To: Mendocino County Board of Supervisors

From: Keep the Code Date: June 18, 2019

Re: Original Jurisdiction Request for Harris Quarry

Dear Supervisors,

COUNTY OF MENDOCINO BOARD OF SUPERVISORS

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PER UKIAH. CALIFORNIA

We do not accept that Northern Aggregates qualifies for special consideration to avoid Planning Commission review and public review of their project revisions. This view is based on their past history of permit violations, including significant over-extraction of gravel beyond their Use Permit conditions and their erroneous claim of Vested Rights.

It should not be the responsibility of private citizens to inform the County of permit violations. Keep the Code spent many thousands of dollars to do an aerial survey to demonstrate to the County that Northern Aggregates was in gross violation of their Use Permit regarding extraction rates and amounts, for many consecutive years. As county residents, we want to know: did Northern Aggregates pay County and State taxes on the over-extracted rock? What penalty did they accrue from these violations? We repectfully request answers to these questions.

Regarding their erroneous claim of Vested Rights: even though the former County Planning Director, Nash Gonzalez, an expert in California Surface Mining and Reclamation Act (SMARA), stated in writing that Northern Aggregates did not qualify for Vested Rights, and the former owner of the quarry (Church of the Golden Rule) stated that the quarry had never been a commercial rock extraction operation, as required to qualify for Vested Rights; nonetheless, the previous Board of Supervisors still granted Northern Aggregates Vested Rights, which then caused citizens to spend many thousands of dollars in legal fees to have the case taken to court where Northern Aggregates lost on both the original Vested Rights case and then, the appeal. Awarding Northern Aggregates Vested Rights would have allowed them to ignore their Use Permit conditions and the Environmental Impact Report (EIR) mitigations. Moreover, the original determination by the County was to award Northern Aggregates a zoning change and to not even require an EIR for their enormous project.

Based on these past actions, it seems to many residents of Mendocino County that the County Administration is either incapable or unwilling in its ability to oversee this quarry operation and enforce the project Use Permit conditions and EIR mitigations.

Please act with standard procedures and take the proper time needed to fully evaluate this project. Please don't fast-track Northern Aggregates request. Please allow for public review that is warranted for a project of this magnitude. No County or State project will be delayed or adversely affected by observing standard procedure. No harm or cost to county residents will result by following standard procedures. There is no need for being in a rush; awarding their request only seems further evidence that this quarry operation is above any County control.

Their past bad faith behavior should not be rewarded by receiving special privilege that limits public review of the project. Thank you for your consideration of this matter and protection of the public trust.

Sincerely, Keep The Code

June 17, 2019

Mendocino County Board of Supervisors

Re: Harris Quarry Expansion and Original Jurisdiction Assertion

Dear Supervisors,

Northern Aggregate is asking The Board to abandon normal planning functions and oversight responsibilities for an expansion proposal which includes a controversial asphalt plant. This latest tactic involves the use of an obscure ordinance (Code section 2.52.080) to try to justify the abandonment of normal project procedures, conspicuously denying the new board the opportunity to properly evaluate the merits of this proposal.

The quarry is currently mining and exporting rock for sale, so where is the urgency or special need to support the use of Code section 2.52.080?

To further support this unusual approach they offer that because their rock meets CalTrans standards, this should qualify them for special treatment by the county: approval of an expansion of the quarry and an asphalt plant, and on a fast tracked basis. It should be noted that in the letter from their attorney, Tina Wallis, there is no stated reason why this proposal should be fast-tracked. Their rationale for proceeding in this unusual manner is neither logical nor well supported, as well as potentially illegal, which could expose the county to further legal entanglements.

In the past, Keep the Code has been forced to bring legal challenges to Northern Aggregates and the County for choosing incomplete, inaccurate and ill-advised assessments like this one. We have won two legal challenges in the original lawsuits and on appeal. The vested rights case was completely lacking in merit, and evidence to support it was noticeably deficient, which should have been obvious to the county. To have supported the claim of a vested right showed an obvious lack of judgement and adherence to the truth, which was an expensive error for all parties involved.

Fast-tracking these projects through the use of "original jurisdiction" is improper and an ill-advised approach for BOTH the Supervisors AND the public, all of whom should be given adequate time to review the advantages and disadvantages of siting an asphalt plant in such a challenging location. An analysis of the benefits and the cost should be done and a careful assessment of the proposal should be made based on updated information.

Hopefully you will recognize and consider that on the cost side of the assessment equation, our homes, property values and businesses will be devalued, the tax base diminished, and there will be many other unavoidable negative impacts from a poorly sited asphalt plant.

