WISCONSIN
DEPT. OF NATURAL RESOURCES

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor
Scott Hassett, Secretary

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March 2, 2004

Senator Neal Kedzie
State Capitol
P.O. Box 7882
Madison, WI 53707-7882

Re: Diesel component in NR 445

Dear Senator Kedzie:

I am writing in response to your letter of February 18th in support of the changes to NR 445 submitted by the Engine Manufacturers Association (EMA) and the Wisconsin Engine Manufacturers & Distributors Alliance (WEMDA).

Please find attached the response that we sent to Marc Bentley, the Executive Director of these associations. This is the same response that Caroline Garber e-mailed to you on February 20th, for your information.

I believe the changes that were adopted last week by the Natural Resources Board substantially address the changes recommended by Mr. Bentley.

Please let me know if you have additional concerns regarding this issue.

Sincerely,

Allen Shea
Administrator
Division of Air and Waste

Enclosure

REPRESENTING WISCONSIN BUSINESS

Wisconsin Manufacturers & Commerce

Memo

TO: Natural Resources Board
FROM: Jeff Schoepke, Director, Environmental Policy
RE: NR 445
DATE: April 22, 2003

Thank you for the opportunity to speak this afternoon on proposed revisions to NR 445, the state air toxics program.

Wisconsin Manufacturers & Commerce (WMC) is a statewide, non-profit association representing Wisconsin business. WMC has 4,300 members that include both large and small manufacturers, service companies, local chambers of commerce and specialized trade associations. WMC has been engaged in this rulemaking effort for nearly four years and has submitted six sets of comments to date. This testimony is intended to summarize and clarify the points already raised in those communications. Our detailed written comments outline WMC's concerns in more detail, and for the most part, are still applicable on key issues discussed here.

While WMC has significant concerns about the general approach of NR 445, we have been pleased with the process DNR staff have used to date. Staff have been inclusive in their efforts and responsive to industry concerns.

WMC supports several provisions in the proposed rule that will clarify, streamline or otherwise reduce costs associated with this ever-expanding program. Specific provisions that WMC supports include:

- The concept of due diligence in the search and inquiry process, and the accompanying safe harbor provisions.
- Additional criteria added to the rule's listing protocols, allowing, among other things, exclusions for substances adequately regulated by other programs. (Although we believe, as discussed later, the concept of a more refined evaluation must be taken to another, more detailed level.)
- The opportunity provided by the rule to "petition" the listing of a particular substance.
- Language clarifying that sources subject to federal requirements are exempt to the extent the federal standards address NR 445 substances.
- Language providing exemptions for incidental emitters, such as non-industrial operations.
- Provisions adding modeling off-ramps that allow sources to demonstrate compliance based on risk analysis or avoid regulation through "simple" modeling.

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- The addition of lower thresholds based on stack heights, and the DNR's approach to handling terrain concerns on a case-by-case basis.
- Final rule draft proposals which remove wood dust and crystalline silica from the rule's tables.

These changes improve the rule. If these revisions were to move forward on their own, WMC might refer to the effort as "regulatory reform".

However, the rule is still fundamentally flawed. WMC continues to oppose the general approach of NR 445: reliance on third party lists to "dump" chemicals on a list with little consideration of actual risk or occurrence in Wisconsin, as well as the absence of meaningful evaluation of costs and related benefits associated with regulating the listed substances. This listing protocol results in expansive applicability and extraordinary administrative costs for a rule with no quantified environmental benefits.

WMC's general concerns with NR 445 include:

- The continued use of third party chemical lists as the primary source for NR 445, even though one of those lists (ACGIH) specifically advises against use for ambient air quality standards.
- Regulatory thresholds, particularly for carcinogens, that are overly conservative.
- A state toxics program three times as large as the federal program (578 substances in NR 445 vs. 189 in the federal HAPS program) adding a significant additional layer of regulatory burdens.
- An ongoing process of adding chemicals to a state only list that will by its very nature eventually add hundreds of more substances and related burdens on Wisconsin industry.
- Administrative and related paperwork costs that are still significant, despite efforts to reduce these burdens, with no corresponding environmental benefits.

Nearly two years ago WMC approached DNR about Chapter 227 requirements regarding small business impacts and mitigation. DNR shared WMC's interest in limiting administrative burdens, and engaged WMC in this discussion. The result was a cooperative process of reviewing the costs, including WMC's retention of outside consultants to assist in the effort.

