

**NEIGHBORS AGAINST THE BURNER
PETITION FOR ENVIRONMENTAL ASSESSMENT WORKSHEET**

AFFIDAVIT OF ALAN J. MULLER

STATE OF DELAWARE)
) ss.
COUNTY OF NEW CASTLE)

Alan J. Muller, after being sworn on oath, states and deposes as follows:

1. I have been retained by Neighbors Against the Burner as a consultant in their opposition to incineration projects in the Minneapolis/St. Paul metropolitan area.
2. For over a decade, as Executive Director for Green Delaware, I have been working against incineration, opposing specific projects and working toward legislative solutions. For fifteen years, I was a consultant for DuPont, promoting incinerators world-wide, and have extensive knowledge of incinerators, emissions and the industry.
3. I am submitting this Affidavit and Exhibits in support of the Neighbors Against the Burner Petition for an Environmental Assessment Worksheet for the Midtown Eco-Energy burner (hereinafter "Midtown.") proposed byKandiyohi Development Partners.
4. The purpose of Environmental Review" in Minnesota:

..is to avoid and minimize damage to Minnesota's environmental resources caused by public and private actions. The program accomplishes this by requiring certain proposed projects to undergo special review procedures prior to obtaining approvals and permits otherwise needed¹.

Environmental review begins with an "Environmental Assessment Worksheet" (EAW) and may proceed to a more thorough "Environmental Impact Statement."

AN ENVIRONMENTAL ASSESSMENT WORKSHEET IS NECESSARY BECAUSE OF THE NATURE OF THE PROPOSAL AND UNSUITABILITY OF THE PROPOSED LOCATION AND THE TYPE, EXTENT AND REVERSIBILITY OF ENVIRONMENTAL EFFECTS

5. The proposed Midtown burner, by the Applicant's estimates, has potential to emit about one million pounds of health-damaging air pollutants every year, via a 140 foot smokestack, including fine particles, mercury, dioxin, arsenic, lead, ammonia, sulfuric acid, and formaldehyde. MPCA Draft Air Permit; Midtown Application, Table 3-1. p. 3-2².

¹ See "Guide to Minnesota Environmental Review Rules," Environmental Quality Board, <http://www.eqb.state.mn.us/pdf/rulguid3.pdf>

² See also Midtown Application, Appendix C.

6. Annual emissions of cancer-causing pollutants include: arsenic (69 lbs), carbon tetrachloride (147 lbs), benzene (13,220 lbs), beryllium, cadmium (13lbs), chromium (9 lbs), nickel (11 lbs), vinyl chloride (58 lbs) and styrene (5840 lbs). Midtown Application, Table 3-1, p. 3-2.
7. Insufficient data is available, according to the MPCA technical support document, to know with confidence what the entire smokestack emissions of the facility would be. See *Supra*, para. 32-36.
8. PM 2.5 is not specifically listed in the draft Air Permit.
9. The MPCA has initiated a waste combustor rulemaking with a letter going out to “interested parties” on December 13, 2005³, and official publication “slated for fall, 2006,” but as of this writing, the draft rule has not been formally published nor opened for comments. The MPCA Waste Combustor rule is out of compliance with Federal standards. The MPCA’s view is that the Midtown project is not subject to the Waste Combustor rules, but I do not agree.
10. Nearly ten thousand heavy truck trips a year would be generated – trips specifically attributable to the Midtown Eco-Energy burner, hauling in waste fuel and process chemicals, and hauling out ash. Diesel exhaust is a known cause of cancer, asthma, and many other serious health problems.
11. The MPCA has considered the emissions of trucks only when they are driving on the site itself, and not when they are passing through the surrounding communities. Each truck trip is considered to be a trip of 800 feet, within the site footprint only, and includes inbound and outbound movement. There will be an annualized average of 27.3 truck trips daily loaded with fuel and another truck daily for outbound ash and inbound urea (annualized 0.65 daily, 0.51 for ash and 0.14 for urea) with daily maximum estimated at 40⁴. This 800 foot “trip” modeling assumption greatly underestimates the additional truck pollution that would directly result from the facility. The health hazard from these diesel truck emissions is therefore underestimated as well.
12. The emissions of the Midtown Eco-Energy burner include substances known to cause or contribute to cancer, birth defects, asthma, bronchitis, heart disease, strokes, reduced intelligence in children, and many other serious and fatal health problems with associated increases in health care costs. See *Health Effects of Waste Incinerators*⁵, and *The Price of Pollution: Cost Estimates of Environmental Related Pollution in Minnesota*.⁶
13. The proposed location is unsuitable because least ten schools and 3 health care facilities are within one mile⁷. The young and the ill are especially vulnerable to the health effects