Since our existing asphalt plant in Ukiah is not operating at anywhere near full capacity, with the primary need coming from Sonoma County, it seems unnecessary and counter-productive to abandon Mendocino County's previously established commitment to us and our projects and degrade hundreds of property values for the financial benefit of one company.

The Mendocino County General Plan offers us common sense and sound advice: "Industrial projects should be clustered together in an Industrial Zone to minimize potential conflicts".

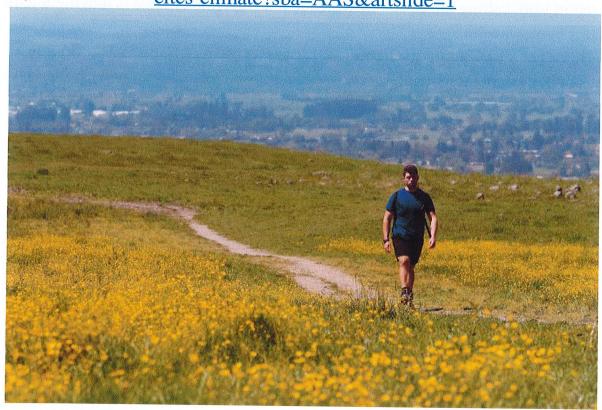
Please DENY the Northern Aggregates request for "original jurisdiction".

Sincerely,
Sheila Jenkins
Cynthia Raiser Jeavons
Keep the Code
5798 Ridgewood Road, Willits, CA



Lung Association report cites climate change for rise in airborne soot, smog

https://www.pressdemocrat.com/news/9532017-181/lung-association-reportcites-climate?sba=AAS&artslide=1



GUY KOVNER
THE PRESS DEMOCRAT

April 29, 2019

Grading Air Quality

The American Lung Association's "State of the Air" report assigned air pollution grades to California counties, including three north of the bay, for the period 2015-2017.

Particle pollution:

Sonoma County: C

Lake County: C

Mendocino County: F

Ozone pollution: Sonoma County: B Lake County: A

Mendocino County: A

Sonoma County residents choked on smoke from the 2017 firestorms that also ended the county's eight-year run of perfect scores on the American Lung Association's annual air quality report card, which cited climate change for a nationwide trend of increasingly foul air.

Pollution levels rose throughout the San Francisco Bay Area and around the United States, with many cities reaching or tying their worst marks ever, the "State of the Air" 2019 report said, calling the trend "evidence that a changing climate is making it harder to protect human health."

Bay Area air pollution in October 2017 was as bad as smog-cloaked Beijing, China, sending people to emergency rooms, forcing schools to close and people to wear masks when they stepped outside. A regional air board official called it the worst air quality ever recorded in many parts of the Bay Area.

The three years covered by the lung association's latest report — 2015 to 2017 — ranked as the hottest years on record globally, with spikes in ozone and particle pollution putting millions more Americans at risk, the report said.

Seven of the 20 most destructive fires in state history occurred during those three years, including the Tubbs, Valley, Nuns, Atlas and Redwood Valley fires in the North Bay and Mendocino County.

Heat drives up pollution by converting vehicle emissions to ozone, also known as smog, while wildfires driven in part by changing rain patterns generate particle pollution, called soot. Diesel engines and wood-burning stoves also generate soot.

"As climate change continues, cleaning up these pollutants will become ever more challenging," the report said.

California's air pollution hot spots — Los Angeles, Fresno and Bakersfield — dominated national rankings for unhealthy air.

Sonoma County had earned a pair of As without a single day of ozone or particle pollution exceeding federal standards for the past eight years, marks it owes largely to ocean winds that blow pollution east, contributing to poor grades in other counties.

But in the report released Wednesday, the county got a B for one day of excessive ozone pollution and a C for four days of particle pollution.

Mendocino County saw a perfect score for ozone but got an F for 12 days of excessive particle pollution, along with eight other Bay Area and Northern California counties flagged with Fs, including Napa, Marin and Humboldt.

Lake County also was perfect for ozone, but got a C for three days of particle pollution.

No California county got perfect air quality scores for the first time in the 20 years the report has been issued.

"We are seeing climate change in our air pollution impacts," said Jenny Bard, a lung association spokeswoman based in Santa Rosa.

The report is a "wake-up call," underscoring the need to move away from fossil fuel-powered transportation and put more zero-emission vehicles on the road, she said, and comes in the face of federal government rollbacks on anti-pollution standards.

