# COMMENTS ON DRAFT OHIO AIR POLLUTION RULE AMENDMENTS TO TERMINATE AIR DISCHARGE PERMIT TO INSTALL REQUIREMENTS FOR TOXICANT DISCHARGERS THROUGH A REVISED EMISSION THRESHOLD EXEMPTION AND SIX DIFFERENT NEW PERMIT BY RULE EXEMPTIONS

Concerning Amendments to OAC 3745-31-03

#### Submitted to:

# Ohio Environmental Protection Agency Division of Air Pollution Control &

U.S. Environmental Protection Agency, Region V
Air and Radiation Division
Permits and Grants Section

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#### 1 Introduction

These are the comments of Buckeye Environmental Network and additional organizations concerning proposed administrative rules offered by Ohio Environmental Protection Agency (Ohio EPA) to terminate current requirements for getting permits to install for new and modified toxic air pollution sources meeting a new emissions-based threshold exemption or sources in six newly designated discharge source categories.

The Buckeye Environmental Network (BEN) is a non-profit organization with a citizen volunteer board of directors. BEN provides information, technical and organizing assistance statewide to disadvantaged communities on the effects of toxic and hazardous materials on communities, public health and environment. BEN has been doing this kind of work in our state for the last ten years. BEN is the convener and coordinator of this effort to provide comments to Ohio EPA in this draft rules amendment proceeding.

This statement is also supported by additional groups shown on the second cover page of this document.

Commentors are requesting this document be made part of the public comment record concerning these draft rules on exemptions from Ohio permit to install and permit to operate requirements for new and modified sources.

Both Buckeye Environmental Network and the named organizations insist that both the draft rules and the process by which the draft was developed are both grievously flawed from both a substance and process standpoint.

Environmental groups were never informed that this level of deregulation was contemplated as part of a so-called agency permit "efficiency" evaluation. Major features of the draft rule amendments, such as the so-called "one ton" list are fundamentally deceptive and misleading. Only an extremely close and detailed reading of the draft rules indicates that the effectiveness of the "one ton" toxicant list is modified by exceptions that "swallow the whole" and eviscerate any protectiveness that is otherwise intimated by the misleading name of this list of chemical toxicants.

Ohio EPA's utter failure to articulate the toxicological, risk assessment, risk management and air quality modeling basis of the draft rule has produced a non-transparent result which has significantly degraded the ability of the public to understand the proposed policy and to effectively articulate potential revisions.

The proposed permit exemption rules will seriously disenfranchise and/or terminate completely the ability of the public to exercise appropriate neighborhood and community participatory supervision over the siting and expansion of certain local air

pollution sources, including those not otherwise federally regulated as a source category or those in the six new permit by rule categories.

For these reasons and those cited below, Ohio EPA should withdraw this proposal until a more carefully defined approach can be crafted in draft form for first viewing.

Ohio EPA Should Not Establish an Air Permit to Install Exemption Process for Toxic Air Contaminants Whose Risk Management Objective is Solely to Show Conformance with the Agency's Present Primitive, Grossly Deficient, Non-Rule-based Process for Evaluation of Health Effects from Ambient Airborne Toxicant Exposures

Ohio EPA presently does not have any state administrative rules establishing clear risk assessment requirements and enforceable risk management policy goals for toxic air pollutants that are not federally regulated. The only rule-based risk management techniques available to Ohio are the Ohio BAT requirement, its minor source permit to install program and indirect controls on common criteria pollutants.

The agency has a non-rule policy for establishing maximum ground level concentrations of toxic pollutants based, in general, on ambient concentration limits that are 1/42th of Threshold Limit Values (TLVs) published by the American Conference of Governmental Industrial Hygienists. However this policy only addresses inhalation toxicity, only addresses compounds on the TLV list and does not properly address risk from airborne carcinogens. In addition, this primitive Ohio EPA policy does not address risk assessment associated with multipathway, non-inhalation exposures or ecological risk assessment.

Commentors assert that Ohio EPA's approach to the emission threshold permit to install exemption is a back door approach to accommodating regulatory relaxation to fit the lax requirements of this primitive air toxics risk assessment/risk management policy. This policy is badly in need of modernization and establishment in a new rulemaking.

Instead of institutionalizing deregulation of airborne toxicants through air permitting exemptions, Ohio EPA should first modernize its risk assessment procedures and risk management processes and targets for public health and environmental protection. Ohio EPA should first establish protective targets for maximum predicted risk from both inhalation and multipathway exposures and specific procedures for carcinogenic and non-carcinogenic risk assessment.

It is only within the context of a revised and strengthened risk assessment and risk management policy that any emissions-based and/or source category-based exemptions from air permitting requirements should be considered. .

