STATE OF MICHIGAN
BEFORE THE MICHIGAN DEPARTMENT OF
ENVIRONMENTAL QUALITY, AIR QUALITY DIVISION

In re Permit to Install Application for	)	
Holland Board of Public Works	)	Permit Application No. 25-07

PETITION TO INTERVENE

Pursuant to M.C.L. 324.1705, the Natural Resources Defense Council ("NRDC") and Sierra Club, request that they be granted intervention in this proceeding before the Michigan Department of Environmental Quality ("MDEQ"). In addition, to the extent MDEQ believes that such an assertion must be made and that it has not yet been made, this petition represents an official allegation under the Michigan Environmental Protection Act ("MEPA") that the proposed coal-fired power plant at issue in this proceeding ("Proposed Coal Plant") will pollute, impair, or destroy Michigan's environment and natural resources. In support of this petition, the NRDC and Sierra Club state as follows, and hereby incorporate by reference the comments and supporting documents that they previously submitted to MDEQ regarding the Proposed Coal Plant, Holland's permit application and Electric Generating Alternatives Analysis, the Draft Permit issued by MDEQ, and the Michigan Public Service Commission regarding Holland's proposal.

I. BACKGROUND

This proceeding is a review of Permit Application No. 25-07, Holland Board of Public Works's ("Holland") application for a Permit-to-Install a proposed 78 megawatt coal-fired power plant ("Proposed Coal Plant") in downtown Holland, Michigan. The Proposed Coal Plant would annually emit up to 568 tons of carbon monoxide, 478 tons of sulfur dioxide, 341 tons of

nitrogen oxides, 102 tons of particulate matter, 22 tons of sulfuric acid mist, 13 tons of volatile organic compounds, 160 pounds of lead, 5 pounds of mercury, and approximately 220,000 tons of carbon dioxide.

Holland initially filed the application in January 2007, which it amended or provided additional information for in a series of filings in 2007 and 2008. On November 26, 2008, MDEQ issued a draft permit for the Proposed Coal Plant, scheduled public hearings for January 12 and 13, 2009, and established a public comment period that closed on January 30, 2009. On January 29, 2009, NRDC and Sierra Club, along with other non-profit organizations, jointly submitted written comments that, in part, urged MDEQ to deny Holland's permit application under MEPA because the Proposed Coal Plant would pollute, impair, or destroy the environment, and because a combination of energy efficiency, wind, concentrated solar power, combined heat and power, and natural gas combined cycle could satisfy whatever energy needs existed with a much lower environmental impact. In the January 29 Comments, NRDC and Sierra Club also explained that MDEQ must reject Holland's permit application pursuant to Section 165(a)(2) of the Clean Air Act, 42 U.S.C. § 7475(a)(2), and Mich. Admin. Code R 336.1817(e)(2) because there was not a need for the Plant and because there are cleaner alternatives for meeting whatever energy need exists.

On April 1, 2009, MDEQ and the Michigan Public Service Commission ("MPSC") entered into a Memorandum of Understanding regarding the role of each agency in carrying out the analysis of alternatives requested by NRDC and Sierra Club and authorized under Section 165(a)(2) of the CAA and Mich. Admin. Code R 336.1817(e)(2). On April 7, 2009, MDEQ sent Holland a letter requesting that the company submit an analysis of alternatives to the Proposed Coal Plant.

Nearly a year later, on April 1, 2010, Holland submitted the requested Electric Generation Alternatives Analysis ("EGAA") to MDEQ and the MPSC. In its EGAA, Holland acknowledged that:

> Several peaking, intermittent, intermediate, and baseload resource alternatives appear to be available to HBPW to meet its resource needs including partial ownership purchases, market purchases, natural gas fired combined cycle and simple cycle, supercritical pulverized coal, CFB, landfill gas, hydroelectric, biomass, solar PV, wave, and wind.

(EGAA at p. 9-1). The EGAA further acknowledges that

> Coal generation has the greatest impact on the emissions profile of the region as it typically has the highest rate of emissions for every unit of fuel burned. In contrast, natural gas fired resources have the lowest emission rates amongst all fossil fuels. Renewable resources including wind, solar, and hydro units do not have any emissions at all. Landfill gas and biomass will have emissions of various pollutants, but are generally considered carbon neutral with no CO2 emissions.

(EGAA at p. 8-1). Holland's EGAA concluded that the least cost option for meeting future energy needs would be to convert boilers at its existing James DeYoung plant into a natural gas combined cycle plant. (EGAA at p. 7-10). Pursuit of the Proposed Coal Plant was estimated to cost 7.2% more than the least cost option. (EGAA at 7-15).