"Our clean air laws have been under attack since the beginning of this administration," Bard said.

The report noted that the Clean Air Act of 1970, which has driven improvements in air quality for nearly 50 years, "must remain intact and enforced" to continue the trend.

More than 141 million Americans — more than 4 in 10 people — live in counties that got at least one F for foul air, 7 million more than in last year's report and 16 million more than in the 2017 report. But the number remains far below the 166 million in the years covered by the 2016 report.

Freeway-laced Los Angeles remained the city with the worst ozone pollution, as it has for 19 of the report's 20-year history. Los Angeles ranked the fifth most polluted city in the nation for year-round particle pollution and seventh for short-term particle pollution.

Bakersfield, in an area ringed by mountains at the south end of the Central Valley, was No. 1 in short-term particle pollution, third in ozone pollution and second in year-round particle pollution.

The Fresno area ranked first in year-round particle pollution, second in short-term particle pollution and fourth in ozone pollution.

In the latest report, California had seven of the 10 most ozone-polluted cities in the nation.

You can reach Staff Writer Guy Kovner at 707-521-5457 or guy.kovner@pressdemocrat.com. On Twitter @guykovner.

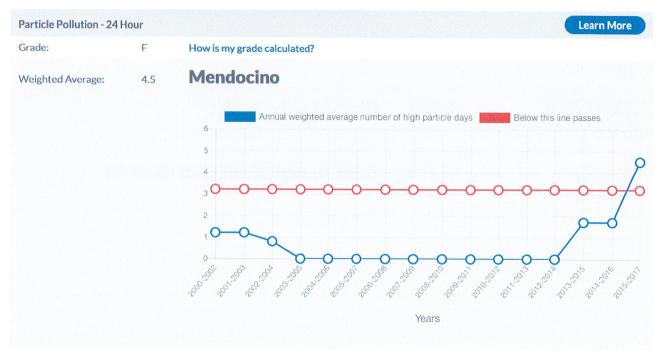




If you live in Mendocino County, the air you breathe may put your health at risk.

https://www.lung.org/our-initiatives/healthy-air/sota/city-rankings/states/california/mendocino.html





Mendocino County

Groups At Risk		Learn More
Total Population:	88,018	Risks to the population
Pediatric Asthma:	1,182	Risks to people with Asthma
Adult Asthma:	5,565	Risks to people with Asthma
COPD:	3,655	Risks to people with COPD
Lung Cancer:	36	Risks to people with lung cancer
Cardiovascular Disease:	5,406	Risks to people with Cardiovascular Disease
Diabetes:	8,576	Risks to people with Diabetes
Children Under 18:	19,048	Risks to children and teens
Adults 65 & Over:	18,671	Risks to older adults
Poverty Estimate:	14,156	Risks to people with low incomes

Polycyclic Aromatic Hydrocarbons (PAHs) - ToxFAQs™

This fact sheet answers the most frequently asked health questions (FAQs) about polycyclic aromatic hydrocarbons (PAHs). For more information, call the CDC Information Center at 1-800-232-4636. This fact sheet is one in a series of summaries about hazardous substances and their health effects. This information is important because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Exposure to polycyclic aromatic hydrocarbons usually occurs by breathing air contaminated by wild fires or coal tar, or by eating foods that have been grilled. PAHs have been found in at least 600 of the 1,430 National Priorities List (NPL) sites identified by the Environmental Protection Agency (EPA).

What are polycyclic aromatic hydrocarbons?

(Pronounced pŏl'ĭ-sī'klĭk ăr'ə-măt'ĭk hī'drə-kar'bənz)

Polycyclic aromatic hydrocarbons (PAHs) are a group of over 100 different chemicals that are formed during the incomplete burning of coal, oil and gas, garbage, or other organic substances like tobacco or charbroiled meat. PAHs are usually found as a mixture containing two or more of these compounds, such as soot.

Some PAHs are manufactured. These pure PAHs usually exist as colorless, white, or pale yellow-green solids. PAHs are found in coal tar, crude oil, creosote, and roofing tar, but a few are used in medicines or to make dyes, plastics, and pesticides.

What happens to PAHs when they enter the environment?

- PAHs enter the air mostly as releases from volcanoes, forest fires, burning coal, and automobile exhaust.
- PAHs can occur in air attached to dust particles.
- Some PAH particles can readily evaporate into the air from soil or surface waters.
- PAHs can break down by reacting with sunlight and other chemicals in the air, over a period of days to weeks.
- PAHs enter water through discharges from industrial and wastewater treatment plants.