### Ohio EPA's Proposal in Draft Rules for an Emissions-Based Threshold for Exemptions from the Ohio Permit to Install/Permit to Operate Requirement

Ohio EPA's proposal for an emissions threshold-based process claims:

"This rule is designed to exempt small, insignificant air pollution sources from the need to obtain a permit-to-install if the sources meet certain qualifying criteria."

"In order to quality for the exemption, the air pollution project or individual sources must meet various tests. These tests are designed to make sure that only small, insignificant sources quality for the exemption...."

Commentors deny Ohio EPA's draft rule demonstrates any such achievement. No information presently exists on the record showing that such exempted facilities will not cause unreasonable human health and/or ecological risks.

The thrust of the emission threshold-based proposal is to excuse toxic emission sources <u>not</u> subject to federal New Source Performance Standards and Maximum Achievable Control Technology requirements from the Ohio Permit to Install requirements as long as certain other emission thresholds are met for listed toxic chemical pollutants and common criteria pollutant emissions.

It will be up to the dischargers in their sole discretion to characterize their emissions of both common and toxic pollutants to see if they meet any applicable emission thresholds. The dischargers will make these determinations without any oversight by Ohio EPA, without making a public report of claimed emissions, without an annual sworn certification of compliance with the rules and without any public participation at all.

<sup>&</sup>lt;sup>1</sup> Ohio EPA rule package "Rule Synopsis," p. 1

The draft rule contains the following lists of airborne chemical toxicants:

List	List Basis	Number of Pollutants on List
Great Lakes Binational Toxics Strategy Pollutants and IRIS Category A and B1 Carcinogens	Derived from other lists	14 chemical pollutants
The "1 ton" Threshold List	Unable to evaluate the basis of this list because OEPA has not coherently articulated its basis	About 416 chemical pollutants
The "10 ton/2 ton" Threshold List	Unable to evaluate the basis of this list because OEPA has not coherently articulated its basis; although these pollutants are deemed to be subject to stack dispersion and setback requirements because of their toxicity	71 pollutants

There is no clarity on how each of these lists were developed and justifications for the decisions made.

The consequence of the form and contexts of these lists, aspects of some of the chemicals on and off of the lists and other parts of the emission threshold-based draft rule language are discussed below.

# 3.1 The Basis for Annual Threshold Emission Criteria Shown for Great Lakes Toxicants Abdicates Sound Toxicology Approaches and Evades Ohio's Responsibility to Protect the Great Lakes Under the Great Lakes Air Permitting Agreement

Ohio EPA has admitted that the annual emission thresholds shown in the table for Great Lakes toxicants were determined by using its stock physical dispersion regime for a good engineering stack height and setback from a fenceline to model a one in a million inhalation-only risk level-equivalent annual ambient toxicant concentration<sup>2</sup> with a back calculation to the emission source strength to come up with the draft rule Great Lakes and EPA carcinogen toxicant threshold.

By definition, the Great Lakes Binational Strategy toxicants are those whose environmental fate and transport and subsequent toxic effects are featured by air to water and air to land to water media deposition/transfer and subsequent contamination of aquatic species. It is contrary to legitimate toxicology analysis to pretend that such a

 $<sup>^{2}\,</sup>$  October 12, 2004 telephone conference with Paul Koval.

Great Lakes regime of environmental fate and transport and production of excessive human health and ecological risk can be represented for regulatory purposes by an exercise in the prediction of inhalation-only risk and air-only exposure pathways.

As a result Ohio EPA's emission thresholds thus do not have a basis in the entire reason for the designation of these Binational Great Lakes Toxicants. Consequently, the permitting thresholds provide for unrealistic or absurd results. For example, Ohio EPA has proposed 260 lbs/year of mercury, 87 lbs/year of polychlorinated biphenyls and 0.03 lbs/year each for polychlorinated dibenzodioxins and furans as appropriate emission thresholds under its proposal. Adoption of these high thresholds for requiring an air permit to install would constitute an abdication of both the Great Lakes Water Quality Agreement with Canada (or its annexes) and the Great Lakes Toxic Substance Control Agreement by the Great Lakes Governors.

The Ohio EPA action would specifically abrogate an agreement entered by the Great Lakes environmental administrators known as the "Great Lakes States Air Permitting Agreement." This agreement, which was signed by Ohio, provides, in part:

"For the pollutants listed on Table A [which includes mercury], each permitting authority shall utilize all applicable air pollution regulations to insure that BACT is being installed on any new or modified source which is subject to the state's New Source Review Program, an on existing sources, considering a diminimus cutoff, which are required to obtain an operating permit. States which do not have the current legal authority to assure that BACT is installed on new and existing sources of the pollutants in Table A shall pursue through their appropriate regulatory process authority to implement the governors' and environmental administrators' agreements."