³ The December 13, 2005 letter verifies the state’s regulatory noncompliance and conflicts with federal law that must be addressed.

⁴ Midtown Application, p. 3-4 (July 13, 2007).

⁵ *Health Effects of Waste Incinerators*, 4th Report of the British Society for Ecological Medicine (Dec. 2005) www.ecomed.org.uk/content/IncineratorReport.pdf

⁶ *The Price of Pollution*, IATP and MCEA (June 2006)

www.sehn.org/tccpdf/childhood%20illness,%20cost%20of%20preventable%20MN%20report.pdf

⁷ MPCA Impact Analysis Summary, p. 6 of 18.

of air pollution. See Health Effects of Waste Incinerators⁸, and The Price of Pollution: Cost Estimates of Environmental Related Pollution in Minnesota.⁹

14. The Midtown burner would not use all available means to reduce emissions. For example, up to 80,000 pounds per year of sulfur dioxide would be spewed from the smokestack. The promoters say that this could be reduced to less than 8,000 pounds with "scrubbers," but claim that this would not be cost effective, placing private profit above community health and forcing neighbors to bear the cost.

THE PROPOSED MIDTOWN BURNER WOULD INFLICT ENVIRONMENTAL INJUSTICE ON AN ETHNICALLY AND RACIALLY DIVERSE POPULATION WITH A HIGH PERCENTAGE LIVING AT OR BELOW THE POVERTY LEVEL.

15. The Midtown burner would be located in or near communities that have a high proportion of low-income residents and have an ethnically and racially diverse population. The immediate area also has a relatively high number of young and elderly people, who are especially vulnerable to the effects of pollution.
16. The ethnic and racial statistical breakdown for House District 61A¹⁰, the district where the proposed Midtown Eco-Energy burner would be located:

Race and Hispanic¹¹ Universe: Total Population of Minnesota House District 61A

White alone	16,175	43.9
Black alone	8,979	24.3
Amer Indian Alaska native alone	2,538	6.9
Asian alone	2,106	5.7
Hawaiian and Other Pac Islander alone	10	0
Other race alone	4,084	11.1
Two or more races	2,989	8.1
Hispanic	7,271	19.7
White alone not Hispanic	13,882	37.6
Minority Population	22,999	62.4

Poverty¹² Universe: Persons for whom poverty status is determined in Minnesota House District 61A

Persons for whom poverty status determined	35,445	96.1
Poor Persons	9,929	28.0
Persons below 50% of poverty level	4,509	12.7
Persons below 185% of poverty level	19,591	55.3
Persons between 100-200% of poverty level	10,517	29.7

⁸ Health Effects of Waste Incinerators, 4th Report of the British Society for Ecological Medicine (Dec. 2005) www.ecomed.org.uk/content/IncineratorReport.pdf

⁹ The Price of Pollution, IATP and MCEA (June 2006)

www.sehn.org/tccpdf/childhood%20illness,%20cost%20of%20preventable%20MN%20report.pdf

¹⁰ From Minnesota Legislative District Profile 61A, http://mc2c2.missouri.edu/cgi-bin/broker?_PROGRAM=websas.dp3_2k.sas&_SERVICE=sasapp&st=27&sldl=61A&ut=Minnesota+Legislative+District+Profile

¹¹ Id.

¹² Id.