- Most PAHs do not dissolve easily in water. They stick to solid particles and settle to the bottoms of lakes or rivers.
- Microorganisms can break down PAHs in soil or water after a period of weeks to months.
- In soils, PAHs are most likely to stick tightly to particles; certain PAHs move through soil to contaminate underground water.
- PAH contents of plants and animals may be much higher than PAH contents of soil or water in which they live.

How might I be exposed to PAHs?

- Breathing air containing PAHs in the workplace of coking, coal-tar, and asphalt production plants; smokehouses; and municipal trash incineration facilities.
- Breathing air containing PAHs from cigarette smoke, wood smoke, vehicle exhausts, asphalt roads, or agricultural burn smoke.
- Coming in contact with air, water, or soil near hazardous waste sites.
- Eating grilled or charred meats; contaminated cereals, flour, bread, vegetables, fruits, meats; and processed or pickled foods.
- Drinking contaminated water or cow's milk.
- Nursing infants of mothers living near hazardous waste sites may be exposed to PAHs through their mother's milk.



Polycyclic Aromatic Hydrocarbons

How can PAHs affect my health?

Mice that were fed high levels of one PAH during pregnancy had difficulty reproducing and so did their offspring. These offspring also had higher rates of birth defects and lower body weights. It is not known whether these effects occur in people.

Animal studies have also shown that PAHs can cause harmful effects on the skin, body fluids, and ability to fight disease after both short- and long-term exposure. But these effects have not been seen in people.

How likely are PAHs to cause cancer?

The Department of Health and Human Services (DHHS) has determined that some PAHs may reasonably be expected to be carcinogens.

Some people who have breathed or touched mixtures of PAHs and other chemicals for long periods of time have developed cancer. Some PAHs have caused cancer in laboratory animals when they breathed air containing them (lung cancer), ingested them in food (stomach cancer), or had them applied to their skin (skin cancer).

Is there a medical test to show whether I've been exposed to PAHs?

In the body, PAHs are changed into chemicals that can attach to substances within the body. There are special tests that can detect PAHs attached to these substances in body tissues or blood. However, these tests cannot tell whether any health effects will occur or find out the extent or source of your exposure to the PAHs. The tests aren't usually available in your doctor's office because special equipment is needed to conduct them.

Has the federal government made recommendations to protect human health?

The Occupational Safety and Health Administration (OSHA) has set a limit of 0.2 milligrams of PAHs per cubic meter of air (0.2 mg/m³). The OSHA Permissible Exposure Limit (PEL) for mineral oil mist that contains PAHs is 5 mg/m³ averaged over an 8-hour exposure period.

The National Institute for Occupational Safety and Health (NIOSH) recommends that the average workplace air levels for coal tar products not exceed 0.1 mg/m³ for a 10-hour workday, within a 40-hour workweek. There are other limits for workplace exposure for things that contain PAHs, such as coal, coal tar, and mineral oil.

Glossary

Carcinogen: A substance that can cause cancer.

Ingest: Take food or drink into your body.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 1995. Toxicological profile for polycyclic aromatic hydrocarbons. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information?

For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology and Human Health Sciences, 1600 Clifton Road NE, Mailstop F-57, Atlanta, GA 30329-4027.

Phone: 1-800-232-4636.

ToxFAQs™ Internet address via WWW is http://www.atsdr.cdc.gov/toxfaqs/index.asp.

ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

ASPHALT PLANT POLLUTION



Asphalt plants mix gravel and sand with crude oil derivatives to make the asphalt used to pave roads, highways, and parking lots across the U.S. These plants release millions of pounds of chemicals to the air during production each year, including many cancer-causing toxic air pollutants such as arsenic, benzene, formaldehyde, and cadmium. Other toxic chemicals are released into the air as the asphalt is loaded into trucks and hauled from the plant site, including volatile organic compounds, polycyclic aromatic hydrocarbons (PAHs), and very fine condensed particulates.[EPA]