"For purposes of this agreement, BACT means emission limits, operating stipulations, and/or technology requirements based on the maximum degree of reduction which each Great Lakes state determinates is achievable through application of processes or available methods, systems, and techniques for the control of each of the pollutants listed in Table A, taking into account energy, environmental, and economic impacts, and other costs."

"Emission limits, operating stipulations, and/or technology requirements shall be established as permit conditions for each of the pollutants listed in Table A. Whenever warranted, sources will also be required to conduct an emission

<sup>&</sup>lt;sup>3</sup> A copy of this agreement is available at <a href="http://www.sagady.com/stuff/GLStateAirPermittingAgreement.pdf">http://www.sagady.com/stuff/GLStateAirPermittingAgreement.pdf</a>

verification test to assure compliance with the allowed emission limits during the initial verification test as well as during periodic verification tests."

Ohio will be out of compliance with this agreement by setting such high thresholds for air permitting and by filing to have standards and procedures addressing both risk management and risk assessment for chemical pollutants that are persistent and/or bioaccumulative. Evaluation of such chemical emissions require multipathway risk assessment and multi-media/cross media transfer risk management considerations. Ohio EPA has not carried out such analysis as a required part of its air permitting programs. The draft exemptions from permitting requirements merely exacerbates such agency failures.

Ohio EPA's approach to poly chlorinated dibenzo dioxins/furans does not recognize the hierarchy of toxicity displayed by various PCDD/PCDF congeners through a system of 2,3,7,8-tetrachlorodibenzo(p)dioxin toxic equivalents. A similar toxic equivalent approach is merited for the congener family of poly chlorinated biphenyls.

# 3.2 Ohio EPA Draft Rule Fails to Protect Public Health by Ignoring Many Substances that are Known and/or Suspected Cancer Causing Agents and by Failing to Incorporate Chemical Carcinogen Designations from Legitimate Institutions

One example in the rule of an antiquated approach that represents a non-precautionary and unprotective approach to health and environmental protection from airborne toxicants is Ohio EPA's failure to consider a greater range of categories of carcinogens [cancer causing/promoting agents] for lower threshold and required permit determinations. Ohio EPA has only considered EPA IRIS listed carcinogens under category A (proven human) and B1 (human probable). This ignores potential carcinogenic compounds shown by animal evidence with no/inadequate evidence in humans (EPA category B2) and possible human carcinogens (EPA category C). This approach also ignores determinations of chemical carcinogenicity made by other legitimate agencies, such as the International Research on Cancer (IARC).

The following table illustrates some chemical contaminants that Ohio EPA ignores in risk management/risk assessments inherent in the draft rule exemptions from permitting requirements that are considered by IARC as proven/possible cancer causing agents:

IARC Chemical Carcinogens Not Adequately Considered by Ohio EPA in Risk Management/Risk Assessment Underlying Considerations in the Draft Permit Exemption Decisionmaking			
IARC Group 1: Proven Human Carcinogens			
aflatoxins	4-aminobiphenyl	asbestos	
azathiprine	N,N-Bis(2-chloroethyl)-2- naphthylamine	bis(chloromethyl)ether	
1,4-Butanediol dimethansulfonate	chlorambucil	1-(2-Chloroethyl)-3-(4-methylcyclo hexyl)-1-nitrosourea	
Cyclophosphamide	Diethylstilboestrol	Ethylene oxide	
Formaldehyde	Gallium arsenide	Mustard gas	
2-Naphthylamine	Nickel compounds (other than nickel subsulfide)	Plutonium-239	
Several other radionuclides	crystalline silica	Talc containing asbestiform fibres	
Coal-tar pitches & coal tars	Mineral oils	Wood dust	
IARC Group 2A: Probably carcinog	enic to humans		
acrylamide	benz(a)anthracene	bischloroethyl nitrosourea	
1,3-Butadiene	Captafol	chloramphenicol	
a-chlorinated toluenes	1-(2-Chloroethyl)-3-cyclohexyl-1-n itrosourea	4-Chloro-ortho-toluidine	
Chlorozotocin	Dibenz[a,h]anthracene	Diethyl sulfate	
Dimethylcarbamoyl chloride	1,2-Dimethylhydrazine	Dimethyl sulfate	
Epichlorohydrin	Ethylene dibromide	N-Ethyl-N-nitrosourea	
Glycidol	Indium phosphide	IQ (2-Amino-3-methylimidazo[4,5-f]q uinoline)	
Lead compounds, inorganic	5-Methoxypsoralen	4,4'-Methylene bis(2-chloroaniline)	
Methyl methanesulfonate	N-Methyl-N'-nitro-N-nitrosoguanid ine	N-Methyl-N-nitrosourea	
Nitrogen mustard	N-Nitrosodiethylamine	N-Nitrosodimethylamine	
Phenacetin	Procarbazine hydrochloride	Styrene-7,8-oxide	
Tetrachloroethylene	ortho-Toluidine	Trichloroethylene	
1,2,3-Trichloropropane	Tris(2,3-dibromopropyl) phosphate	Vinyl bromide	
Vinyl fluoride	Creosotes	Diesel engine exhaust	
IARC Group 2B: Possibly carcinogenic to humans			
Several chemical contaminants; list	available at: http://www-cie.iarc.fr/mon	oeval/crthgr02b.html	