On April 30, 2010, Sierra Club and other public interest organizations submitted comments supported by a technical analysis from expert consultant Schlissel Technical Consulting, that the EGAA failed to demonstrate either a need for or a lack of feasible and prudent alternatives to the Proposed Coal Plant. On June 8, 2010, NRDC, Sierra Club, and other organizations submitted comments to MDEQ reiterating their belief that the Proposed Coal Plant was not needed given the existence of cost competitive cleaner energy alternatives.

On July 7, 2010, the MPSC Staff issued a report regarding the EGAA in which it concluded that "Holland failed to adequately demonstrate the need for the proposed facility as the sole source to meet its projected capacity requirements." The MPSC Staff report further

noted that Holland's electricity demand growth estimate "appears overly optimistic" and that the EGAA's assumption regarding demand reduction potential through energy efficiency and demand-side management "appears unduly conservative," which "results in a projected capacity need which may not fully materialize." The MPSC Staff report also found that the Proposed Coal Plant is only "one alternative out of a range of alternatives that may be used to fill the projected capacity need," noting that the EGAA identified "other less costly alternatives" that could be selected. The MPSC Staff explained that options that could be used to meet all or some of Holland's electric needs include "a combined cycle natural gas plant, purchase power options or a combination of alternatives that could lead to lesser amounts of purchased power, energy efficiency and load management, and renewable generation resources."

On August 20, 2010, MDEQ denied Holland's PTI application "pursuant to Section 165(a)(2) of the Clean Air Act and Rule 1817(2)(e) of Michigan's Air Pollution Control Rules for failure to demonstrate a need for the proposed facility." Holland appealed, and on December 15, the Ottawa County Circuit Court reversed MDEQ's denial of Holland's permit application. In its opinion, the Circuit Court did not discuss or even mention Section 165(a)(2), the leading U.S. Environmental Appeals Board decision applying Section 165(a)(2), Rule 1817(2)(e), or MEPA. The Circuit Court did, however, order MDEQ to reconsider Holland's permit application within 60 days and improperly limited such review to legal requirements in place as of August 20, 2010.

NRDC and Sierra Club now petition to intervene in MDEQ's permitting process to ensure that the requirements of MEPA are complied with.

II. NRDC AND SIERRA CLUB ARE ENTITLED TO INTERVENE IN THIS PROCEEDING.

A. MEPA Allows for Intervention by "Any Person" That Can Show an Action Would Cause the Environment to be Polluted, Impaired, or Destroyed.

M.C.L. 324.1705(1) authorizes "any person" to move to intervene in an administrative, licensing, or other proceeding by filing a petition alleging that the proposed action under consideration would pollute, impair, or destroy the environment. The Michigan Supreme Court has recently made clear that the phrase "any person" means exactly what it says for purposes of a separate MEPA provision, MCL 324.1701(1), that grants "any person" the right to bring a MEPA action in Circuit Court. *Anglers of the Au Sable, Inc. v. Mich. Dept. of Envt'l Quality*, -- N.W.2d --, 2010 WL 5393267, at *5 (Mich. 2010). By the same logic, it is clear that the Michigan legislature intended to authorize any person that can make a showing that an action would pollute, impair, or destroy the environment to intervene without the need for the proposed intervenor to satisfy other standards regarding intervention.

NRDC and Sierra Club plainly fall within the category of "any person," as they are both organizations that represent significant numbers of Michigan residents. For example:

- NRDC has 193 members in Ottawa County and 12,875 in Michigan
- Sierra Club has 336 members in Ottawa County, 161 in Allegan County, and 17,128 in Michigan.

The addition of NRDC and Sierra Club to the permitting proceeding is, therefore, not only authorized by MEPA, but is also an efficient approach because the interests of many potential plaintiffs in ensuring that a full MEPA analysis occurs will be effectively represented in a single proceeding.

B. Issuance of a Permit for the Proposed Coal Plant Would Allow the Proposed Coal Plant to Pollute, Impair, or Destroy the Environment.

