

Summary Report – Dunlap Road
Potential Environmental Health and Community Concerns
March 22, 2023

Project Authorization

In June 2021, the Athens-Clarke County Unified Government (ACCGov) Mayor and Commission identified a need and allocated funding to investigate potential environmental concerns in the area of Pittard and Dunlap Roads. The nature and extent of the concern was not defined at that time.

Based on the information gathered as part of this report, the environmental concerns related to Pittard Road are generally associated with privately owned land, while the concerns in the area of Dunlap Road involve the Municipal Solid Waste Landfill owned by ACCGov.

Because of the two different types of ownership (public and private), these areas were divided into two sub-projects to better address area-specific concerns and issues.

LANDFILL OVERVIEW

The existing Athens-Clarke County (ACC) Municipal Solid Waste (MSW) Landfill, located at 5700 Lexington Road, Athens, Georgia, comprises approximately 444 acres of land on the Clarke County/Oglethorpe County line, with 193 acres permitted for disposal. Existing Disposal Area I (EDA 1) was closed in 1989, and Existing Disposal Area 2 (EDA 2) was closed in 1997. Both EDA 1 and 2 were pre-Subtitle D areas, constructed without synthetic liners and leachate collection systems. Phases 1, 2, 3 and 5 are built to the Environmental Protection Agency's (EPA) Resource Conservation and Recovery Act (RCRA) Subtitle D standards. Phase 4 was turned into the commercial composting area and Phase 5, cell 1A and 1B, is where waste is currently disposed. Athens-Clarke County has owned and operated an MSW landfill at this site since November 16, 1976. **ATTACHMENT A – ACC Landfill Map.** The landfill accepts solid waste from Athens-Clarke County and Oglethorpe County as part of a joint landfill project coordinated by the Joint Solid Waste Committee (JSWC) comprised of Athens-Clarke County and Oglethorpe County representatives.

REVIEW OF HISTORICAL INFORMATION

Environmental Health Issue and Initial Corrective Measures

In 1988, two organic compounds, tetrachloroethene and vinyl chloride, were detected at levels above comparison values in drinking water wells located on the landfill property. These drinking water wells were used by landfill staff. The Georgia Environmental Protection Agency (EPD) was contacted. As a precaution, Georgia EPD sampled individual water wells within 500 feet of the landfill property, and no contaminants exceeding comparison values were detected in any private wells during the sampling event. As a result of the initial findings on ACC landfill property, ACCGov implemented a Georgia EPD approved groundwater monitoring program in 1988 along with starting intrinsic remediation (phytoremediation). Phytoremediation is the use of plants (trees and shrubs in case of the landfill) to reduce the concentrations or toxic effects of contaminants in the environment. The contaminated drinking water wells on ACC Landfill property were converted into monitoring wells and closed for drinking water consumption. ACCGov installed several groundwater monitoring wells at this time. Analyses of water samples collected from the monitoring wells confirmed that several contaminated groundwater plumes were moving toward nearby residential properties but had not exited the landfill property. In January 1989, ACCGov took preventative measures and provided funds to connect residences within 500 feet of the landfill to the county water supply. In addition, ACCGov provided for annual testing upon request of individual (private) water wells within 1,000 feet of the landfill boundary. A Corrective Measures Assessment was conducted in 1997. From the assessment a remedial plan outlined corrective measures that ACCGov implemented to address the contaminant plumes.

The plan included the following:

- Acquisition of all properties impacted and/or that could be impacted by the contaminant plumes. Approximately, twelve (12) residential properties were purchased by ACC.
- Expanding landfill buffers from 50 to 200 feet beyond the plumes' projected outer limits.

- Source control - cap and closure of existing EDA's 1 and 2. Closed in 1989 and 1997, respectively.
- Creation of landfill gas collection and control system. The gas system was installed in July 2011 and system startup was September 2011.
- Intrinsic Remediation (ongoing).

Citizen Committee and Recommendations

During this time a Citizens Committee was formed to address the following: long range use of the landfill; landfill planning; paving of roads; recycling; formal establishment of a citizen advisory committee; landfill entrance; traffic; litter and water issues from groundwater plume. A final agreement between the Citizen Committee, ACCGov and Oglethorpe County was approved in November 1992. A major part of the agreement specifically outlined water requirements as follows:

Within 500 feet of landfill boundary (including Phase 5):

- Private structure and well inventory
- Water line construction and extension to this area (including Billups Grove Baptist Church) – all extensions completed by January 1, 1995
- Landfill Enterprise Fund paid Public Utilities Department for meter, stub, backflow prevention device, pavement cut and GDOT permit
- Landfill Enterprise Fund paid property owners for well closure and present value of 15 years of water use after the well was closed

Between 500 and 1000 feet of boundary:

- Test the well water quality by arrangement within 60 days of agreement
- No expense to property owner
- Tests paid by Landfill Enterprise Fund
- If the well quality fails the test, same provision as within 500 feet
- Annual tests thereafter by written request of property owner

Greater than 1,000 feet of boundary:

- Same provision as within 500 feet apply if:
- Well water unacceptable according to State regulations, and
- Test failure caused by landfill contamination, then alternate water supply provided by Landfill Enterprise **ATTACMENT B – Citizen Agreement**

Approximately, 182 residents adjacent to the landfill are connected to ACC Public Utilities water including 26 residents along Dunlap Road, Dawson Road and including Billups Grove Baptist Church. ACC Solid Waste Department has not been asked to provide well testing in many years by residents.

