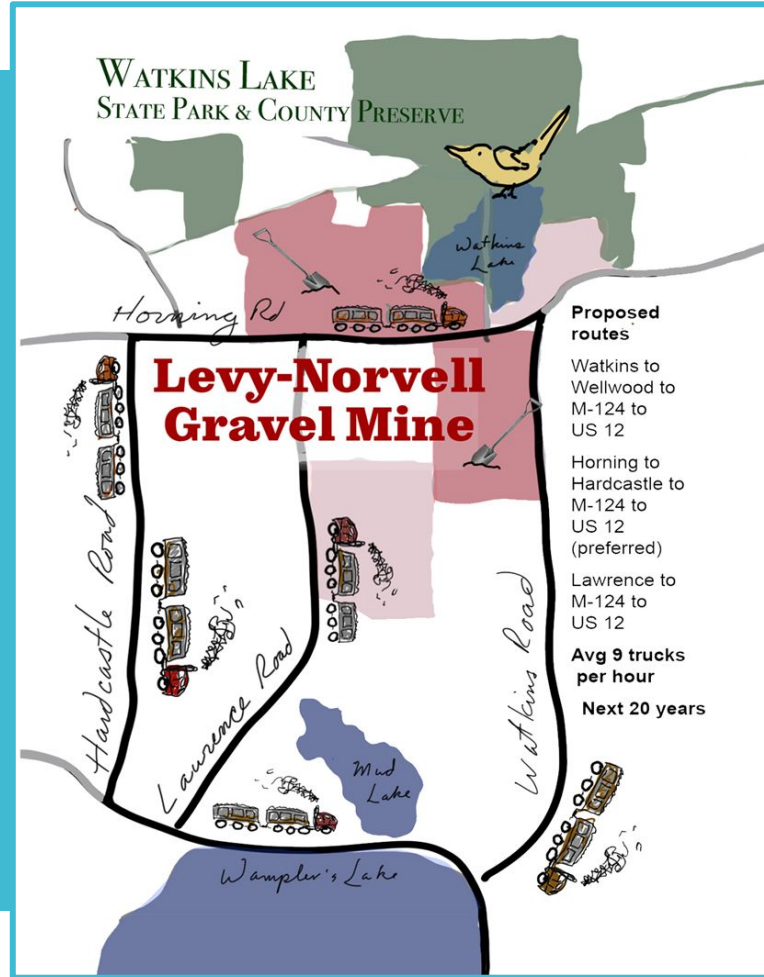


Community Meeting on the Proposed Gravel Mine in Norvell Township

May 16, 2026

Irish Hills
Concerned
Citizens



Community Meeting on the Proposed Gravel Mine in Norvell Township

May 16, 2026



Irish Hills
Concerned
Citizens

Welcome
everyone!

Zoom
attendees:
use chat to
participate
in the
meeting.

Process

- Planning commission
- Township Board - BIG CHANGES
- Courts
- Very serious consequences
- Need for gravel
- Master plan

How we win

- Grassroots
- Allies
- Stories
- Experts
- Lawyers

Treasurer's Report

Available Balance **\$57,813.31**

Expenses to Date **\$7,906.47**

Protect the Parks **\$61,470.00**

40 % of goal **\$150,000.00**

Air quality
and health

How the Levy-Norvell Gravel Mine will impact the air we breathe



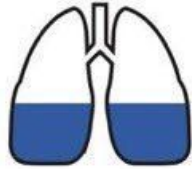
Kindra Weid, RN, BSN, MPH

Outdoor air pollution

THE INVISIBLE KILLER

Air pollution may not always be visible, but it can be deadly.

Emergencies ▾



36%
OF DEATHS FROM
LUNG CANCER



34%
OF DEATHS FROM
STROKE



27%
OF DEATHS FROM
HEART DISEASE

air quality

are associated with

nature deaths

BREATHE LIFE.
Clean Air. Healthy Future.