- Asphalt Fumes are Known Toxins. The federal Environmental Protection Agency (EPA) states "Asphalt processing and asphalt roofing manufacturing facilities are major sources of hazardous air pollutants such as formaldehyde, hexane, phenol, polycyclic organic matter, and toluene. Exposure to these air toxics may cause cancer, central nervous system problems, liver damage, respiratory problems and skin irritation." [EPA]. According to one health agency, asphalt fumes contain substances known to cause cancer, can cause coughing, wheezing or shortness of breath, severe irritation of the skin, headaches, dizziness, and nausea. [NJDHSS] Animal studies show PAHs affect reproduction, cause birth defects and are harmful to the immune system. [NJDHSS] The US Department of Health and Human Services has determined that PAHs may be carcinogenic to humans. [DHHS]
- Health Impacts & Loss of Property Value. The Blue Ridge Environmental Defense League (BREDL), a regional environmental organization, has done two studies on the adverse impacts on property values and health for residents living near asphalt plants. A property value study documented losses of up to 56% because of the presence of a nearby asphalt plant. In another study, nearly half of the residents reported negative impacts on their health from a new asphalt plant. The door-to-door health survey found 45% of residents living within a half mile of the plant reported a deterioration of their health, which began after the plant opened. The most frequent health problems cited were high blood pressure (18% of people surveyed), sinus problems (18%), headaches (14%), and shortness of breath (9%). [BREDL]
- Flawed Tests Underestimate Health Risks. In addition to smokestack emissions, large amounts of harmful "fugitive emissions" are released as the asphalt is moved around in trucks and conveyor belts, and is stored in stockpiles. A small asphalt plant producing 100 thousand tons of asphalt a year may release up to 50 tons of toxic fugitive emissions into the air. [Dr. R. Nadkarni] Stagnant air and local weather patterns often increase the level of exposure to local communities. In fact, most asphalt plants are not even tested for toxic emissions. The amounts of these pollutants that are released from a facility are estimated by computers and mathematical formulas rather than by actual stack testing, estimates that experts agree do not accurately predict the amount of toxic fugitive emissions released and the risks they pose. According to Dr. Luanne Williams, a North Carolina state toxicologist, 40% of the toxins from asphalt plant smokestacks even meet air quality standards—and for the other 60% of these emissions, the state lacks sufficient data to determine safe levels.

BE SAFE: Take Precautionary Action to Protect Our Communities from Asphalt Plant Air Pollution

BE SAFE'S FOUR PRINCIPLES

1. HEED EARLY WARNING SIGNS

There is documented evidence from health experts and federal and state regulators of the serious health effects of asphalt plant emissions. We must heed these early warning signs and take action to prevent communities from further exposure to cancer-causing substances released by asphalt plants. The following actions are needed:

Moratoriums on asphalt plant construction and operation in communities where people live and go to school;

Stricter testing and enforcement of air quality standards at asphalt plants; and **Improved air standards** that address all toxic contaminants—including fugitive emissions.

2. PUT SAFETY FIRST

Even if an asphalt plant meets all state and federal air pollution standards, people living nearby are still exposed to cancer-causing substances that can cause long-term damage. These standards are based on the principle of "acceptable risk", and assume each state will enforce the standards, the plants will operate perfectly, and the owners can be trusted to operate on an honor system where they are expected to follow all the laws and regulations that apply to their facility without any government oversight. In the majority of cases, it is unknown whether the 'theoretical' air emissions predicted by computer models and used by plant owners accurately reflect air emissions from a plant's daily operations. We must put safety first and shut down or overhaul the current system that fails to protect communities from the daily health hazards of asphalt plant pollution.

3. EXERCISE DEMOCRACY

Federal regulations based on the "acceptable risk" model and self-regulating honor systems are inadequate to protect public health. Many states rely on inadequate federal standards that do not take into account local factors such as how close an industrial facility is to homes and schools, local weather patterns, and additional 'nuisance' factors such as the effect acrid and nauseating smells have on the quality of life in these communities.

Organizations are working to improve federal and state standards and add asphalt plant fumes to the hazardous air pollutant (HAP) list under the federal Clean Air Act. Communities can take advantage of any state laws aimed at protecting local values that allow counties to determine where new industrial facilities will be located. These communities can band together to work with their county governments to prevent new asphalt plants from being located in their neighborhoods and prevent existing plants from renewing their permits until further evaluation of public health risks are conducted.

BE SAFE is coordinated by the Center for Health, Environment & Justice. To sign the platform or for more information, contact us at CHEJ, P.O. Box 6806, Falls Church, VA 22040, 703-237-2249, or 518-732-4538, or visit www.besafenet.com

4. CHOOSE THE SAFEST SOLUTIONS

Communities faced with an asphalt plant proposal should push for setbacks from residences and community buildings, site specific health-based air pollution modeling and monitoring, enclosures for loading zones, and preferably a zero emissions asphalt plant, with total containment of air pollutants.

Investigate Pollution in Your Area.