Household Income in 1999
Total Households 15,137

¹³Universe: Households in Minnesota House District 61A

Less than \$10,000	2,812	18.6
\$10,000 to \$14,999	1,643	10.9
\$15,000 to \$24,999	3,055	20.2
\$25,000 to \$34,999	2,795	18.5
\$35,000 to \$49,999	2,170	14.3
\$50,000 to \$74,999	1,583	10.5
\$75,000 to \$99,999	611	4.0
\$100,000 to \$149,000	342	2.3
\$150,000 to \$199,999	59	0.4
\$200,000 or more	67	0.4
Median HH Income	25,161	
Average Household Income	31,613	

AN ENVIRONMENTAL ASSESSMENT WORKSHEET IS NECESSARY BECAUSE OF CUMULATIVE POTENTIAL EFFECTS including PRE-EXISTING CONTAMINATION

17. The vicinity of the proposed Midtown burner is already affected by environmental contamination, both generally distributed and at identified contaminated "hot spot" sites. Contaminants of concern include those, such as arsenic, that would be emitted by the Midtown project. The project would worsen already-severe environmental contamination in the communities.
18. The Midtown Eco-Energy burner has potential to emit 14,000 pounds per year of formaldehyde. The MPCA has substantiated high levels of formaldehyde in the area, and no more should be allowed. MPCA Presentation, Slide 25, Midtown Eco-Energy Title V Permit, August 9, 2007.
19. The MPCA itself admits that "cumulative impacts were not formally analyzed."¹⁴

GRANTING AN AIR PERMIT FOR THE MIDTOWN BURNER WOULD VIOLATE FEDERAL AND MINNESOTA LAWS, POLICIES, AND RULES/REGULATIONS AGAINST ENVIRONMENTAL INJUSTICE.

20. Executive Order 12898 (President Clinton) states "*... each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States*" Since Minnesota issues air permits under delegated Federal authority, and under continual review by the US Environmental Protection Agency, this order applies to the proposed permit. The proposed Midtown permit would violate this Executive Order and cannot be granted.
21. Executive Order No. 12250 requires "effective" implementation of laws prohibiting discriminatory practices in programs receiving Federal financial assistance. Minnesota's

¹³ Id.

¹⁴ MPCA Impact Analysis Summary, p. 10 (February 2007).

air program receives Federal financial assistance. The proposed Midtown air permit cannot be granted because to do so would be a violation of Executive Order 12250.

22. The US Civil Rights Act of 1964, Title VI, prohibits discriminatory environmental regulatory actions. The proposed Midtown permit would violate the Civil Rights Act and cannot not be granted.
23. The Minnesota Pollution Control Agency has adopted an "Environmental Policy" which states¹⁵:

"The MPCA will, within its authority, ensure fair and equitable treatment and meaningful involvement of all Minnesota citizens in the implementation of federal and state environmental laws, rules, programs, and policies to insure that:

Minority and economically-disadvantaged communities in Minnesota do not bear a disproportionate share of the involuntary risks and consequences of environmental pollution..."

See paragraph 14 above. The proposed Midtown permit would violate this MPCA policy and cannot not be granted.

AN ENVIRONMENTAL ASSESSMENT IS NECESSARY TO ASSESS COMMUNITY BENEFITS VERSUS COSTS

24. No local benefits would accrue to offset the harmful pollution and traffic that would be introduced to host communities. Residents would not get cheaper energy, protection from shutoffs, assistance with weatherization, or access to lower-cost "district heating."
25. Even if the project were built, local governments would not receive much-needed utility personal property tax revenue because the Midtown Eco-Energy burner secured a legislative exemption from utility personal property tax, a tax divided between the host county, city and school district. That exemption has expired, and the Applicant is expected to be lobbying for an extension. The exemption statute reads:

Minn. Stat. §272.02, Subd. 82.

Biomass electric generation facility; personal property.

(a) Notwithstanding subdivision 9, clause (a), attached machinery and other personal property which is a part of an electric generation facility, including remote boilers that comprise part of the district heating system, generating up to 30 megawatts of installed capacity and that meets the requirements of this subdivision is exempt. At the time of construction, the facility must:

(1) be designed to utilize a minimum 90 percent waste biomass as a fuel;

(2) not be owned by a public utility as defined in section [216B.02, subdivision 4](#);

(3) be located within a city of the first class and have its primary location at a former garbage transfer station; and

(4) be designed to have capability to provide baseload energy and district heating.