NAAQS: Criteria pollutants

Clean Air Act (1963) **Environmental Protection Agency (1970)**

NAAQS- National Ambient Air Quality Standards

- Carbon monoxide (CO)
- Lead (Pb)
- Nitrogen dioxide (NO₂)
- Ozone (O₃)
- Particulate matter (PM_{2.5} and PM₁₀)
- Sulfur dioxide (SO₂)

Diesel pollutants



Diesel Pollutants

- Particulate Matter (PM)
- Nitrogen Oxides (NO_x)
- Climate Change
- Nitrogen Oxides (NO_x)
- Human Health
- Carbon Monoxide (CO)
- Carbon Dioxide (CO₂)
- Other Greenhouse Gases (GHG)
- Air Toxics

Nitrogen dioxide (NO₂)

Nitrogen dioxide (NO₂) sources:

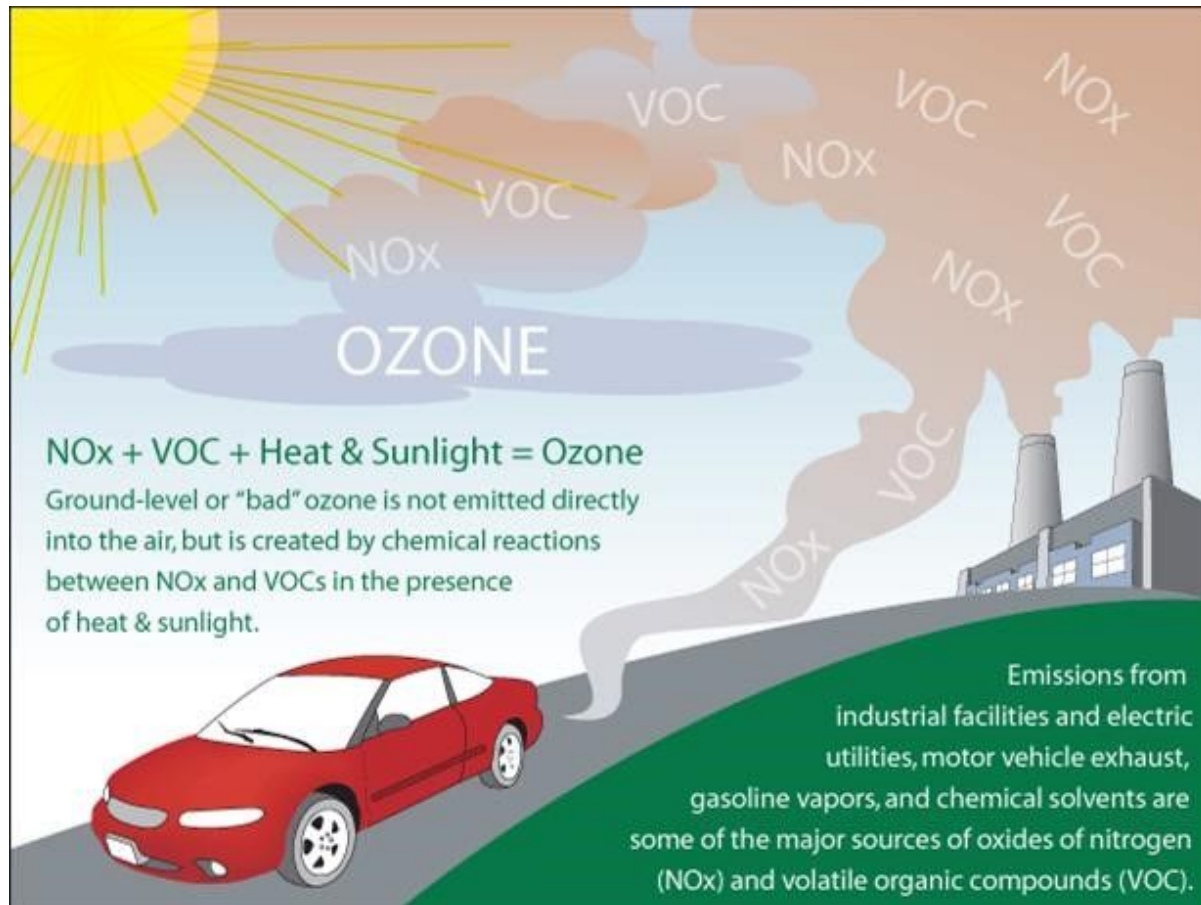
- Group of highly reactive gases called nitrogen oxides (NOx)
- Combustion of fossil fuels
 - HDV 20% of all NOx pollution from vehicles



Health impacts:

- **Short term exposure**
 - Airway irritant & exacerbates chronic respiratory conditions
- **Long term exposure**
 - Development of asthma
 - Increase susceptibility to respiratory infections
- **High risk populations**
 - Children, elderly, people with asthma

Ozone (O₃)