The full results of this study were submitted for the record in September, 2002. To the surprise of few, the study shows significant administrative costs associated with the rule. The measure of administrative costs is summarized in the table below:

Rules Version[1]	Administrative costs of First-Year Implementation of NR 445				
	Estimated Average Cost per Facility		Estimated Statewide Costs		
	$	% Increase Over Existing Rules	Number of Facilities	Total	% Increase Over Existing Rules
Existing Rule	**$126,900**	**0 %**	**800**	**$101,520,000**	**0 %**
Extended Rule	**$221,400**	**75 %**	**1,620**	**$358,668,000**	**253 %**
Streamlined Rule	**$204,000**	**61 %**	**1,237**	**$252,348,000**	**149 %**
Rule as Approved for Hearings	**$163,700**	**29 %**	**1,223**	**$200,205,100**	**97 %**

The study protocols are described in the report, and this memo does not discuss them in detail here. The primary author of the study report, Lyman Wible of Kestrel Management Services, LLC, will speak later and take questions on study protocol. However, it is important to note that these costs are administrative only, and do not reflect capital costs of compliance.

Two general observations of the study are clear to those looking at the data even for the first time:

1) The rule presents a significant increase in costs per company, and to all of industry in general, and
2) Streamlining efforts pushed by industry and adopted by DNR have reduced costs substantially over the originally proposed revisions.

[1] The "extended rule" assumes the addition of new substances and thresholds, with implementation under existing provisions. The "streamlined rule" contains streamlining measures presented at the onset of the study. The "rule as approved for hearing" reflects the latest version of the rule now the subject of these comments.

The study estimated that the current draft rule costs $158 million less than a rule using existing framework (i.e., no streamlining measures). However, the study also quantified the concerns of industry that administrative costs of a revised NR 445 remain high – close to $100 million additional in the first year. The study also concludes that listing of substances, and a company's documentation of substances it may or may not have are the biggest cost driver.

WMC's concerns over the $100 million price tag for this rule is two-fold. First, the rule by itself is too costly in light of expected benefits. Second, the additional $100 million burden imposed on manufacturers is not an isolated "cost of doing business," but is in addition to many other regulatory burdens on Wisconsin businesses not imposed in other states.

On the first point, DNR was helpful in determining the regulatory burdens associated with this proposal. While there remains certain disagreement on the expected price tag, DNR and WMC generally agree that a substantial effort will be required to determine whether and to what extent the rule applies. On the other hand, DNR did little to assess what Wisconsin citizens gain by these efforts. For example, flour would now be considered a "toxic," requiring an assessment by bakeries as to whether they emit flour at threshold levels (0.0269 lbs/hr), and if so, whether the levels exceed ambient air concentrations at their fenceline (12 micrograms/m^3). Bakeries must also assess new reporting obligations under NR 438 (inventory reports if 118 lbs/yr.) Since bakeries do not have in-house professionals to make these determinations, they must hire consultants at substantial costs. Yet, DNR did not even attempt to assess whether a "flour threat" exists, or correspondingly, whether mandating these requirements on bakeries produces any meaningful benefit.

On the second point, the $100 million cost for manufacturers is only part of the cost of doing business in Wisconsin. Earlier this year, WMC conducted listening sessions on Wisconsin's regulatory climate and heard some disturbing stories on how the DNR continues to create disincentives for manufacturers to expand or locate in Wisconsin. The common theme throughout the state is that Wisconsin is becoming increasingly uncompetitive when businesses assess their investment options. Delays in obtaining needed air permits top the list of concerns, but the continual expansion of state only rules with little or no environmental benefit are a close second. We have little doubt that the expansive nature of this rule will be an additional impediment to economic development. In fact, we know companies are being advised not to locate in Wisconsin because of the potential regulatory costs associated with this rule.

Simply put, the current process of adding hundreds of substances from third-party lists is the fundamental flaw with NR 445. The Kestrel study confirms that this listing process creates an enormous regulatory burden on Wisconsin industry that will continue to compound as more and more substances are added. The most discouraging aspect of DNR's approach is the fact these burdens will be incurred without any meaningful effort by the department to quantify corresponding environmental benefits.