Health Consultation

In 2000, Georgia EPD requested the Georgia Division of Public Health (GDPH) to complete a health consultation that would examine groundwater sampling data to determine whether past exposure could have harmed landfill employees and the landfill caretakers family and whether the remediation strategies implemented by ACC and approved by EPD were protective of public

health. The GDPH concluded that the landfill site posed no apparent public health hazard because exposure to the landfill staff had stopped and preventative measures taken by ACC were appropriate to prevent future exposure to residents in the area. GDPH cited the following conclusions as situation-specific:

1. Employees and the family members who used contaminated groundwater from the on-site well are not likely to develop adverse health effects as a result of their exposure because of the low levels of contaminants that were present in their water.
2. No one living within 500 feet of the landfill has been exposed to contaminants at levels associated with adverse health effects.
3. To ensure that future exposures will not occur, Athens-Clarke County has taken several precautionary measures, including providing nearby downgradient homesites with water from the municipal system. Additionally, Athens-Clarke County purchased several residential properties bordering the landfill to increase the buffer zone around the landfill and to prevent future development of property within the contaminant plumes.
4. No public repository has been established so that people can access information about this site. (2000, *Health Consultation*, pages 7-8)

This report went on to recommend that the contaminated groundwater should not be used; ACCGov should continue remediation efforts including groundwater monitoring; and GDFP should establish a public health repository at the local library with information about the landfill site. **ATTACHMENT C – Health Consultation.** ACC Solid Waste Department staff is uncertain if the information was ever available at the ACC Library.

On November 15, 2015, the US Environmental Protection Agency, External Civil Rights Compliance Office (ECRCO) received a complaint alleging that the ACC Landfill caused hazardous exposures to the Dunlap Road community. ECRCO determined that the complaint could not be accepted due to insufficient information/documentation about the allegations.

ATTACHMENT D – Response Letter EPA 3.1.18.

On October 13, 2014, Jill Jennings-McElheney (regional resident) sent a letter to the Department of Health & Human Services. She requested a public health assessment of the ACCGov composting and landfill operations. The Georgia Department of Public Health (GA DPH) came to the ACC landfill to conduct a site visit and review operational practices. In a letter dated June 7, 2016, GA DPH stated they did not identify any information or data that would indicate the community around the landfill was being exposed to toxic chemicals from the landfill at levels of health concern. See the full letter in **ATTACHMENT E – Response Letter Department of Health & Human Services 6.7.16.**

Ongoing and Additional Corrective Measures

In January 2000, ACC continued intrinsic remediation on the landfill site per the Corrective Measures Assessment. From 2000 through 2007, staff planted a variety of trees to degrade, transform, store or transport the contaminated groundwater. Specifically, the following were planted:

January 2000	50 of each oak, ash and loblolly pine planted south of EDA 1
January 2002	200 bald cypress planted west of EDA 1. 50 river birch planted in a portion of EDA 1 ditch
January 2003	250 poplars and 150 elaeagnus were planted along Dunlap Road. 100 willows south and east of EDA 1 ditch
December 2005	1000 pine, crepe myrtle, poplar and turkey oak planted south of EDA 2
January 2007	200 river birches planted in EDA 1 ditch

Annual tree planting is ongoing and expected through approximately 2031. In addition to intrinsic remediation, staff driven corrections included a constructed ditch at the south-side of EDA 1 and a constructed methane vent trench along Dunlap Road. Although not required in the Corrective Action plan these actions further protect the residents from any groundwater issues from the contaminated plume.