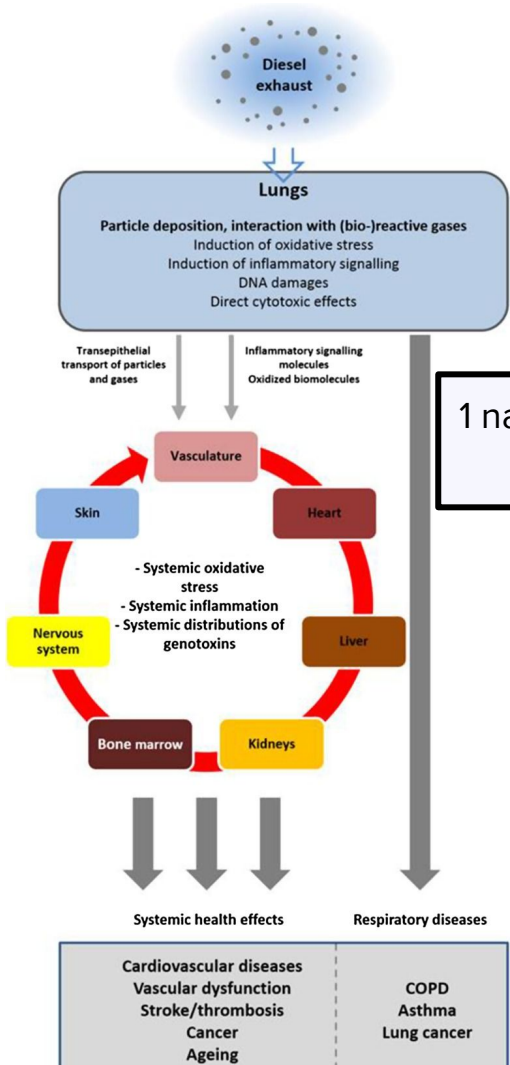
Ozone (O₃)

Health Impacts of Ozone:

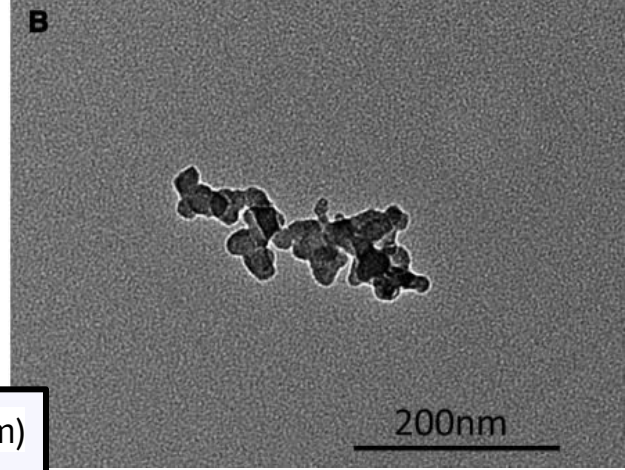
- **Short term exposure:**
 - Upper airway irritation;
 - Inflammation and damage to airways increasing risk of infection;
 - Exacerbation of lung diseases, such as asthma, emphysema and bronchitis;
 - Increased frequency of asthma attacks
- **Long term exposure:**
 - Asthma exacerbation and development;
 - Premature death from respiratory causes
- **At risk populations:** People with asthma, children, older adults, and people who are active outdoors, especially outdoor workers.

Particulate Matter (PM_{2.5-10})

Diesel particles



1 nanometer (nm) = 0.001 micrometer or micron (μm)
200 nm = 0.2 μm



Particulate Matter (PM_{2.5-10})

Health Impacts:

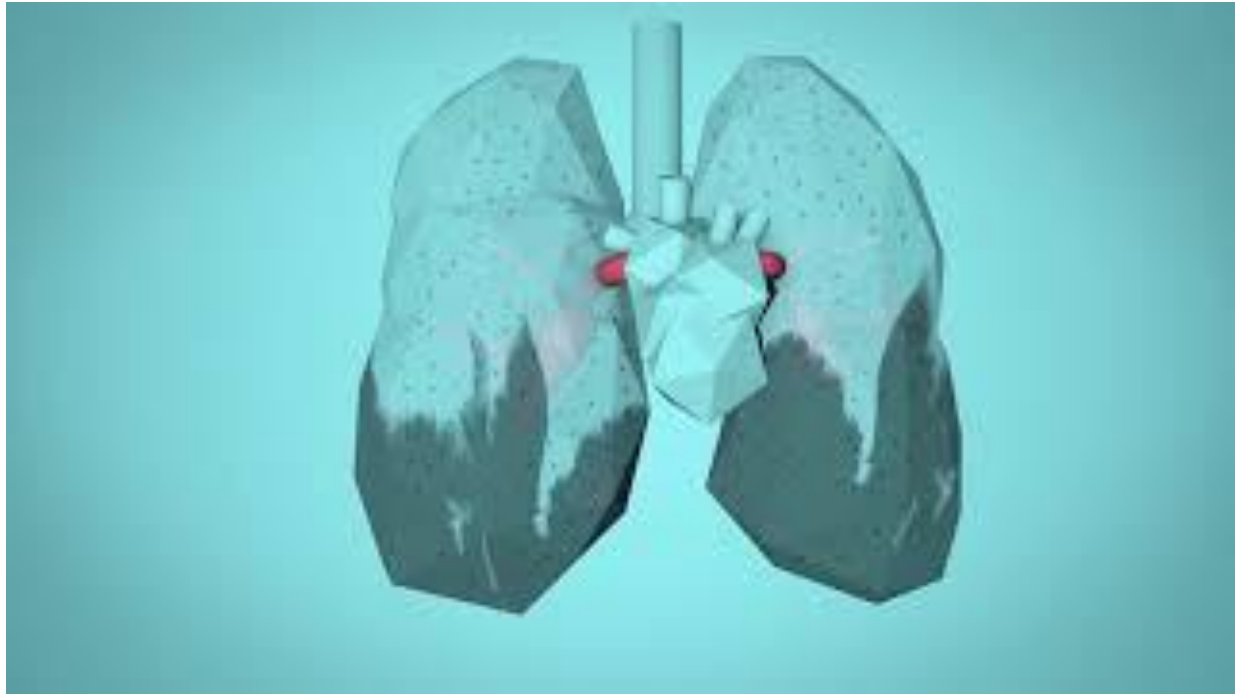
Short term exposure (hours to days) is linked to increased:

- Infant mortality
- Hospitalizations for cardiovascular disease
- Hospitalizations and ED visits for COPD
- Hospitalizations for children with asthma
- Severity of asthma exacerbations among children

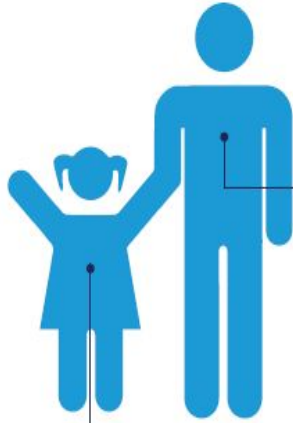
Long term exposure (day after day, year round) is linked to:

- Higher likelihood of developing childhood asthma;
- Worsening COPD in adults;
- Slowed lung function & growth in children & teenagers;
- Increased risk of heart attacks & strokes
- Higher likelihood of getting lung cancer and developing diabetes;
- Neurological impacts
- Altered birth outcomes
- Increased risk of death from cardiovascular disease

WHO: Air Pollution



Air pollution remains a major danger to the health of children and adults.



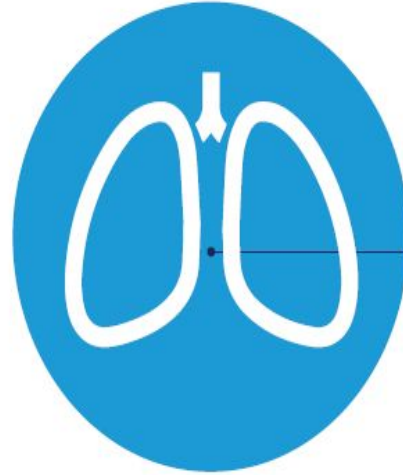
Health risks from:
Ozone Pollution
Particle Pollution



PREMATURE DEATH

May cause developmental harm

May cause reproductive harm



Health risks from:
Ozone Pollution
Particle Pollution



Asthma attack

Lung cancer

Wheezing and coughing

Shortness of breath

Cardiovascular harm

Susceptibility to infections

Lung tissue redness, swelling

Sensitive populations: Who in your family is at risk?

Who are sensitive populations?

- People with pre-existing heart and lung conditions, such as asthma, COPD and coronary artery disease, and diabetes
- Children
- Older adults
- Pregnant women
- Increased exposure factors
 - Low-income
 - People of color
 - Outdoor workers
 - Athletes
 - Mobility challenges/devices

Why children?

- Higher respiratory rates
 - Breathe more air per lb/kg of body weight
- Developing lungs
- Increased exposure to outdoor air with activities
- Proximity to tailpipes



Emission Results and Health Benefits for Project: IHCC

Emission Results

Health Benefits



1 short ton = 2000 lbs

Emission Results [?]

