

MAINTENANCE ACTIVITY PERFORMED:

CRACK SEAL

SURFACE SEAL COAT

RESURFACING

OTHER: _____

Is further maintenance required at this time in order to prevent exposure to the underlying soil?

Yes _____ No _____

If yes, describe the additional maintenance required: _____

INSPECTOR'S NAME: _____

SEAL:

GEORGIA PROFESSIONAL ENGINEER OR PROFESSIONAL
GEOLOGIST LICENSE NUMBER: _____