



Cleveland Department of Public Health



Arco Recycling, Inc.

Presented to: NACAA Fall Membership Meeting

David Hearne, Interim Commissioner

Division of Air Quality

October, 2018

Background

- Former GE Facility owned by City of East Cleveland.
- Private investor purchased property in early 2014; demolishes building leaving a large concrete pad.
- New facility established to recycle construction and demolition debris (C&DD) and clean hard fill.
- Operations commenced in summer of 2014.
- Significant volume of C&DD from demolition of houses by Cuyahoga County Land Reutilization Corporation (CCLRC).

Background

- C&DD recycling was not specifically regulated in Ohio when facility was established.
- Air permitting included crushing, materials handling, storage piles, and roadways.
- Cleveland Local Air Agency (Cleveland LAA) issued NOV for failure to obtain permits and dust issues; facility obtained necessary air permits and returned to compliance.
- Cleveland LAA conducts air sampling for asbestos; results negative.

ARCO Recycling June 2014



ARCO Recycling June 2014



Arco Recycling, 2015-2016

- C&DD accumulates onsite through early 2016.
- Arco acquires screeners and sorters to assist in recycling material; Cleveland LAA issues NOV for failure to obtain air permits.
- Permits obtained in March, 2016.
- Minimal processing of material; minimal amount of material leaving site.
- Large number of complaints from residents (odors, dust, asbestos, health impacts).