Every time a particular substance received a heighten level of scrutiny by the department in this rulemaking process (i.e., silica, wood dust, diesel exhaust, asphalt fumes, coal dust, etc.), the DNR concluded that NR 445 simply did not work. In those circumstances DNR determined that these substances should either not be regulated (wood dust, silica, asphalt) or should be regulated in a different manner (coal dust, diesel). This begs the question of what the rule might look like if such an analysis were to be conducted for each of 578 substances. Why should there not be a substance-specific evaluation on each substance, new or existing? How many would stand up to such scrutiny and stay on the tables as proposed?

WMC's position is that the DNR Board should move forward with streamlining measures outlined earlier, lessening the already too high regulatory burdens on Wisconsin's manufacturing sector. Allowing companies to take advantage of the streamlining provisions and cut implementation costs of the rule now will remove at least some disincentives when companies evaluate whether to invest in Wisconsin. Timing is critically important as we expect business opportunities, and related investment decisions, will present themselves when the nation emerges from its current economic doldrums.

On the other hand, now is not the time to add more disincentives to invest in Wisconsin. It is WMC's position that there must be a compelling showing that such Wisconsin-only burdens are necessary to protect public health or the environment. And, as we learned in our evaluation of coal dust and diesel exhaust, part of this substance-specific scrutiny must include alternatives to the NR 445 cookie-cutter approach. Wisconsin industry cannot afford a "regulation for regulation sake" rule. The Board should not proceed with the listing of additional substances and related lower regulatory thresholds.

Again, thank you for the opportunity to comment on this rule.

WISPIRG
Wisconsin Public Interest Research Group

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Statement of WISPIRG Director Kerry Schumann,
In Support of NR445 Rule Revision: Regulation of Toxic Air Emissions
May 22, 2003

Thank you for the opportunity to speak today. On behalf of the Wisconsin Public Interest Research Group, I ask that you approve NR445. Although these rules are not perfect, we believe the expansion of the list of toxic air emissions will help to protect the health of Wisconsin citizens.

Why do we need to strengthen the regulation of air toxins?

There are about 80,000 chemicals in use by industry today. Chemicals are used in the creation and processing of thousands of products. They are used to create plastic products, from toys to toilet seats. They are used in creating electronics, paper products, machinery, pharmaceutical and personal care products, and household cleaners. Chemicals are also used in the process of food production, like packing meat and vegetables, and during electricity generation.

When factories across the U.S. and Wisconsin use chemicals they release many of those chemicals, polluting the air we breathe. These pollutants escape from smokestacks and generators, sneak out of factories and evaporate from holding tanks.

Many of the chemicals in use today are toxic and are threatening the health of Wisconsin citizens. Chemical air emissions can lead to cancer, birth defects, neurological damage, impaired fetal brain development, respiratory problems, reproductive problems, suppressed immune systems and developmental delays. Recent statewide data shows that 3,498 Wisconsinites have been diagnosed with lung cancer, 58,099 with emphysema, 176,232 with chronic bronchitis and 133,623 with adult asthma.

Individually, toxic air emissions can have an impact on human health. When humans are exposed to a number of different chemicals from a number of different sources, as is more typically the case, the cumulative effects are even more dramatic.

Despite the many health effects we are aware of from chemical air emissions, there is an additional problem: we know almost nothing about the effect most chemicals are having on human health. That is because very few chemicals are tested for health effects before they reach the market. Of the 80,000 chemicals in use today, 2,800 are considered high production volume chemicals - meaning industry uses over 1 million pounds per year. We only have health information for about 7% of the 2,800 high production volume chemicals, and for less than 1% of the total chemicals used.

Why are the effects of man-made chemicals such a mystery? Most people probably assume that any chemical on the market today underwent safety testing before being approved for use. Unfortunately, that is not the case. The federal government does not require chemicals to be tested before they are used, and industry pressure has prevented much-needed chemical safety laws from becoming a reality in the United States.

Because of scientific research by groups like the National Toxicology Program and the World Health Organization's International Agency for Research on Cancer, we are slowly learning the effects of different chemicals on human health. This research is often finding that chemicals are toxic to humans in much smaller quantities than was previously realized. As more scientific research becomes available, it is imperative that state and federal government

take action to limit air emissions of chemicals that have been found to be toxic.