# 3.3 The Listing Provisions of the Draft Rules would Permanently Deregulate Airborne Chemical Waste Dischargers from Permitting Requirements for All Chemical Compounds that Do Not Appear on Lists in the Draft Rule if the Common Criteria Pollutant Emission Thresholds are Met

Under the draft rules published by Ohio EPA, a toxic substance that does not appear on any of the 3 lists in the table above and is not otherwise regulated under federal jurisdiction will remain indefinitely unregulated. This static approach to chemical toxicology ignores advancing and increasing knowledge about potential health effects of particular compounds and toxic emissions and the need for state government to based decisions on the best data available..

While newly unregulated airborne toxicants will nevertheless be subject to some requirements under volatile organic compound and non-toxic particulate matter regulation, such regulation is inherently incapable of recognizing any specific chemical toxicant properties that might justify increased regulatory stringency, particularly from developing information as knowledge increases.

Federal air toxicant regulations were never intended to address all health risks from all airborne toxicants. Other states have recognized that they must make principled decisions to regulate airborne toxicants in state air permitting programs. Yet, Ohio EPA's approach would abdicate its mission of protecting Ohio citizens and their environment when specific airborne chemicals are not regulated by any current federal regulation.

The following are examples of substances with known dangerous toxicant or problematic properties that Ohio is choosing to deregulate. These substances do not appear on any of the draft listings in the proposed rule [some of these are regulated as toxicants in other states]:

A Very Small Subset of Substances with Known Dangerous Properties Either for Human Health, Communities or Environment to be Permanently Deregulated as Airborne Toxicants by Ohio EPA for purposes of the State's Air Permitting Program			
welding fumes	2,4,5-trichlorophenoxyacetic acid	teflon decomposition products	
difluorodibromomethane	diesel exhaust particulate	synthetic vitreous fibers & refractory ceramic fibers	
chlorpyrifos & several other registered pesticides	trifluorobromomethane	gasoline vapor	
dichlorodifluoromethane	rosin core solder thermal decomposition products	dichlorotetrafluoroethane	
brominated diphenyl ethers	glutaraldehyde	ethyl mercaptan	
phenyl mercaptan	hydrogen bromide and hydrogen iodine	formic acid	
portland cement dust	acetic anhydride	radium & thorium compounds	
trimethylbenzene	nickel compounds other than nickel carbonyl and nickel subsulfide	aluminum chloride	
anthracene	antimony trichloride	asbestos fibers	
benzaldehyde	boron trifluoride	butyraldehyde	
butyric acid	chlorinated paraffins	dimethyl disulfide	
dimethyl sulfide	urethane	furfural	
furan	asphalt fume	paraffin wax fume	
phenanthrene	terpentine and pinenes	most poly aromatic hydrocarbons other than benzo(a)pyrene	
sodium hypochlorite	most speciated glycol ethers	perfluorooctanoic acid	
chloramine	tetrahydrofuran	most IARC carcinogens	

# 3.4 As Written, the Draft Rules Authorize Emissions at Unpermited, Unreviewed Emission Sources of up to Ten Tons per Year for the Vast Majority of All of the Listed Toxic Air Contaminants Compounds that are Volatile Organic Compounds or Solid Phase Particulate Without Any Regard for Downwind Ambient Exposures that would be Caused by Such Emissions

As written, the only restraint on unpermited, unreviewed emission sources for the vast majority of airborne toxicants under the rule would be a ceiling of 10 tons per year for the total of all organic compounds (including designated volatile organic compounds) and 10 tons per year for the total of all solid phase discharge material as particulate matter. For most such compounds there would be no rules on stack heights and set backs from property lines or other conditions of air pollution dispersion. A careful reading of the rule indicates that the "one ton" list provides no such one ton limitation on emissions. The actual limit for unpermitted sources is, in fact, ten tons per year of emissions

from unpermitted sources that have no restrictions on the dispersion conditions for such emissions (i.e. stack heights and fence line setbacks).

