



Fostering appreciation and conservation of birds and the environment we share since 1939

## STATEMENT REGARDING A PROPOSED DETROIT FUGITIVE DUST ORDINANCE

October 9, 2017



**Source: Huffpost 2013. Dust from piles of pet coke on the Detroit Riverfront**

Detroit Audubon, with its 6,000+ members in southeast Michigan strongly supports the city council's adoption of a strong fugitive dust ordinance. Just four years ago in 2013, we joined many other environmental organizations in opposing the piles of pet coke that created huge plumes of black dust extending over the Detroit River and into Windsor—thus creating an international problem. At that time, we joined and are still a member of the Detroit Coalition Against Tar Sands (D-CATS). Not only was the aesthetics of Detroit's revived riverfront compromised, but homes and vehicles were being coated with toxic dust. Since then, a new park has been established near where the pet coke piles were stored. Today the riverfront is again threatened by the prospect of not only piles of petcoke, but metcoke, and coal and the toxins they contain including arsenic and lead that come with them, but even so-called non-toxic particulate matter that can cause serious environmental problems just because of the size of the particles.

The scientific research is clear and compelling that tiny particles of particulate matter (PM-10 and PM 2.5) which blow from stored piles of solid materials just by their size alone cause respiratory and cardiovascular morbidity, aggravate asthma and other respiratory conditions causing increased hospital admissions, and increases mortality from respiratory and cardiovascular disease. The World Health Organization reports that PM10 and PM2.5 are "small enough to penetrate the thoracic region of the respiratory system."

We are one of Michigan's oldest environmental groups. We are concerned with the full gamut of environmental health, including the health effect of pollution and environmental degradation on humans, but we have a special interest in birds.

Detroit was designated the 29<sup>th</sup> Urban Bird Treaty City by the US Fish and Wildlife Service on May 22 of this year. The City of Detroit was a sponsor of the application and one of the signatories to the treaty signed on that day in a ceremony overlooking the Detroit River from the Michigan DNR's Outdoor Adventure Center. Part of requirements of the Urban Bird City Treaty designation was the submission of a plan documenting the bird populations and bird habitat in Detroit and surrounding communities, an analysis of threats to birds in this area, and an action plan for addressing those threats. Among those threats is environmental degradation including air and water pollution.

Detroit in many ways is not only a comeback city economically, but environmentally as well. Detroit Audubon has documented over 350 species of birds frequent the Detroit metro areas either as year-round residents or as migrants. Birds like the Bald Eagle and Peregrine Falcon once on the precipice of extinction are now common sites in Detroit. One of Michigan's largest colonies of Cliff Swallows nests on the McArthur Bridge to Belle Isle while over a quarter million ducks spend the winter on the waters of the Detroit River and Lake St. Clair or spend considerable time here during migration. Detroit is at the intersection of two major migratory flyways: the Atlantic and Mississippi Flyways. We have one of the largest concentrations of hawks migrating through our area than any other spot in North America, including one record day in September 1999 when over 500,000 Broad-winged Hawks flew over on their way south. Songbirds stop to feed for several days to refuel in woodlots and wetlands on Belle Isle, Rouge Park, Eliza Howell Park and many other open spaces.

If the respiratory systems of humans can be harmed by small particulate matter (PM-10 and 2.5) the problems are even worse for birds which have a much faster breathing rate, spend more time in the air, and have a much more extensive respiratory system of air sacs that give more surface area for respiratory issues to develop, and this system of air sacs is also involved in buoyancy in flight.

Without a strong bulk storage ordinance, the birds that breed here, and even the birds that pass through could be seriously affected by the plumes of PM-10 and 2.5 which become airborne at only 15 mph, (the winds regularly gust to 68 mph along the Detroit River!).

Toxins in petcoke, metcoke, coal and other materials can cause bird morbidity and mortality directly or by causing cancers that cause mortality indirectly. The toxins as they blow over the river, become water pollutants as well, affecting the macroinvertebrates that form the base of the food chain and the fish which have made such a dramatic comeback. What a shame it would be if the Bald Eagle which made such a comeback in the Detroit area were to decline once again due to airborne particulates either affecting their respiratory systems or their aquatic food supply. Small songbirds with their smaller size and comparatively large respiratory surface area would be even more at risk. More information on the effect of PM-10 and 2.5 on birds can be found on National Audubon's website: <http://ca.audubon.org/news/birds-suffer-air-pollution-just-we-do>. We are one of two chapters of National Audubon in the state of Michigan.