WISPIRG supports the Wisconsin Department of Natural Resources' decision to update the state's list of hazardous air contaminants based on scientific research. We fully support the addition of chemicals that have been found to harm human health to the list of regulated air toxins. We support the reductions in allowable emission levels for many of the chemicals on the existing list based on scientific research. WISPIRG also supports the change to risk-based thresholds as the standard for setting emissions levels.

Although we ask you to adopt NR445, we do want to highlight one major problem with the rule.

NR445 contains several loopholes that reduce industries' accountability for illegally polluting. WISPIRG opposes both the "safe harbor" and "incidental emitters" portions of the rules. These policies will protect illegal polluters from being held responsible for negatively impacting human health.

Despite the problems with NR445, I ask you to support the rule. Overall, the revisions to this program will help protect Wisconsin citizens from toxic air pollution.

# # # #

Wisconsin Public Interest Research Group (WISPIRG) is a nonprofit, nonpartisan public interest advocacy group working to protect the environment, protect consumers and promote democracy. For more information about WISPIRG, go to www.wispirg.org.

Madison Department of Public Health

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22 May 2003

WANTS MORE EXPANSIVE RULE THAN PROPOSED

Dear Honorable Senators and Representatives:

Thank you for this opportunity to testify at this joint meeting of the Senate Committee on the Environment and Natural Resources and the Assembly Committee on Natural Resources. I am the Environmental Epidemiologist with the Madison Department of Public Health and have experience working with regional WI DNR staff to address concerns about air toxics raised by Madison residents. I also have spent a considerable amount of time working with the NR445 Technical Advisory Group, which was charged with helping DNR staff develop the rule revisions we are discussing today.

It is from this perspective that I ask you to support the implementation of these rule revisions as they are currently written.

Madison Department of Public Health supports these proposed rule revisions to NR 445 and related rules. While there are concerns that are not addressed by these revisions, several important improvements to the current rules are made by these revisions. Some of these improvements include:

- Listing of threshold limits for 144 additional hazardous air pollutants,
- Establishment of risk-based threshold limits for carcinogenic pollutants,
- Revision of threshold limits for 116 regulated pollutants to match current scientific knowledge,
- Additional control of emissions from diesel generators,
- Inclusion of hazardous air pollutants (such as coal dust) that need further study to determine the appropriate steps for compliance determination.

These improvements are critical if local public health agencies, my own, and regional DNR staff are going to be effective in protecting public health and reducing exposure to hazardous air pollutants.

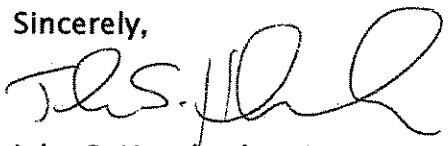
After these needed changes are implemented, our Department strongly urges the DNR and the Natural Resources Board to consider further improvements to air toxics rules that will further strengthen public health protection. These improvements

were identified and discussed during the meetings of the NR445 Technical Advisory Group (TAG) but were not included in the current rule revision because they did not have broad stakeholder support. These improvements include:

- Cumulative exposure to multiple hazardous air pollutants must be considered to ensure protection of public health.
- Control of hazardous air pollutants should include all potential pathways of exposure not just inhalation. This is especially true for persistent, bioaccumulative toxic chemicals.

Thank you for your consideration of this important effort to improve our State's air quality. We look forward to working with WI DNR in the future to continue to improve Wisconsin's air quality protection rules.

Sincerely,



John S. Hausbeck, MS, RS
Environmental Epidemiologist

signing for
Kathryn N Vedder, MD, MPH
Director of Public Health
Madison Department of Public Health

A Better NR 445 Option

WMC's Position

On Streamlining Provisions. The DNR Board should move forward with streamlining measures outlined earlier, lessening the already too high regulatory burdens on Wisconsin's manufacturing sector. Allowing companies to take advantage of the streamlining provisions and cut implementation costs of the rule now will remove at least some disincentives when companies evaluate whether to invest in Wisconsin. Timing is critically important as we expect business opportunities, and related investment decisions, will present themselves when the nation emerges from the current economic doldrums.

On New Burdens. Now is not the time to add more disincentives to invest in Wisconsin. The Board should not proceed with the listing of additional substances.