The only exception on dispersion requirements is the list of 14 Great Lake toxicants and a few proven human carcinogens and another list of 71 other organic compounds which would have requirements for stack heights and setbacks.

Nothing in the draft rulemaking support materials provided to the public articulates the health protection basis and/or risk management basis of this draft policy. Nothing in the draft rule supporting materials articulates a design basis for expected dispersion relationships between the allowed dispersion regime (or lack thereof) and the fence-line protective basis for the rule. As a result, it is impossible to offer knowledgeable public comment on the draft proposal.

Given the abject failure by Ohio EPA to articulate the basis for weakening permit requirements for airborne toxicants, Ohio EPA should withdraw this proposal and not proceed to final proposal stage with anything at all like the present draft proposal.

# 3.5 Ohio EPA Has Failed to Recognize Short Term Toxicity of Many Chemical Contaminants by Failing to Provide Short Term Limits on Emission Sources Eligible for Air Permitting Exemptions

No aspect of the draft rule addresses any transient, short term emission phenomena for any of the listed toxicants. Some of these toxicants will have irritant and sensitizing properties that are significant and represent the primary public health concerns for short term exposure. The draft rule only address annual emissions and no restrictions at all are provided for 24 hour or 1 hour averaging times for maximum emissions and the implied exposures from such short term events. Treating all airborne toxicants in Ohio as though they do not have short term, acute toxic effects abdicates legitimate public health concerns about the toxicology of these chemical emissions.

3.6 Even Though Certain Pollutants Are Listed in the So-Called "One Ton"
Table, the Text of the Underlying Draft Rule Authorizes Unlimited Gaseous
Emissions for Certain Compounds at Sources Which Could Escape All Air
Pollution Permitting Requirements When Not Otherwise Limited by
Common Pollutant Limits

Because the draft rule has an exception tied to the "one ton" table that swallows most of the situations evaluated and because the only real restraint on Unpermited sources is the 10 ton criteria pollutant limits on organic compounds and particulate matter, the

rule authorizes unlimited emissions of certain compounds present on the "one ton" list and still allows sources to escape air permitting requirements.

The draft rule authorizes unpermitted emission sources to release unlimited amounts of chemical toxicants that are gaseous pollutants that are neither organic compounds nor particulate matter.

Under OAC 3745-31-01(III):

""organic compounds" means any chemical compound containing carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, ammonium carbonate, non landfill gas methane and ethane."

Under OAC 3745-17-01(B)(12):

"Particulate matter" means any material, except water in uncombined form, that is or has been airborne, and exists as a liquid or a solid at standard conditions."

This means that the following materials could not be construed as either organic compounds or particulate matter and could be released in unlimited amounts by Unpermited, unreviewed emission sources under the relaxation sought by Ohio EPA and industry:

Chemical Toxicants on the "One Ton" List that Could be Released in Unlimited Amounts by Unpermited, Unreviewed Emission Sources Under the Draft Rule			
hydrogen sulfide	hydrogen chloride	chlorine	
chlorine dioxide	phosphine	osmium tetroxide (sublimated gases)	
nitric acid fume	hydrogen bromide fume	hydrogen peroxide	
hydrogen fluoride	molecular fluorine	arsine	
ammonia	hydrazine	titanium tetrachloride fume	
selenium hexafluoride	sulfur hexafluoride		

Given that the draft rule allows unrestrained, unpermited and unlimited release of these compounds, there is no possibility that any aspect of the rule represents any kind of a risk management approach at all for these substances. Ohio EPA's draft rule utterly fails from a health and environmental protection standpoint. This is a particular onerous failure given that many of these gases are acutely toxic and cannot be risk-managed solely with long term exposure limitations.

### 4 Ohio EPA's Proposal to Establish Six New Permit by Rule with Exemptions from the Ohio Permit to Install/Permit to Operate Requirement

### 4.1 The New Permit by Rule Exemption for Natural Gas Boilers Should be Abandoned

Ohio EPA proposes a permit by rule exemption for natural gas boilers controlled with low NOX burners that have heat input ratings from 10 to 100 million BTU per hour. These are relatively large units and will frequently be found in aggregate with other emission units at large sources. Ozone and PM 2.5 control strategies may ultimately call for increased emission controls for such units that exceed what Ohio EPA has provided in its draft rules.

New source review of aggregated sources has the potential to trigger additional control technology evaluation and control requirements for these boilers, notably in nonattainment areas. The draft proposal cannot be allowed to cause such units to escape such control technology scrutiny or their effects in consuming PSD increment..

There is no requirement that the particulate emissions limitation for boilers and heaters reflect both filterable and condensible particulate matter.

Process heaters that are integral to a drying operation should be disallowed for coverage because of the expected problem of thermal decomposition of the dried material or flash-off of dried surface and the additional emission inherent in such a situation.