(b) Construction of the facility must be commenced after January 1, 2004, and before January 1, 2008. Property eligible for this exemption does not include electric transmission lines and interconnections or gas pipelines and interconnections appurtenant to the property or the facility.

¹⁵ <http://www.pca.state.mn.us/publications/policy-environmentaljustice.pdf>

26. "District heating" from the Midtown burner, if implemented at all, is a private benefit and would only be available to large institutions and developments outside the immediate neighborhood.
27. As noted in paragraph 10, above, health costs, monetary and otherwise, would disproportionately accrue to those least able to afford it, the poor, the young and old.
28. Originally, the project now known as the Midtown Eco-Energy burner had a community ownership and community benefit component. It began under the umbrella of the Green Institute, led by its director, Michael Krause. Initial feasibility and studies were funded with a portion of a \$1.9 million Federal grant. Later, Mr. Krause left the Green Institute, and he and his partners bought rights to the project from the Green Institute. There is no longer any direct community benefit to the Midtown Eco-Energy burner. The Green Institute has retreated in its support and now feels it is "not the same project" and has expressed reservations.¹⁶ Other Community organizations have withdrawn their support, including those of East Phillips and Seward.

AN ENVIRONMENTAL ASSESSMENT WORKSHEET IS NECESSARY BECAUSE THE "AIR EMISSIONS RISK ANALYSIS" PERFORMED BY THE MPCA IS INADEQUATE, DEFICIENT AND FLAWED

29. Air emissions are expected to be about one million pounds per year, NOT including carbon dioxide. While reading this list, keep in mind that all of these pollutants are harmful to human health and/or to the environment -- if they weren't, they wouldn't be regulated in the first place. Many are known to cause cancer in humans (*). Emissions, as found in the Midtown permit application:

Emitted substance	Pounds annually
Nitrogen oxide	320,000
Sulfur dioxide	80,000
Carbon monoxide	320,000
Lead	150
Particulate matter	130,000
Hydrogen chloride (hydrochloric acid)	61,000
Formaldehyde	14,000
Benzene	13,000
Chlorine	2,400
Sulfuric acid	1,200
Arsenic	69
Cadmium	13
Carbon tetrachloride	143
Chlorobenzene	104
Chromium	9
Mercury	5.5
Methylene chloride	902
Nickel	11
Styrene	5840

¹⁶ See the Green Institute Comments, dated December 7, 2007, at <http://www.greeninstitute.org/energy/>

Vinyl chloride	58
Ammonia	110,000

30. According to the MPCA "Impact Analysis Summary"¹⁷, the Midtown burner would emit the following percentages of that total pollutant emitted within one kilometer (.6 mile) of the proposed site from all known sources. Some of note are listed below, with the "Chemical Name" on the left, and on the right is the column entitled "Midtown Fraction of Total Point, Area, & Mobile Source Emissions in 1km radius." In other words, this shows the percentage of each named pollutant emitted in the area that would be from Midtown if it were built and operated.

Emitted substance	% of emissions within 1km (0.6 mi)
PM 2.5	27%
Lead	36%
Antimony	88%
Beryllium	92%
Carbon Tetrachloride	100%
Chlorine	98%
Copper	63%
Ethylene dibromide	100%
Ethylene dichloride	91%
Hydrochloric acid	88%
Pentachlorophenol	100%
Phenol	76%
Styrene	83%
PCBs	100%
2,3,7,8 tcdfuran	46%
2,3,7,8 tcd-p-dioxin (the most toxic dioxin)	95%
Trichloroplouromethane (CFC-11)	100%
2,4,6 Trichlorophenol	100%
Vinyl chloride	100%

31. All of these pollutants cause death, disease, birth defects, reduced intelligence, cancer, or other serious problems. No "safe" level can be established for many of these pollutants. See Health Effects of Waste Incinerators¹⁸, and above, The Price of Pollution.
32. MPCA acknowledges formaldehyde levels are above acceptable rates, and should not allow additional formaldehyde emissions. MPCA Power Point, Midtown Eco-Energy Title V, Slide 25, August 9, 2007.
33. The MPCA risk analysis found a cancer risk approximately ten times higher than acceptable under current Minnesota rules from the "farmer-cancer scenario," yet claims that such a scenario