On Alternatives for Wisconsin-Specific Regulation of Toxics.

- There must be a compelling, substance-specific showing that Wisconsin-only air toxics be regulated. Consistent with existing law, that approach would be to quantify the risk associated with a proposed "candidate" substance and a relating finding that regulation of that substance is necessary to protect public health or the environment from quantified risks. The proposed listing protocol could be used to identify such candidate substances.
- Part of this substance-specific scrutiny must include evaluation of alternatives (e.g., best management practices for dusts; alternative regulatory thresholds) to NR 445's "cookie-cutter" approach.
- ***One way*** to implement these recommendations is to proceed with all changes, including revised thresholds, except that new substances be removed (or moved to separate table) from the draft rule. DNR would then review these new, candidate substances in groups (or bins) in accordance with appropriate criteria (e.g., initial assessment of toxicity). Once newly identified substances are reviewed, DNR would continue this process with existing substances.

Basic Rationale

Existing Law envisions this Process.

On the Preference that Federal Standards Control. Section 285.27(2) (a), Stats., provides:

> If an emission standard for a hazardous air contaminant is promulgated under section 112 of the federal clean air act, the ***department shall promulgate by rule a similar standard but this standard may not be more restrictive*** in terms of emission limitations than the federal standard . . .

On the Finding of Need. Section 285.27(2) (b), Stats., provides:

> If an emission standard for a hazardous air contaminant is not promulgated under section 112 of the federal clean air act, the department may promulgate an emission standard for the hazardous air contaminant ***if the department***

finds the standard is needed to provide adequate protection for public health and welfare.

While the courts have ratified DNR's approach results in a finding, the court made it clear the sufficiency of such finding was not the subject of the litigation. Those understanding the genesis of the above provision have little doubt the Legislature's intent was that adding new, state-only substances would be the exception not the rule. Also, it was always envisioned that DNR would produce evidence of need for each substance, and not provide the *en masse* rationalization currently used.

Experience Proves Substance-Specific Evaluation is needed

Every time a particular substance received a heighten level of scrutiny by the department in this rulemaking process (i.e., silica, wood dust, diesel exhaust, asphalt fumes, coal dust, etc.), DNR concluded that NR 445 simply did not (or may not) work. The result was that DNR concluded that these substances should either not be regulated until a more substance-specific evaluation is completed (wood dust, silica) or should be regulated in a different manner (coal dust, diesel). This experience proves a flexible, substance-specific evaluation is warranted, and that this approach has merit for all, not just those controversial substances noted above.

This has always been Industry's Position

Flour Dust Example

DNR did little to assess what Wisconsin citizens gain by these efforts. For example, flour would now be considered a "toxic," requiring the following:

1. An assessment by bakeries as to whether they emit flour at threshold levels (0.0269 lbs/hr)
2. If so, whether the levels exceed ambient air concentrations at their fenceline (12 micrograms/m^3)
3. Bakeries must also assess new reporting obligations under NR 438 (inventory reports if 118 lbs/yr.)
4. And determine permit requirements under NR407 (permit inclusion if 23.5 lbs/yr)

Since bakeries do not have in-house professionals to make these determinations, they must hire consultants at substantial costs. Yet, DNR did not even attempt to assess whether a "flour threat" exists, or correspondingly, whether mandating these requirements on bakeries produces any meaningful benefit.

Jim Doyle
Governor

Helene Nelson
Secretary

State of Wisconsin

Department of Health and Family Services

DIVISION OF PUBLIC HEALTH

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May 22, 2003

Senate Committee on Environment and Natural Resources
Assembly Committee on Natural Resources

Dear Legislators:

Attached is a copy of the text of my testimony on behalf of the Department of Health and Family Services regarding Clearinghouse Rule 02-097 relating to the control of hazardous air contaminants (revisions to the state air toxics rule). Thank you for your consideration.

Sincerely,

Mark A. Werner, Ph.D.
Toxicologist

Thank you for the opportunity to speak to you today. My name is Mark Werner and I am a toxicologist with the Wisconsin Department of Health and Family Services, Bureau of Environmental Health. I am testifying at today's hearing in support of adoption of the revisions to the state air toxics rule the Natural Resources Board approved in April. We are supportive of this rule for a number of important reasons. First, the list of toxic substances for which airborne emissions are regulated and the science on which those regulations are based have not been updated since 1988. The past fifteen years have seen the emergence of new methods of emissions control and new scientific data from animal studies and community epidemiology studies on what levels of exposure to air pollutants pose an unacceptably high health risk. And we benefit today from new and better methods of assessing risks associated with chemical exposures. As such, this rule represents a critical step forward in assuring that the protections offered the citizens of Wisconsin in the way of air quality are founded in strong public health science.