We are aware of no studies that have been done to indicate possible impacts on fish, birds, and other wildlife in the Detroit River corridor specifically. In light of the plethora of studies elsewhere, the precautionary principle dictates that the only rational course of action is to prevent the kind of problems that cause serious human, avian and environmental health effects from happening here in the first place.

Storage of bulk materials also may potentially adversely impact the Rouge River as well. Millions of dollars have been spent to clean up the Rouge River under the Rouge River Wet Weather Demonstration Project. It makes no sense to allow activities like unregulated bulk storage along or near its banks, which is likely to result in regression on Rouge River clean-up efforts. With all the federal and state funds that have been spent on that effort, it is also wasteful.

We favor the following provisions to be included in the fugitive dust ordinance:

1. Detroit should follow the lead of other cities and require all petroleum coke, met coke, and coal to be stored and handled in a completely enclosed structure.
2. Detroit should require all bulk solid material facilities to install and operate particulate matter monitors so that they can stop pollution spikes in real-time. This must be paid for by the industry as a cost of doing business in a responsible way. We strongly oppose recent suggestions that the city would need to pay for this monitoring. The city cannot afford it and the ones who create environmental problems or potentially could cause environmental problems need to bear the cost of making sure their practices are safe.
3. The city needs to determine a safety radius of a plume from bulk storage materials and prohibit them from being stored near areas where children gather (schools and parks), hospitals or wildlife gathering areas and at least 100 feet away from a waterbody and contained or treated to prevent fugitive dust.
4. Storage piles should not exceed 30 feet in height.
5. What is the safety radius of the plume created from bulk storage of solid materials, and does the City currently determine the critical places where children are located in proximity to this?

We really would prefer that storage of pet coke be prohibited outright by the ordinance because allowing the storage of these toxic pet coke piles also helps facilitate the continued mining, extraction, transportation, and burning of THE most toxic form of petroleum known to humankind—tar sands. Our Board of Directors has gone on record as opposing the mining and use of tar sands, which would be facilitated allowing petcoke, the waste remaining after refining tar sands, for following reasons:

- James Hansen, retired NASA Scientist, has said that if the tar sands are fully exploited, it is “game over for climate change.” If we are to have an environmentally sustainable future the place for tar sands is not on the Rouge River or anywhere else. Their rightful place is to remain in place under the boreal forest of Canada where they have done and will do no harm.
- Tar sands oil is dirty oil, producing far more greenhouses gasses in the mining process, transportation process, and when it is burned than ordinary crude oil.
- To mine the tar sands oil, vast expanses of boreal forest are being destroyed. The tremendous volume of photosynthesis in those forests pulls in vast amounts of carbon dioxide from the

atmosphere, making that heretofore virtually untouched biome the biggest carbon sink on earth. With that sink greatly diminished, less carbon dioxide will be pulled out of the atmosphere and the total carbon dioxide level in the atmosphere will skyrocket.

- As the boreal forest is cut down, important habitat for migratory songbirds, including warblers, which we enjoy watching in Michigan on their way north, will be lost, thereby threatening already vulnerable populations. Caribou numbers are already plummeting as their habitat shrinks, but wolves are being scapegoated and killed as well.
- The damage from inevitable spills is incalculable. Enbridge Energy is still cleaning up a tar sands spill in the western part of our state that happened in 2010. The fact that the tar sands oil is heavy and tends to sink, rather than float, makes it much harder, if not impossible, to clean up.
- Developing tar sands, apart from the devastating-direct effects on the environment, keeps us from putting the kind of focus on and devoting the resources needed to develop non-polluting alternative energy sources like solar, wind, and geothermal power.

Even though the present administration in Washington has decided to pull out of the Paris Climate accords and to pull back from any regulation that would diminish the Climate Change that is already happening, cities, states and private corporations all over the country are pledging to move forward with their own efforts to meet the Paris agreement. Banning petcoke in Detroit is one powerful way for the city to strike a blow to help prevent the worst-case scenarios of climate warming from occurring

In summary, we demand best practices from industries storing bulk materials in our community, that we are warned when harm is being done, and that we are assured that corrective action is undertaken immediately when such problems are detected.

We want a healthy and vibrant community for our kids, elders, birds and other wildlife to survive and thrive in the Motor City, and what we now know is justifiably called Bird City as well.

Sincerely,



James N. Bull, Ph.D., President  
(Ph.D. in Natural Resources)

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