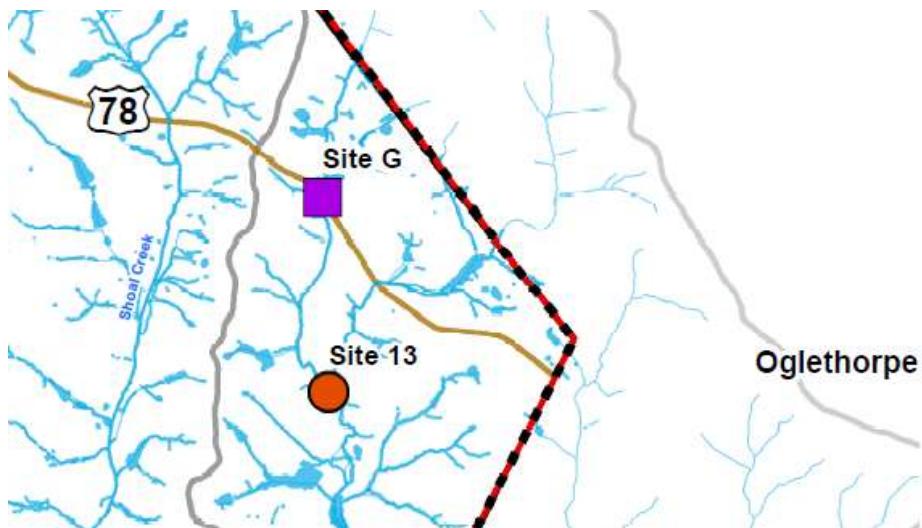
CURRENT DATA AND REPORTING

Surface Water Summary around Compost Pad and Big Creek

Staff requested a current Technical Memorandum from the on-call landfill consultant, Atlantic Coast Consulting, Inc., summarizing surface water testing around the compost pad and Big Creek. This area has been an area of concern for residents in the past. The results of the sampling demonstrated no concentrations of constituents were above instream water quality standards. **ATTACHMENT F – Surface Water Technical Memorandum.**

ACC Public Utilities Water Sampling Data

ACC PU sampling locations near the ACC Landfill at the following sites:



Results from the sampling from 2018 – 2021 are available to view in **ATTACHMENT G – WPP Sites G and 13 Data 2018-2021** and **ATTACHMENT H – WPP Sites G and 13 Data Cont.**

Status of Remedial Action Review Report

In correspondence dated February 25, 2016, Georgia EPD requested that an updated schedule of corrective actions be provided, based on an analysis of time/concentration data of contaminants of concern from recent groundwater monitoring events. A Status of Remedial Action Review Report (SRARR) was provided to Georgia EPD on May 5, 2016 and January 16, 2020. The current SRARR evaluates data from 2019 through 2022 and discusses the effectiveness of the remedies in achieving groundwater compliance at the ACC Landfill. **ATTACHMENT I – 2022 SRARR.** A SRARR is required to be provided to Georgia EPD every three years. Complete SRARR Summary and Recommendations are on page 6 of Attachment I. Based on this SRARR, 43 of the 46 groundwater wells at the site have achieved the corrective action goals. Overall, the trends indicate that site compliance is on track to meet the timeline of approximately 2031.

Environmental Attorney Review

In 2020, the Mayor and Commission released the *Resolution of the Commission of Athens-Clarke County, Georgia In Recognition That Black Lives Matter*. **ATTACHMENT J – Black Lives Matter Resolution.** Part of the resolution tasked staff with exploring ways to address the environmental health concerns in the Dunlap Road community. This report is a result of the resolution. In addition, ACCGov sought council from environmental attorney Rebecca A. Davis with Seyfarth Shaw LLP in Atlanta. Rebecca provided a legal analysis of the compliance and environmental justice concerns. She found no evidence of current noncompliance at the ACC Landfill. However, she expressed that the concerns raised from the community need to be addressed and made the following recommendations:

- Hold a public meeting to discuss concerns that the general public may have with the ACC Landfill. The meeting would be used to listen to community members, and disseminate information compiled in this report. She recommended discussing environmental justice initiatives, including grants and training opportunities with the participants.
- Based on feedback from the public meeting, ACCGov may want to request another DHHS health assessment or special compliance inspection from Georgia EPD or a third party landfill consultant. She felt it probable that DHHS will reject the request.
- Lastly, at or after the meeting, ACCGov should educate the public on how to access all of the compliance data from the ACC Landfill.

Current GA EPD Inspection Data

Included in this report is the most recent annual compliance inspection from Georgia EPD. **ATTACHMENT K – Georgia EPD Compliance Inspection.** The inspection was completed on November 9, 2022, and the ACC Landfill was found to be in compliance with a score of 100%.

CONCLUSIONS

This investigation did not find any data or evidence that there are current environmental health concerns regarding groundwater contamination at the ACC Landfill. Furthermore, data demonstrates that the implementation of ongoing remedial measures is responsible for improved groundwater quality at the site. In general, this review found that there is no evidence of current noncompliance at the ACC Landfill.

RECOMMENDATIONS

- Provide this information to the ACC Mayor and Commission.
- Post all findings from this report on the ACCGov website.
- Provide information and the process for well testing in the Dunlap Road community.
- Host a public meeting to discuss any concerns the general public, especially Dunlap Road residents, may have about the ACC Landfill. This meeting will cover historical contamination issues to the present day corrective measures in place to mitigate the groundwater issues. Staff is suggesting a public meeting to be scheduled for Tuesday, April 25th from 6:00 PM – 8:00 PM at Billups Grove Baptist Church.