The standard for whether MEPA's analysis of needs and alternatives requirement is triggered is whether a proposed action would pollute, impair, or destroy the environment. In early 2009, then-Attorney General Mike Cox issued Opinion No. 7224 (the "Opinion"), in which he concluded that MEPA does not "authorize the DEQ to determine whether there are 'feasible and prudent alternatives' to a particular coal-fired power plant, until there has first been an allegation followed by an individualized determination that that plant will, or is likely to, pollute, impair, or destroy natural resources." Opinion at 11. The Attorney General did not address whether MDEQ had the authority to make an allegation of "pollution, impairment, or destruction," nor did the opinion letter suggest any limits for groups or individuals to make such an allegation. NRDC and Sierra Club believe that, in this proceeding, MEPA requires the agency to, at its own initiative, make a determination under MEPA regarding pollution, impairment, or destruction of the environment. *See* MCL 324.1705(2) (requiring such a determination "in administrative, licensing, or other proceedings, and in any judicial review of such a proceeding," and not solely those in which intervenors have alleged harm). Nevertheless, as MDEQ has apparently decided not to do so, NRDC and Sierra Club seek to intervene to ensure that MEPA's requirements to protect Michigan's environment are met.

There can be no reasonable dispute that the pollute, impair, or destroy standard is satisfied here. As described below, and as explained in NRDC and Sierra Club's January 29, 2009 Comments, which are adopted by reference herein, the air pollution emissions from the Plant would exacerbate climate change and adversely impact public health, air quality, water quality, and vegetation. In addition, there would be significant impacts from the coal mining and fuel transportation, water withdrawals and discharges, and waste disposal that the plant would

require. Such impacts plainly qualify as pollution, impairment, or destruction of Michigan's environment and natural resources.

1. The Proposed Coal Plant would pollute, impair and destroy Michigan's air for decades.

The Proposed Coal Plant would emit approximately 1,500 tons of air pollution – including SO_2, NO_X, PM_{10}, $PM_{2.5}$, CO, and VOCs – that the U.S. EPA has identified as criteria air pollutants under the Clean Air Act because they "cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 7408(a)(1)(A). Such pollutants cause or contribute to problems breathing, asthma, cardio-pulmonary disease, premature death, smog, acid rain, crop damage, and impaired visibility.[1] While the National Ambient Air Quality Standards ("NAAQS") established by U.S. EPA for these pollutants are supposed to be designed to prevent serious injury to human health and welfare, the NAAQS by themselves do not fully protect public health. *LaFleur v. Whitman*, 300 F.3d 256, 270 (2d Cir. 2002). The very text of the PSD program recognizes that negative impacts to health may occur at levels below the NAAQS:

> The purposes of this part are… to protect public health and welfare from any actual or potential adverse effect which… may reasonably be anticipate [sic] to occur from air pollution… notwithstanding attainment and maintenance of all national ambient air quality standards.

42 U.S.C. § 7472(1).

In fact, Congress has found that the NAAQS "do not adequately protect against genetic mutations, birth defects, cancer, or diseases caused by long-term chronic exposures or periodic short-term peak concentrations, and hazards due to derivative pollutants and to cumulative or synergistic impacts of various pollutants; and they do not adequately protect against crop damage

[1] *See, e.g*, National Research Council, Hidden Costs of Energy: Unpriced Consequences of Energy Production and Use (Oct. 2009), attached as Ex. 1; Clean Air Task Force, Toll From Coal: An Updated Assessment of Death and Disease From America's Dirtiest Energy Source (Sept. 2010), attached as Ex. 2.

and acid rain." *Hawaiian Elec. Co. v. U.S. E.P.A.*, 723 F.2d 1440, 1447 (9th Cir. 1984). General consensus exists in the health field that significant negative health impacts from particulate matter in particular occur at levels below the current NAAQS, and the D.C. Circuit recently remanded both the 2006 primary (human health) and secondary (public welfare) PM2.5 NAAQS due to their inadequacies. *American Farm Bureau Federation v. EPA*, 559 F.3d 512 (D.C. Cir. 2009). The Proposed Coal Plant's emissions will contribute to these impacts.

As MDEQ acknowledges in the Public Participation Document, the Draft Permit would allow Holland to emit thousands of tons of criteria and other air pollutants every year, including:

Pollutant Estimated	Emissions
Particulate Matter	102 tpy
SO_2	478.3 tpy
NO_X	341.6 tpy
CO	568.3 tpy
Volatile Organic Compounds (VOCs)	13.6 tpy
Lead	0.08 tpy
Sulfuric acid mist (H2SO4)	22.7 tpy
Mercury	5.32 lbs/year
Hydrogen Flourides	6.4 tpy
Hydrogen Chlorides	238.7tpy

Public Participation Documents ("PPD") at 9, 35. There is no credible dispute that these emissions would have significant impacts to public health and the environment.[2]

2. The Proposed Coal Plant's CO_2 emissions would exacerbate climate change, which has significant impacts on public health and the environment.

