

# EARTH REVIVAL

Utilizing C & D Fines for Mine Reclamation and Economic Development

## ABOUT US

- We are a small family-owned business located in Northeast, PA.
- I'm the third generation involved in Pennsylvania's rich mining history.



## WHAT WE DO

### MINE RECLAMATION

- We reclaim abandoned Pre-Act coal/non coal surface mining pits left behind by Pennsylvania's Mining Legacy.
- These Pre-Act pits are the state's responsibility as no current miner has any obligations to reclaim them.
- Secretary Patrick McDonnell of PA DEP stated at last year's 2021 AMR Conference that there are at least 287,000 acres in Pennsylvania that still need reclamation.
- The Pa Department of Environmental Protection site states that the funds needed to reclaim just the high priority sites is over \$1 billion and doesn't even include many of the Pre-Act sites which are still undocumented.
- Earth Revival reclaims these Pre-Act sites at zero cost to the taxpayer.



## HOW WE DO IT

### BRIDGING THE GAP BETWEEN INDUSTRIES

We work with the PA DEP Waste Division to beneficially utilize C & D Fines in our Abandoned Mine Reclamation efforts.

### OUR PROCESS

We blend C & D Fines with Portland cement and water. This stabilizes the material and acts as a great fill material with low permeability.

# OUR ACHIEVEMENTS AND GOALS



CONSERVATION



REMEDIATION



ECONOMIC DEVELOPMENT



COMMUNITY

## CONSERVATION



- Conservation of virgin aggregate and fill material.
- Beneficial Use of C & D Fines that would otherwise be landfilled.
- Conservation of landfill space.



## REMEDIATION

### LAND

Restoration of dangerous abandoned mining pits with high walls to natural contour.

### WATER

Restoration of natural watersheds when original contour is achieved. Prevention of future stormwater sitting on barren mine lands contributing to heavy metal leaching.

### ECOSYSTEMS

The ability for forests to reclaim and reseed these sites through natural propagation.

## ECONOMIC DEVELOPMENT

- Abandoned mine pits returned to conditions suitable for future development.
- The creation of potential new tax streams through the redevelopment and land recycling of these sites.
- Reutilization of the existing roadways and utilities already present at many of these abandoned mine sites.





# COMMUNITY



High paying employment opportunities for local communities gained during the project and after redevelopment



Improved Public Safety/Removal from Abandoned Mine Land Hazards Inventory



All goals achieved at zero cost to the taxpayer saving community funds



## CHALLENGES IN MOVING FORWARD

### WHAT DEPARTMENT?

Our project bridges the gap between many public departments.

- Brownfield Redevelopment
- Land Recycling
- Site Remediation
- Mining/Abandoned Mine Lands
- Waste/Beneficial Use



### AN UNFINISHED PROJECT

Due to COVID-19, our project was left unfinished with an expired permit.

### COVID-19 AND REGULATORY DEADLINES

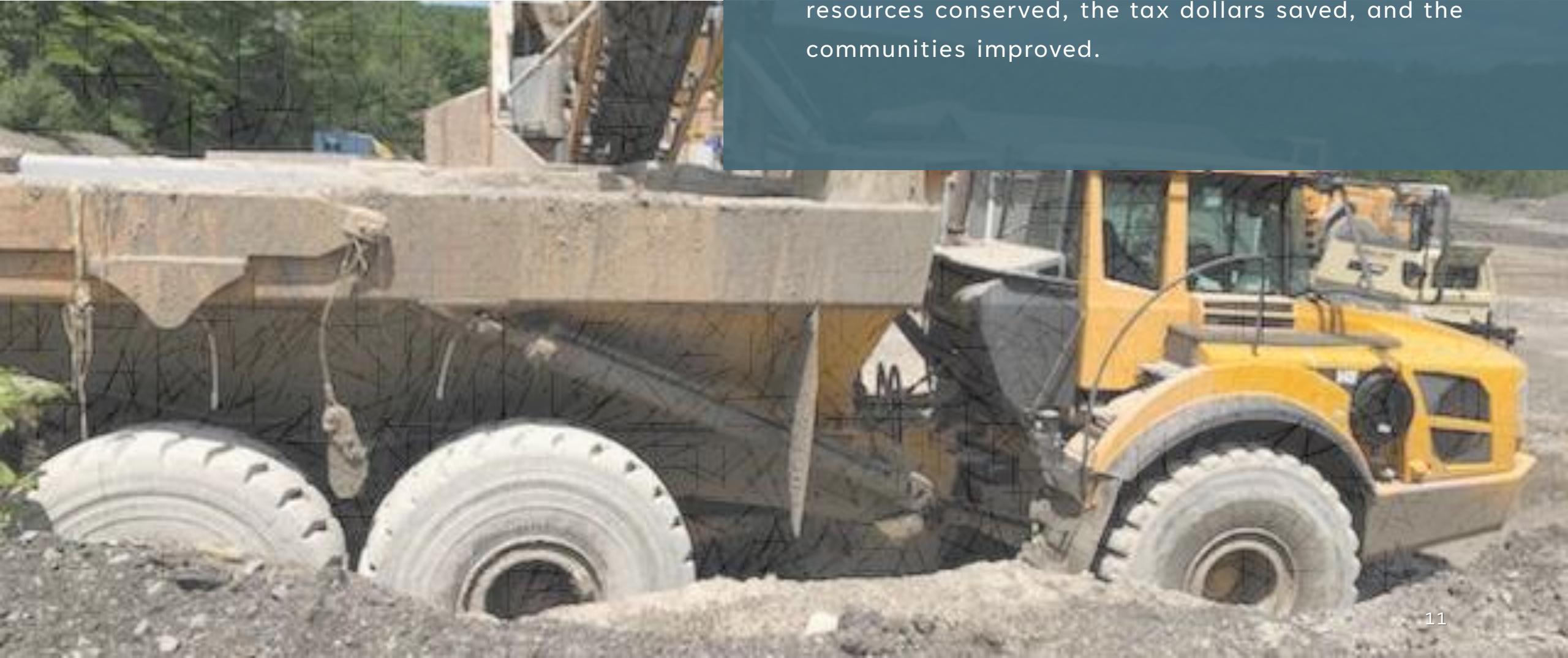
2 years have passed and COVID-19 is still overshadowing regulatory deadlines, thus increasing permit costs and delaying progress.

### HARMFUL EFFECTS OF DELAYS IN PERMITTING

- No income for projects in between permits
- Families out of work
- Most harmful on the small family-owned companies

## HOPES FOR THE FUTURE

My hope is to walk into this conference in a few years proud to list the mine pits reclaimed, the natural resources conserved, the tax dollars saved, and the communities improved.



THANK YOU

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