## 4.2 Ohio EPA Has Not Created/Published a Record Sufficiently Detailed to Justify its Auto Body and Printing Source Category Exemptions from Air Permitting Requirements

Ohio EPA has not shown in its draft rules publication and supporting documents why allowing sources of emissions in the range of 10 tons without permitting will be sufficiently protective for chemical compounds typically in use in these industries.

For example, there is no attempt in the rule to restrict operations of the facilities subject to permit by rule to commercial/industrial-only zoning areas or to otherwise provide that adjacent properties could not be residentially zoned.

In particular, it strains credulity to assert that an auto body refinishing operation with emissions of nearly 6 tons per year of a single HAP and up to 11.7 tons of all HAPs will be sufficiently controlled with a dispersion regime involving a 16 foot stack and a sixty foot stack setback from what could be residential neighborhoods. Instead of requiring good engineering practice stack heights, this rule institutionalizes the worst

features of bad dispersion practice in this industry with its emission discharges. Note also that the rule doesn't provide for a compliance method and recordkeeping for ensuring that HAP emissions conform to the rule for the auto body sector.

Similarly, putting no minimum setback/stack conditions on printing facilities discharging in the 5-12.5 ton per year range for hazardous air pollutants does not appear to be justified by any valid consideration of risk assessment and risk management.

Ohio EPA must be compelled to explain in detail why such high emissions that could potentially be adjacent to residential areas should, in fact, be considered as fully protective of public health for a range of chemical compounds commonly used in that industry and for both potential acute and chronic effects of such expected ambient exposures. There has also been no showing that odor problems would be prevented for typical chemical emissions discharged by sources in this particular sector.

- Administrative Process and Federal Clean Act Issues Inherent in Ohio EPA's Draft Rules Package Terminating Certain Emission Sources from Applicability for Ohio Permit to Install and Permit to Operate Requirements
- 5.1 It is Not Correct for Ohio EPA to Insist that the Process-Review-Approval Performance Aspects of the Ohio Best Available Technology Requirement Under an Air Permitting System Will Continue to be Applied to Self-Regulated Facilities Operating Under the Envisioned Exemptions from Permit to Install Requirements

Ohio EPA requires that sources subject to the Ohio new source review use "best available technology" (BAT) which is defined as:

"(P) "Best available technology" means any combination of work practices, raw material specifications, throughput limitations, source design characteristics, an evaluation of the annualized cost per ton of air pollutant removed, and air pollution control devices that have been previously demonstrated to the director of environmental protection to operate satisfactorily in this state or other states with similar air quality on substantially similar air pollution sources." OAC 3745-31-01(P).

A decision on Ohio BAT as defined is an explicit part of the required decisionmaking criteria by the Director of Ohio EPA under 3745-31-05(A)(3).

Ohio EPA has published an interpretive guide #42 as to the meaning of Ohio BAT which includes consideration of environment factors, such as air and water quality

impacts, land impacts, aesthetic impacts and the avoidance of "excessive degradation of these environmental areas."

A fundamental feature of BAT decisionmaking is that sources make a technology-based demonstration subject to Ohio EPA review and approval inherent in an issued Permit to Install with required emission limitations, work practices and reliance on the content of the permit application. It is simply not correct for Ohio EPA to insist that a similar or the same level of BAT air pollution control efficiency and pollution reduction will, in fact, be achieved through source self regulation in the context of an exemption from the permit to install requirement. Under a permit exemption there simply isn't anything close to the same level supervision of source accountability and compliance which would be required under an air permit.

As a result, there is no way to ensure that sources operating under permit exemption are responsible for BAT emission reductions. The proposed new exemptions amount to a significant relaxation of current Ohio EPA air pollution control requirements.

5.2 Elements of the Current Ohio BAT Process Within Ohio Minor Source Permit to Install Review are an Established Element of the Approved Ohio State Implementation Plan Under the Clean Air Act that Cannot be Weakened in a Manner that Jeopardizes Attainment and Maintenance of National Ambient Air Quality Standards or Reasonable Further Progress Towards Attainment

Ohio EPA has already heard previously from U.S. EPA Region 5 that the Best Available Technology requirement cannot be summarily ended or rendered non-federally enforceable because the Ohio BAT requirement is part of the approved State Implementation Plan under the Clean Air Act.

Similarly, Ohio EPA cannot now simply eviscerate Ohio BAT requirements as applied to an entire subset of sources which it now proposes to excuse from such BAT requirements through new emission threshold exceptions to the permit to install requirement.