The Proposed Coal Plant would emit approximately 181,440 tons of CO_2, 130 tons of N_2O and 2 tons of CH_4 every year. This is a total of 220,110 tons of CO_2 equivalents each year.

[2] For an overview of the environmental and public health consequences of coal use, Natural Resources Defense Council, *Coal in a Changing Climate* (Feb. 2007), attached as Ex. 3; and Clean Air Task Force and Physicians for Social Responsibility, *Children at Risk: How Air Pollution From Power Plants Threatens the Health of America's Children* (April 2002), attached as Ex. 4.

This greenhouse gas pollution will exacerbate climate change and its harmful impacts to public health and the environment.

Numerous scientific studies directly link climate change with significant public health, environmental, economic, and ecological impacts.[3] Such impacts include direct heat-related effects, extreme weather events, climate-sensitive disease impacts, air quality effects, agricultural effects (and related impacts on nutrition), wildlife and habitat impacts, biodiversity impacts, impacts on marine life, property damage, and social disruption (such as population displacement).[4]

While global warming is a worldwide phenomenon, the major climate changes associated with global warming – increases in average temperature, and increased incidences of extreme heat, droughts, and heavy rain events – will be experienced throughout Michigan. Following are just some of the likely impacts of climate change on Michigan that have been identified in recent studies:[5]

- A 6 to 10 degree increase in average winter temperatures and a 7 to 13 degree increase in average summer temperatures by the end of the century;
- A changing of the climate in Michigan to resemble that of northern Arkansas in the summer and southern Ohio in the winter;

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[3] *See, e.g.,* Intergovernmental Panel on Climate Change, Working Group II, Climate Change 2007: Impacts, Adaptation, and Vulnerability, *available at* http://www.ipcc-wg2.org/, the Summary for Policymakers of the Working Group II Report is attached as Ex. 5; National Research Council of the National Academies, Advancing the Science of Climate Change (May 2010), available at http://www.nap.edu/catalog.php?record_id=12782, the Report in Brief is attached as Ex. 6; Matthias Ruth, et al., The US Economic Impacts of Climate Change and the Costs of Inaction, Center for Integrative Environmental Research (Oct. 2007), attached as Ex. 7.

[4] U.S. EPA, Climate Change, Health and Environmental Effects, *available at* http://www.epa.gov/climatechange/effects/index.html.

[5] LINDA MORTSCH ET AL., INT'L JOINT COMM'N, CLIMATE CHANGE AND WATER QUALITY IN THE GREAT LAKES REGION 5 (2003), attached as Ex. 8; Brent M. Lofgren et al., *Evaluation of Potential Impacts on Great Lakes Water Resources Based on Climate Scenarios of Two GCMs*, 28 J. GREAT LAKES RES. 537, 546 (2002), attached as Ex. 9; National Conference of State Legislatures, *Michigan: Assessing the Costs of Climate Change* (Oct. 2008), attached as Ex. 10; Matthias Ruth, *Economic Impacts of Climate Change on Michigan, A Review and Assessment Conducted by the Center for Integrated Environmental Research, University of Maryland* (July 2008), attached as Ex. 11; George W. Kling, et al., *Findings From Confronting Climate Change in the Great Lakes Region: Impacts on Michigan Communities and Ecosystems* (April 2003), attached as Ex. 12.

- Increased heavy rainstorms and precipitation, yet a drier climate due to increased evaporation from the heat;

- A doubling or tripling of days in which the temperature exceeds 90 degrees in the Detroit area, and a five- to ten-fold increase in the number of days in which the temperature exceeds 97 degrees;

- A 1.5 to 8 foot decline in water levels in the Great Lakes and declines in the levels of inland lakes;

- Substantial disruption to agriculture from increased heavy rainstorms, a drier climate, increased heat, and the spread of agricultural pests;

- Disruption of the shipping industry, including the need for costly dredging, as a result of declining Great Lakes water levels; and

- Significant drain on public sector budgets, as infrastructure such as sewers and waste-water treatment plants will have to be upgraded to handle heavy precipitation events, and other areas will have to take steps to deal with droughts

The Proposed Coal Plant's greenhouse gas emissions would contribute to and exacerbate climate change and the harmful environmental impacts of climate change.