To find out more about asphalt plant pollution in your area, go to www.scorecard.org

Join the Clean Air Campaign.

Support the campaign on asphalt plant pollution. To find out more, contact the Blue Ridge Environmental Defense League at www.bredl.org.

BE SAFE.

Take precautionary action to prevent asphalt plant pollution. Sign on to the BE SAFE Platform on the next page. Be counted when we deliver this national Platform to the White House in 2005. Endorse the BE SAFE Platform today at www.besafenet.com.

Your Vote Counts.

The next election will set the country's course on asphalt plant regulations. For information on environmental voting records, contact **www.sierraclub.org** and **www.lcv.org**. To register to vote, contact **www.earthday.net**

Clean Air Campaign Halts Asphalt Pollution & Improves Air Policies

"Nothing could have prepared us for the horrors of that plant; we cannot be outside when it operates, we are prisoners."

Jerry Starr, Macon County, NC

Blue Ridge Environmental Defense League (BREDL) has been leading a Clean Air Campaign to reduce toxic pollution from asphalt plants in North Carolina. In partnership with many community groups, BREDL defeated numerous asphalt plant proposals, spearheaded a trend of countywide moratoriums on asphalt plant construction and operation, and mounted plant permit challenges. The campaigns included radio ads, posted yard signs, newspaper display ads, and stories in local newspapers.

BREDL and the Clean Air Campaign have succeeded in reducing asphalt pollution and improving air quality policies. North Carolina and Tennessee signed an agreement to protect air quality in the Great Smoky Mountain National Park and other wilderness areas. North Carolina has improved methods to analyze fugitive toxic air emissions and expanded the Toxic Air Pollutant program to include all operating and proposed asphalt plants.

References:

US EPA Office of Air Quality Planning & Standards, AP-42, Fifth Edition, Volume I, Chapter 11: Mineral Products Industry, [EPA] http://www.epa.gov/ttn/chief/ap42/ch11/final/c11s01.pdf. Final Rule to Reduce Toxic Air Emissions From Asphalt Processing & Asphalt Roofing Manufacturing Facilities, Environmental Protection Agency, June 2000 [EPA]. Hazardous Substance Fact Sheet, Asphalt Fumes. New Jersey Department of Health and Senior Services, January 2001 [NJDHSS]. Agency for Toxic Substances and Disease Registry (ATSDR). 1995. Toxicological Profile for Polycyclic Aromatic Hydrocarbons (PAHs). Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service[DHHS]. Blue Ridge Environmental Defense League Asphalt Health Survey, [BREDL]. Dr. R. Nadkarni developed mass balance equation to estimate total fugitive emissions and his comments to Virginia Dept. of Environmental Quality are at www.bredl.org/pdf/DEQ072503.pdf. [Dr. R. Nadkarni].

Primary Contributor: Lou Zeller, Blue Ridge Environmental Defense League.

BE SAFE Platform

In the 21st century, we envision a world in which our food, water and air are clean, and our children grow up healthy and thrive. Everyone needs a protected, safe community and workplace, and natural environment to enjoy. We can make this world vision a reality. The tools we bring to this work are prevention, safety, responsibility and democracy.

Our goal is to prevent pollution and environmental destruction before it happens. We support this precautionary approach because it is preventive medicine for our environment and health. It makes sense to:

- Prevent pollution and make polluters, not taxpayers, pay and assume responsibility for the damage they cause;
- Protect our children from chemical and radioactive exposures to avoid illness and suffering;
- Promote use of safe, renewable, non-toxic technologies;
- Provide a natural environment we can all enjoy with clean air, swimmable, fishable water and stewardship for our national forests.

We choose a "better safe than sorry" approach motivated by caution and prevention. We endorse the common-sense approach outlined in the BE SAFE's four principles listed below.

Platform Principles

HEED EARLY WARNINGS

Government and industry have a duty to prevent harm, when there is credible evidence that harm is occurring or is likely to occur—even when the exact nature and full magnitude of harm is not yet proven.

PUT SAFETY FIRST

Industry and government have a responsibility to thoroughly study the potential for harm from a new chemical or technology before it is used—rather than assume it is harmless until proven otherwise. We need to ensure it is safe now, or we will be sorry later. Research on impacts to workers and the public needs to be confirmed by independent third parties.

EXERCISE DEMOCRACY

Precautionary decisions place the highest priority on protecting health and the environment, and help develop cleaner technologies and industries with effective safeguards and enforcement. Government and industry decisions should be based on meaningful citizen input and mutual respect (the golden rule), with the highest regard for those whose health may be affected and for our irreplaceable natural resources—not for those with financial interests. Uncompromised science should inform public policy.