¹⁷ MPCA Impact Analysis Summary, p. 14, et seq. (February 2006) .
<http://greendel.org/images/MidtownEcoEnergyImpactAnalysis.doc>

¹⁸ Health Effects of Waste Incinerators, 4th Report of the British Society for Ecological Medicine (Dec. 2005)
<http://www.ecomed.org.uk/content/IncineratorReport.pdf>

does not exist in the area. The MPCA conclusion does not take into account the many Community gardens and individual gardens, which would entail a cancer risk less than the full factor of 9 present in the “farmer-cancer scenario,” yet above “acceptable” risk.¹⁹ One-third of the Community Gardens in Minneapolis are near the proposed site of the Midtown burner. *Id.*

THE MPCA ACKNOWLEDGES THAT THERE IS CONSIDERABLE UNCERTAINTY REGARDING ACTUAL EMISSIONS FOR THIS BURNER – AN ENVIRONMENTAL ASSESSMENT WORKSHEET IS NECESSARY TO ANSWER UNANSWERED QUESTIONS

34. The MPCA states:

There is uncertainty surrounding the emission factors used and staff generally believes that more data should be collected from biomass facilities, particularly with regard to dioxins, PAHs and mercury. This data will be important as more facilities choose to use biomass as fuel for all or part of their operations. Given this need, MPCA staff recommends that the MPCA explore options for conducting testing at this facility.

MPCA Impact Analysis Summary, p. 13 of 18 (February 2006). MPCA notes that of these chemical emissions surrounded in uncertainty, “*dioxins and PAHs are the primary risk drivers in this analysis.*” *Id.*, p. 3.

35. The MPCA admits uncertainty in estimates of risk, stating “*some residences may experience risk from growing and consuming local food that may be higher than the residential risk assessed.*” *Id.*, p. 2. and further states that: “*However, there is the possibility of locally grown food that is consumed by nearby residents. This activity is likely to result in an actual risk above the residential risk estimates but well below the farmer risks that were evaluated.*” *Id.* p. 6.

36. The MPCA admits that lack of experience is an issue: “*The MPCA has limited experience in permitting biomass-to-energy facilities. It is possible that additional chemicals may be emitted that were not evaluated in this analysis.*” *Id.*, p. 8.

37. The MPCA also admits that Midtown emissions contain chemicals that lack inhalation benchmarks: Acetophenone; Cobalt; 2,4-Dinitrophenol; 4-Nitrophenol; Phosphorous and Propionaldehyde. *Id.* at 8. this means their contribution to the health risk caused by the proposed facility has not been quantified.

38. The MPCA further admits that “*the MPCA may want to explore options for performance testing at the facility since test data for pollutants other than criteria pollutants from biomass facilities is limited.*” *Id.* at 11. Similarly, “*Because preprocessed met data in the new format were not available, this analysis was done with the old met data,*” and there is uncertainty regarding the result. *Id.*

39. An Environmental Assessment Worksheet is necessary to begin to alleviate the uncertainty at the MPCA regarding emissions of biomass burners and address community concerns about both the emissions and the regulatory uncertainties. In effect, the proposed facility is experimental.

40. Minnesota considers a 1 in 100,000 cancer risk acceptable. We do not. About 20 Minnesota organizations under the Minnesota Environmental Partnership umbrella are seeking to change the

¹⁹ See Gardenworks www.gardenworksmn.org/Directory/index.htm

acceptable risk to 1 in a million, as other states have done.²⁰ Using a 1 in a million risk level, under the MPCA RASS Results – Total Facility, the Midtown burner as proposed could not be granted a permit due to risk above acceptable threshold.²¹

An Environmental Assessment Worksheet is necessary to begin the process of Environmental Review.

Further your affiant sayeth not.

Dated: _____

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Signed and sworn to before me this
14th day of January, 2008.

Notary Public

²⁰ MEP Minnesota Environmental Briefing Book, available on line at www.mepartnership.org/documents/Brief2008.pdf

²¹ MPCA Impact Analysis Summary, February 2006.