First, Ohio EPA cannot demonstrate in a SIP amendment proceeding that the existing Ohio BAT requirement will be maintained by sources presently or prospectively subject to minor source permit to install requirements that would now be exempt. Ohio EPA cannot make such a demonstration because Ohio BAT requirements would no longer be federally enforceable as a practical matter. All state implementation plan requirements must be federally enforceable through emission limitations and conditions limiting the potential to emit in a written instrument, such as a minor source permit or

general permit. This written instrument would no longer exist under the draft emissions-based permit exemptions.

Since Ohio EPA cannot make a credible and compliant demonstration as a SIP revision showing that control requirements for minor sources are not jeopardized or relaxed by the draft permit exemptions, it follows then that Ohio EPA will not be in a position to demonstrate that such a relaxation will not interfere with attainment and maintenance of National Ambient Air Quality Standards and Reasonable Further Progress Requirements. Moreover, such a new exemption will also jeopardize compliance with Reasonably Available Control Technology requirements applicable in nonattainment areas.

Ohio EPA cannot at once argue that emissions reductions from BAT are inconsequential and then argue that BAT is necessary for proper environmental protection. No quantitative analysis has been provided as to the amount of increased emissions that will result from enactment of these new exemptions. Such analysis must be required by U.S. EPA before any such exemption scheme could possibly be approvable as an Ohio Statement Implementation Plan revision.

Existing minor source emission units with existing permits and emission limitation less than 10 tons per year of organic pollutants seeking coverage under the new exemptions would essentially be permitted to increase allowable emissions to just under 10 tons of VOC organics per year. No evaluation of this emission relaxation was provided in any analysis with the draft rules.

# 5.3 Ohio EPA's Draft Rules Do Not Contain Provisions to Prevent the Envisioned Permit to Install Exemptions from Interfering in Major Stationary Source/Major Modification Permitting

Both the emission threshold based permit exemption provision and the permit by rule exemption for 10 to 100 million BTU/hr natural gas fired boilers have enormous potential to interfere with pre-existing new source review procedures for major stationary sources and major modifications in Ohio.

The draft proposal contains a "Comment" on this topic, but the comment itself is an oxymoron:

"Comment: The following exemptions relieve permittees from the obligation to apply for and obtain a permit to install. They do not, however, relieve the permittee from the requirement of including the emissions associated with the exempt sources into any major new source review permitting action."

First, the comment is not rule language that prevents the objectionable concept it discusses. Commentors could not find any such language in the draft rule which achieves the prohibition discussed in the "comment."

Second, any rule that acts to exempt an emission unit from aggregation in a larger project from the requirements for major stationary source/major modification new source review permitting, control technology review and air quality impact assessment cannot be considered as part of a federally approvable state implementation plan since it undermines federal Clean Air Act requirements for new source review. The Ohio permit exemptions cannot lawfully serve as a vehicle for any kind of dis-aggregation and/or separation of what otherwise would be a major stationary source and/or major modification into parts which NSR applies and parts to which NSR doesn't apply. Such a practice violates longstanding federal court rulings concerning the definition of a major source and major modifications. Any attempt to somehow separate out large, exempt emission units that are actually a part of a new major source and/or major modification is an unlawful attempt to evade the required control technology and air quality impact reviews as well as the requirement for the major source/major modification NSR permit.

### 5.4 The Draft Rule Could Impermissibly Authorize an Exemption from Permitting Requirements for Some Major Hazardous Air Pollutant Sources

The Clean Air Act defines a major source of hazardous air pollutants to include any source that discharges 10 tons of any single HAP or 25 tons discharging any combination of HAPs to be a major source. In addition, the Administrator may establish a lesser quantity to be a major source for a particular substance on the basis of its persistence, potential for bioaccumulation, other characteristics of the air pollutant or other relevant factors.

Under provisions of the draft rule, an emission source having a stack emission of less than but not equal to 10 tons and a fugitive emission of less than but not equal to 2 tons of compounds listed in the "10/2 Compound cut-off Table" is exempted from permit to install requirements [with other non-emission threshold considerations being met]. This draft provision is highly problematic because it, together with other aspects of the emission threshold table, would potentially exempt major sources of hazardous air pollutants as defined by the Clean Air Act in source categories for which Maximum Achievable Control Technology standards have not yet been promulgated. Under 42 USC Sec. 7412(g)(2), case by case MACT determinations are required for major HAP sources and/or modifications for which MACT standards have not yet been promulgated.

The permanent exemption language in the proposed rule does not clearly embrace case by case MACT determinations as pre-existing "standards," yet the draft rule clearly

provides for procedures by which major HAP sources could navigate toward an exemption from permit to install requirements.

The draft rule language allows major HAP sources and major modification HAP sources to gain an exemption from permit to install requirements under the following emission scenarios.