Here are the combined results for all groups and upgrades entered for your project.¹

<i>Annual Results (short tons)²</i>	NO_x	PM2.5	HC	CO	CO₂	Fuel³
Baseline for Upgraded Vehicles/Engines	5.106	0.009	0.117	4.280	1,756.6	156,141
Amount Reduced After Upgrades	5.106	0.009	0.117	4.280	1,756.6	156,141
Percent Reduced After Upgrades	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Research

- Look into dust (and noise) from diesel trucks. *That's our featured presentation today!*
- Dig deeper into what the reclamation plan is. *More on this coming soon!*
- Review Levy's safety record. *No giant red flags but we need a deeper dive... let us know if you are interested in digging into this.*

Community
Suggestions

~

Updates

Communications

- Communicate what would be a compelling reason to favor the mine as a resident? *We are working on a Myth vs. Fact handout, stay tuned!*
- Communicate the long term economic consequences and their impact on families/inheritances. *We are looking deeper into property values to credibly show the impact the mine could have on this generation as well as future generations.*
- Communicate who benefits from mining revenue and who wouldn't. *We're prioritizing an expert analysis of the financial impact of the mine on the Township.*
- Communicate how the mine is counter to the township master plan. *Great point! We have already talked about this at the Planning Commission, and will continue to emphasize it.*

Community
Suggestions
~
Updates

Township Outreach

- Make twp meetings available live via video. *Meetings are currently being recorded and transcribed. If you are interested in live streaming from meetings, please let us know!*
- Invite the planning commission & board members to come here. *Supervisor Haystead was invited to attend today. We will continue reaching out to all Township officials.*
- Pile onto the planning commission meetings - we need more to show up. *Watch for announcements. The May meeting has been cancelled.*
- Review notes from Dec 11 2022 meeting at Twp board. *In progress...*

Community
Suggestions

~

Updates

Community Outreach

- Boats on the lake(s) with signs, big and small. *If you are interested in helping make this happen, please let us know!*
- Add short videos on the website - *If you are interested in helping make this happen, please let us know!*
- Make T-shirts. *We have buttons – if you are interested in helping make shirts, please let us know!*
- Get more big signs on prominent roads. *First batch of banners have been ordered! More on their way...*
- Talk to residents on highway 12 all the way to Saline. *Let us know if you are interested in helping with this and/or attending haul route township meetings.*

Community
Suggestions

~

Updates

Community Conversation

- * Which ideas feel most important right now?
- * What it would take to make these ideas a reality?
- * Did today's presentations spark any additional ideas or concerns?

State Parks advocacy & next steps

- IHCC attended the State Parks Advisory Commission (PAC) online meeting on April 22
- The PAC formed a subcommittee to do a site visit and draft a letter for consideration by the full committee at their next meeting on June 17th
- We are assessing next steps and will have an update soon.

Petition Drive Update

- Over 1700 petitions sent to Norvell Township property owners on April 10
- To date over 850 petitions have been returned from Norvell Township
- ~ 25% of Norvell Township residents have signed
- ~ 200 petitions received from adjoining areas
- They will be presented to the Norvell Township Planning Commission & Board.

Thank you to
all of you for
coming today,
and to our
volunteers for
all of their
hard work!

Glen Ashlock, IHCC Tech & Facilities

Dana Ashlock, IHCC Rural Character

Margaret Bialecki, IHCC Community
Outreach

Silas Bialecki, IHCC Board Member &
Environment Committee

Jordan Bostrom, IHCC Environment

Jennifer Brautigam, IHCC Fundraising
& Communications

Andy Buchsbaum, IHCC Vice
President & Legal Committee

Joe Crisante, IHCC Treasurer &
Fundraising Committee

Alicia DeCaria, IHCC Health &
Community Outreach

Emily Jade Foley, IHCC Board
Member & Communications

Marty Godin, Wamplers Lake Property
Owners Association

Donna Craft Godin, Wamplers Lake
Property Owners Association

Sandy Hines, IHCC Health Committee

Amber Houttekier, IHCC
Communications

Ryan Johnson, IHCC Health

Cathy King, IHCC Community
Outreach & Communications

Linda Knox, IHCC Secretary &
Communications

Peter Knox, IHCC Media &
Communications

Sybil Kolon, IHCC President

John Kotzian, IHCC Research

Debbie Owen, IHCC Health Committee

Jim Vella, IHCC Fundraising

Caitlin Vigneau, IHCC Environment &
Community Outreach

Kindra Weid, IHCC Health Committee