3. The Proposed Coal Plant would emit harmful amounts of hazardous air pollutants.

The Draft Permit would authorize the Holland plant to emit tons of hazardous air pollutants every year, including mercury, hydrogen fluorides, and hydrogen chlorides. PPD at 9, 35. HAPs have been identified as hazardous because the U.S. Congress and U.S. EPA have determined that they pose a threat of adverse human health or environmental effects through ambient concentrations, bioaccumulation, deposition, or other vectors of exposure. 42 U.S.C. § 7412(b)(2). For example, mercury is a highly toxic and persistent pollutant that deposits into rivers, lakes, and streams, and then bioaccumulates in the food chain. U.S. EPA, *Regulatory Finding on the Emission of Hazardous Air Pollutants From Electric Utility Steam Generating Units*, 65 Fed. Reg. 79,825, 79,828 (Dec. 20, 2000). Fetuses or young children that are exposed

to elevated mercury levels may experience developmental disabilities, including cerebral palsy, reduced neurological test scores, and delays and deficits in learning abilities. *Id*. at 78,929. Other HAPs emitted by coal-fired power plants—such as arsenic, cadmium, chromium, nickel, dioxins, hydrogen chloride, hydrogen fluoride, and radionuclides—are carcinogens or likely carcinogens, and may have other health effects. *Id.* at 79,827. Hazardous air pollutant emissions from the Proposed Coal Plant would contribute to these impacts.

4. The Proposed Coal Plant would have many other serious environmental impacts that must be considered.

In addition to the significant public health and environmental impacts of its air pollution emissions, approval of the plant would also lead to a number of other significant adverse impacts. For example, the Proposed Coal Plant would require the mining of significant amounts of coal every year, which leads to habitat destruction, water quality degradation, and the release of greenhouse gases. A recent study by the New York State Energy Research and Development Authority of the impacts of various power generation sources on wildlife found that coal "is by far the largest contributor to risks to wildlife" in part because of the "unique risks during the resource extraction stage."[6]

In order to operate the plant, Holland will most likely have to use large amounts of water, which can threaten water quality and lead to the impingement of fish and other aquatic species. The plant would also discharge heated and pollutant laden waste water and require the disposal and long term storage of coal combustion waste, fly ash, and scrubber sludge, which contain numerous toxic and hazardous pollutants that can threaten the quality of groundwater and nearby rivers, lakes, and streams. Such waste storage poses an important threat here, given

[6] New York State Energy Research and Development Authority, Comparison of Reported Effects and Risks to Vertebrate Wildlife From Six Electricity Generation Types in the New York/New England Region, Report No. 09-02 (March 2009), at S-3, attached as Ex. 13.

that coal combustion waste has significant human health impacts, including increased risks of cancer and damage to the liver, kidneys, lungs, and other organs, and poses a threat to wildlife and ecosystems.[7] This is especially of concern with regards to the Proposed Coal Plant, given its proximity to Lake Michigan.

C. The Citizen Groups' Interests Are Not Adequately Represented.

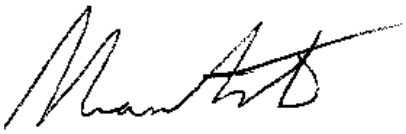
While not a necessary showing in light of the "any person" language in MEPA, it is important to keep in mind that the interests of NRDC and Sierra Club are not adequately represented in this proceeding, as MDEQ is neither sufficiently applying the Clean Air Act nor the requirements of MEPA itself. With regards to the Clean Air Act, MDEQ has, among other things, refused to directly regulate fine particulate matter, one of the most harmful pollutants from the Proposed Coal Plant, as well as greenhouse gases. MEPA, however, requires the agency to go beyond inadequately protective provisions of the Clean Air Act, Michigan's State Implementation Plan, or federal government guidance on these pollutants. M.C.L. 324.1706 (MEPA is "supplementary to existing administrative and regulatory procedures" such as the Clean Air Act); *State Highway Commission v. Vanderkloot*, 392 Mich. 159, 182-83 (1974). MDEQ is specifically required to adopt more stringent standards for approving polluting projects under MEPA than may exist under existing federal regulations. *Her Majesty the Queen in Right of the Province of Ontario v. City of Detroit*, 874 F.2d 332, 344 (6th Cir. 1989). In the present case, MEPA requires MDEQ to protect the public health, welfare, and the environment where the Clean Air Act fails to provide, or has been interpreted in ways that fail to provide, adequate protections. MDEQ apparently does not intend to do so and, therefore, intervention is appropriate.

[7] Environmental Integrity Project and Earthjustice, Coming Clean: What the EPA Knows About the Dangers of Coal Ash (May 2009), attached as Ex. 14.

III. CONCLUSION

For the reasons stated above, NRDC and Sierra Club request intervention in this proceeding and that this petition be placed in the administrative record as an official allegation under MEPA that the Proposed Coal Plant will pollute, impair, or destroy the environment.

Respectfully submitted,



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