CHOOSE THE SAFEST SOLUTION

Decision-making by government, industry and individuals must include an evaluation of alternatives, and the choice of the safest, technically feasible solutions. We support innovation and promotion of technologies and solutions that create a healthy environment and economy, and protect our natural resources.

Take precautionary action to prevent asphalt plant pollution. Sign onto the BE SAFE Platform.

Be counted when we deliver this national platform to the White House in 2005. Endorse the platform today at www.besafenet.com

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Even if an asphalt plant meets all state and federal air pollution standards, people living nearby are still exposed to cancer-causing substances that can cause long-term damage. These standards are based on the principle of "acceptable risk", and assume each state will enforce the standards, the plants will operate perfectly, and the owners can be trusted to operate on an honor system where they are expected to follow all the laws and regulations that apply to their facility without any government oversight. In the majority of cases, it is unknown whether the 'theoretical' air emissions predicted by computer models and used by plant owners accurately reflect air emissions from a plant's daily operations. We must put safety first and shut down or overhaul the current system that fails to protect communities from the daily health hazards of asphalt plant pollution.

3. EXERCISE DEMOCRACY

Federal regulations based on the "acceptable risk" model and self-regulating honor systems are inadequate to protect public health. Many states rely on inadequate federal standards that do not take into account local factors such as how close an industrial facility is to homes and schools, local weather patterns, and additional 'nuisance' factors such as the effect acrid and nauseating smells have on the quality of life in these communities.

Organizations are working to improve federal and state standards and add asphalt plant fumes to the hazardous air pollutant (HAP) list under the federal Clean Air Act. Communities can take advantage of any state laws aimed at protecting local values that allow counties to determine where new industrial facilities will be located. These communities can band together to work with their county governments to prevent new asphalt plants from being located in their neighborhoods and prevent existing plants from renewing their permits until further evaluation of public health risks are conducted.

BE SAFE is coordinated by the Center for Health, Environment & Justice. To sign the platform or for more information, contact us at CHEJ, P.O. Box 6806, Falls Church, VA 22040, 703-237-2249, or 518-732-4538, or visit www.besafenet.com

4. CHOOSE THE SAFEST SOLUTIONS

Communities faced with an asphalt plant proposal should push for setbacks from residences and community buildings, site specific health-based air pollution modeling and monitoring, enclosures for loading zones, and preferably a zero emissions asphalt plant, with total containment of air pollutants.

Investigate Pollution in Your Area.

To find out more about asphalt plant pollution in your area, go to www.scorecard.org

Join the Clean Air Campaign.

Support the campaign on asphalt plant pollution. To find out more, contact the Blue Ridge Environmental Defense League at www.bredl.org.

BE SAFE.

Take precautionary action to prevent asphalt plant pollution. Sign on to the BE SAFE Platform on the next page. Be counted when we deliver this national Platform to the White House in 2005. Endorse the BE SAFE Platform today at www.besafenet.com.

Your Vote Counts.

The next election will set the country's course on asphalt plant regulations. For information on environmental voting records, contact www.sierraclub.org and www.lcv.org. To register to vote, contact www.earthday.net

Clean Air Campaign Halts Asphalt Pollution & Improves Air Policies

"Nothing could have prepared us for the horrors of that plant; we cannot be outside when it operates, we are prisoners."

Jerry Starr, Macon County, NC

Blue Ridge Environmental Defense League (BREDL) has been leading a Clean Air Campaign to reduce toxic pollution from asphalt plants in North Carolina. In partnership with many community groups, BREDL defeated numerous asphalt plant proposals, spearheaded a trend of countywide moratoriums on asphalt plant construction and operation, and mounted plant permit challenges. The campaigns included radio ads, posted yard signs, newspaper display ads, and stories in local newspapers.

BREDL and the Clean Air Campaign have succeeded in reducing asphalt pollution and improving air quality policies. North Carolina and Tennessee signed an agreement to protect air quality in the Great Smoky Mountain National Park and other wilderness areas. North Carolina has improved methods to analyze fugitive toxic air emissions and expanded the Toxic Air Pollutant program to include all operating and proposed asphalt plants.