Review of the "threshold exemption table" indicates that applicable limits in that table do not reach all of the CAA Hazardous Air Pollutant compounds. The following are listed CAA HAPs that are not organic compounds limited by the 10 ton "organic compound" threshold as that term is presently defined in Ohio EPA regulations:

CAA Hazardous Air Pollutants that are Not Organic Compounds and not listed on the Draft Great Lakes Toxicants/Carcinogen Table			
asbestos	chlorine	hydrochloric acid	
hydrogen fluoride	phosphine	phosphorus	
titanium tetrachloride	antimony compounds*	cobalt compounds*	
lead compounds**	manganese compounds*	fine mineral fibers	
nickel compounds other than nickel subsulfide	radionuclides	selenium compounds*	
* for purposes of this table exclude organo-metalics compounds  ** the threshold exemption table includes only elemental lead and not lead compounds			

The gaseous compounds in the table are not addressed at all by the threshold exemption table. The metals are addressed by the particulate matter limitation of 10 tons. Under provisions of the draft rule as proposed, a source emitting a combination of up to 10 tons of a combination of organic compounds that are HAPs, up to 10 tons of a solid phase compound such as metal HAPs and well over 5 tons of a gaseous HAP which is not an organic compound would be a major HAP source which would be exempted from permitting requirements under the draft rule if there were no pre-existing, promulgated MACT standard.

Similarly, a source that emitted over 10 tons of any single non-organic gaseous HAP in the table above would be a major source exempted from permitting requirements where no MACT standard existed.

# 5.5 The Staging of Ohio EPA's Efforts for Emission Threshold Based Permit Exemptions and Permit by Rule Categories Improperly Prejudices Future State Implementation Planning for Ozone and PM 2.5 Controls in Near Term Nonattainment Areas

Ohio faces significantly air pollution control planning obligations to address widespread nonattainment designations for ozone and PM 2.5 throughout the state. The state must come up with a mix of control measures to address needed emission reductions for emissions to control these ambient air quality problems.

Although Ohio has obligations to plan for nonattainment area emission reductions, the exemptions contemplated by the draft rule prejudge what control requirements might have to be established in these nonattainment areas as part of Reasonably Available Control Technology determinations and other measures need to attain and maintain the National Ambient Air Quality Standards for Ozone and PM 2.5. Given the potential intractable nature and severity of these regional air quality problems, it does not reflect wise judgement on the part of Ohio EPA to now excuse sources from permitting and control requirements now and then later have to reimpose such burdens because they are then needed for the nonattainment area control strategy.

### 5.6 Prospective Synthetic Minor Emission Sources Relying on Conditions to Limit the Potential to Emit to Stay Below 10 Ton/Year Emissions Thresholds Must Not Be Permitted Use of Such Permit to Install Exemptions

A source relying on production rate, throughput and operating rate restrictions to stay below a 10 ton per year limit on emissions must not be permitted to use the emission-based permit to install exception. A source that would be major except for such limitations must have federally enforceable limitations on the potential to emit. Without a permit there can be no federally enforceable limitations; as a result synthetic minor emissions sources must not be allowed any access to the exemptions from PTI requirements in the draft rules.

### 5.7 Ohio EPA Has Not Clearly Indicated that Condensible Particulate Matter, Along with Filterable Particulate, Must be Subject to the Ten Ton Limit

It is unclear in the rules whether the 10 ton particulate and 10 ton PM-10 limitation in the "emissions threshold table" includes the sum of both filterable and condensible particulate matter. Any interpretation of this to include only filterable PM should be rejected.

#### **6** Other Comments

Provisions at section A(1)(l) on storage tanks address the matter of "true vapor pressure" as defined in the Ohio EPA VOC rules for tanks as "equilibrium" vapor pressure and liquid in equilibrium. However, the rules do not consider that some organic liquids may issue from processes in non-equilibrium form as unstable liquids with dissolved gases with greater potential for emissions than would be indicated by the "true vapor pressure" as defined.

Some provisions of the rule contain the very vague paragraph or others similar:

"Sources of the chemical compound that have been reduced as part of the project may be counted as a reduction in the summation if the egress parameters of the new or modified air contaminant sources are similar to or better (e.g. taller stack, higher exhaust gas flow rate, etc.) than the egress parameters of the air contaminant sources with reduced emissions; or"

What this means is subject to highly varying interpretations and the language isn't at all clear as to its impact.

The draft rules at talk about installation of equipment but fail to consider process changes at existing equipment and other modifications of existing facilities as to changes and modification at existing sites. It is unclear whether such modifications are similarly exempted.

There is no public participation required any decisions on existing permit holders who seek to be covered under the non-permitting exemption.

Twelve month periods under the rule are defined as block calendar periods instead of more restrictive rolling 12 month periods.