Arco Recycling Inc. - 2016



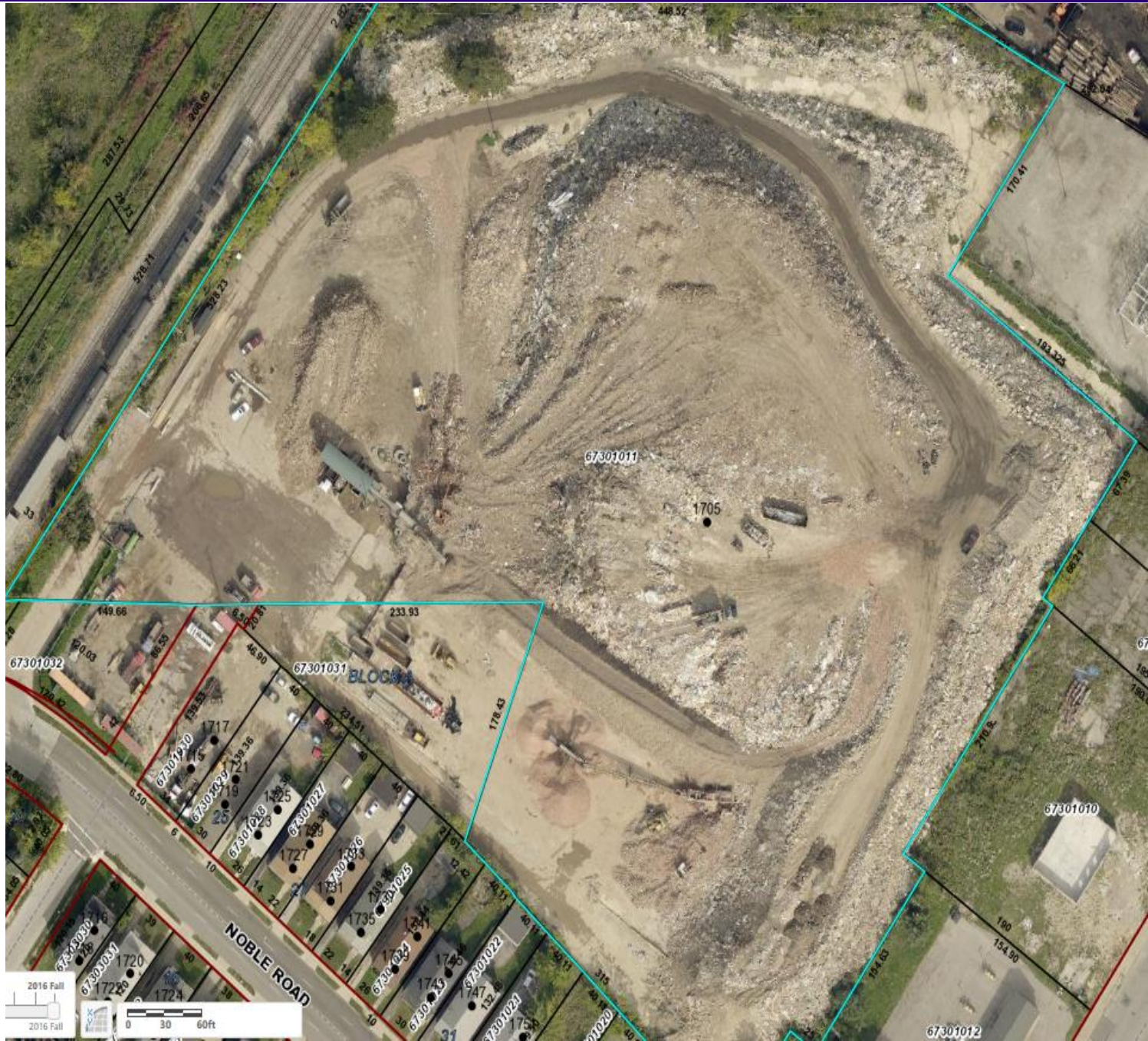
ARCO Recycling 2016





06.30.

ARCO Recycling Late 2016



Arco Recycling, January 2017

- Ohio EPA issues Director's Findings and Orders requiring removal of all material from site.
- Resident concerns, legislative inquiries.
- Analysis of Cleveland LAA air sampling and monitoring data determines no immediate threat to residents.
- Ohio DOT drone technology assisted in determining volume of waste.
- Ohio EPA secures funding for site cleanup.
- Contractors commence waste removal, July 2017.

Arco Recycling, 2017

- Cleveland LAA conducted fence-line twice-weekly, 24-hour sampling for VOCs, H₂S, asbestos, and methane.
- Cleveland LAA established a continuous PM¹⁰ monitor onsite with weekly metals analysis.



Arco Recycling, October 2017

- Most recyclable material has been removed (mostly clean, hard fill).
- Removal of waste destined for C&DD disposal is planned.
- **Fire** breaks out on east side of facility; East Cleveland Fire Department responds and extinguishes.
- Next day, fire rebounds; incident command activated.
- Fire burns for 8 days; 18 fire departments, Red Cross, US EPA, Ohio EPA, Cuyahoga County, Cleveland LAA.

ARCO
Recycling
November
2017



ARCO
Recycling
November
2017



Daily and Real-time Air Monitoring



Arco Recycling, November – December 2017

- Emergency concluded November 6; incident command and mutual aid demobilized.
- Remaining hot-spots managed by onsite contractors.
- Aggressive waste removal to C&DD landfill engaged.
- Maximum removal rate 5,779 yards in a single day (218 trucks).

Arco Recycling, November - December 2017

- Cleveland LAA maintained continuous PM monitoring throughout the emergency.
- Commencing with the fire and for approximately 30-days, Cleveland LAA conducted daily, 24-hour air sampling at multiple locations (upwind, onsite, and downwind) for VOCs, H₂S, asbestos, and methane.
- Canister sampling schedule reverted to twice-weekly, 24-hour sampling towards the end of November.

Arco Recycling, April 6, 2018

- Canister sampling discontinued in April 2018.
- Demobilization of continuous PM sampler occurred on May 25, 2018.



Conclusions

- Ohio EPA was the lead agency; strong partnerships between state and local public and private entities were essential.
- Regulatory need was identified
 - Ohio SB 2 signed into law July, 2017
 - Established regulatory oversight and financial assurance requirements for C&DD recycling facilities.
- Total volume of waste removed was 327,739 yards³.
- Total contractor costs for waste removal and water management: \$9.1 million.
- Litigation continues.



Cleveland Department of Public Health