References:

US EPA Office of Air Quality Planning & Standards, AP-42, Fifth Edition, Volume I, Chapter 11: Mineral Products Industry, [EPA] http://www.epa.gov/ttn/chief/ap42/ch11/final/c11s01.pdf. Final Rule to Reduce Toxic Air Emissions From Asphalt Processing & Asphalt Roofing Manufacturing Facilities, Environmental Protection Agency, June 2000 [EPA]. Hazardous Substance Fact Sheet, Asphalt Fumes. New Jersey Department of Health and Senior Services, January 2001 [NJDHSS]. Agency for Toxic Substances and Disease Registry (ATSDR). 1995. Toxicological Profile for Polycyclic Aromatic Hydrocarbons (PAHs). Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service[DHHS]. Blue Ridge Environmental Defense League Asphalt Health Survey, [BREDL]. Dr. R. Nadkarni developed mass balance equation to estimate total fugitive emissions and his comments to Virginia Dept. of Environmental Quality are at www.bredl.org/pdf/DEQ072503.pdf. [Dr. R. Nadkarni].

Primary Contributor: Lou Zeller, Blue Ridge Environmental Defense League.

BE SAFE Platform

In the 21st century, we envision a world in which our food, water and air are clean, and our children grow up healthy and thrive. Everyone needs a protected, safe community and workplace, and natural environment to enjoy. We can make this world vision a reality. The tools we bring to this work are prevention, safety, responsibility and democracy.

Our goal is to prevent pollution and environmental destruction before it happens. We support this precautionary approach because it is preventive medicine for our environment and health. It makes sense to:

- Prevent pollution and make polluters, not taxpayers, pay and assume responsibility for the damage they cause;
- Protect our children from chemical and radioactive exposures to avoid illness and suffering;
- Promote use of safe, renewable, non-toxic technologies;
- Provide a natural environment we can all enjoy with clean air, swimmable, fishable water and stewardship for our national forests.

We choose a "better safe than sorry" approach motivated by caution and prevention. We endorse the common-sense approach outlined in the BE SAFE's four principles listed below.

Platform Principles

HEED EARLY WARNINGS

Government and industry have a duty to prevent harm, when there is credible evidence that harm is occurring or is likely to occur—even when the exact nature and full magnitude of harm is not yet proven.

PUT SAFETY FIRST

Industry and government have a responsibility to thoroughly study the potential for harm from a new chemical or technology before it is used—rather than assume it is harmless until proven otherwise. We need to ensure it is safe now, or we will be sorry later. Research on impacts to workers and the public needs to be confirmed by independent third parties.

EXERCISE DEMOCRACY

Precautionary decisions place the highest priority on protecting health and the environment, and help develop cleaner technologies and industries with effective safeguards and enforcement. Government and industry decisions should be based on meaningful citizen input and mutual respect (the golden rule), with the highest regard for those whose health may be affected and for our irreplaceable natural resources—not for those with financial interests. Uncompromised science should inform public policy.

CHOOSE THE SAFEST SOLUTION

Decision-making by government, industry and individuals must include an evaluation of alternatives, and the choice of the safest, technically feasible solutions. We support innovation and promotion of technologies and solutions that create a healthy environment and economy, and protect our natural resources.

Take precautionary action to prevent asphalt plant pollution. Sign onto the BE SAFE Platform.

Be counted when we deliver this national platform to the White House in 2005. Endorse the platform today at www.besafenet.com

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The impact of exposure to air pollution on cognitive performance. [1]

GreenMedInfo Summary

http://www.greenmedinfo.com/article/impact-exposure-air-pollution-cognitive-performance

Abstract Title:

The impact of exposure to air pollution on cognitive performance.

Abstract Source:

Abstract Author(s):

Xin Zhang, Xi Chen, Xiaobo Zhang

Article Affiliation:

Xin Zhang

Abstract:

This paper examines the effect of both cumulative and transitory exposures to air pollution for the same individuals over time on cognitive performance by matching a nationally representative longitudinal survey and air quality data in China according to the exact time and geographic locations of the cognitive tests. We find that long-term exposure to air pollution impedes cognitive performance in verbal and math tests. We provide evidence that the effect of air pollution on verbal tests becomes more pronounced as people age, especially for men and the less educated. The damage on the aging brain by air pollution likely imposes substantial health and economic costs, considering that cognitive functioning is critical for the elderly for both running daily errands and making high-stake decisions.

Article Published Date: Sep 10, 2018

Study Type: Human Study

Additional Links

Diseases: Aging: Brain: CK(248): AC(85) [2], Air Pollution Linked Toxicity: CK(80):

AC(13) [3], Cognitive Decline/Dysfunction: CK(1163): AC(215) [4]

Additional Keywords: Risk Factors: CK(3057): AC(392) [5]