Like other stakeholders, DHFS was a full partner in the Toxics Advisory Committee that offered substantive input into the process by which these rule revisions were written. This revision under consideration today represents not only the best efforts of DNR staff and the citizen representatives of the Natural Resources Board, but those of other state and local health agencies, environmental advocacy groups, and representatives of the industrial and commercial sector. Our agency plays a unique role in interacting with DNR on the air toxics rule, as we are charged with reviewing the data and opinions of bodies such as the International Agency for Research on Cancer, the National Toxicology

Program, and the American Conference of Governmental Industrial Hygienists on the potential of air pollutants to impact human health. From our perspective as the state's lead agency for environmental health risk assessment, we believe this rule will do what it sets out to do - it will reduce the risk of acute and chronic health effects resulting from air pollution, and it will give the state the basis it needs for regulating new chemicals that should be subject to emission limits. In short, this rule means we can be more confident the fresh air we enjoy in Wisconsin continues to contribute to the good health of the citizens of the state.

The process by which this rule was crafted stands as a model for open, informed, participatory rule-making, and the product represents the culmination of the joint work of all the parties involved. This revised rule offers no party every provision they would like it to include, but represents a rule all parties through their participation in the process have come to find as one that is workable. The advisory committee membership was constructed to ensure that the final revision both adequately protected public health and allowed affected sectors to ensure that the anti-pollution rule to be considered for adoption was practically achievable. The process has in fact yielded such a rule and we support its adoption.

This rule also represents a step forward in its use of health-based thresholds for regulating air emissions for carcinogenic substances. In doing so, Wisconsin will adopt a more rational and more even-handed approach to regulating air contaminants that better matches required emission controls with the health significance of those emissions. The

use of a one-in-one-million level as a starting point for assessing carcinogenic risks associated with individual substances is another important step forward. Along with other parties who committed time and effort to this process, we recognize that compromise is necessary in order to achieve a working consensus so that other substantive issues can be addressed and broader goals can be achieved. In spite of occasional differences of perspective, we are proud to partner with the Department of Natural Resources in assuring that air pollution does not pose a significant health problem, and to provide technical assistance on non-routine air permitting issues where standard approaches may not offer a view of the overall health risk a pollution source can pose to a family, a neighborhood or a community.

In closing, we support this rule because it brings us newer and better science for the limits we set on toxic air pollutants, because the rule and the process employed to create it represent a balanced, fair and well-reasoned approach that gives no stakeholder all it wishes for but provides every party something it finds useful and important, and because the new, risk-based features of the rule provide stakeholders and the public with a better 'yardstick' for measuring the need for the pollution controls called for in the rule to address exposure to airborne carcinogens. We support the efforts of the Department of Natural Resources and its citizen board in assembling and endorsing this rule package, and we urge you to support it. Thank you.

Senate Environment and Natural Resources Committee
Assembly Natural Resources
Joint Public Hearing
411 South, State Capitol
May 22, 2003 10:00

Agenda

1. **Call of the Role**

2. **Agenda**

Clearinghouse Rule 02-144
Relating to commercial fishing in Lake Michigan

Clearinghouse Rule 02-097
Relating to the control of hazardous air contaminants

ANNOUNCEMENTS

You may speak before the committee or simply register your vote on the hearing slips. Be sure to fill out the slips and hand it to the Page.

Following this joint public hearing, the Senate Environment and Natural Resources committee will remain for a public hearing on an appointment to the Fox River Navigational System Authority

SUMMARY OF CR 02-144

Section 1 of the rule closes the season in Green Bay for commercial trawling for smelt until July 1, 2008

Section 2 of the rule reduces the total annual allowable commercial harvest of smelt taken from Green Bay from 351,993 pounds to zero until July 1, 2008.

After that time, no more than 351,993 pounds may be taken from Green Bay

From statewide public hearings

SUPPORT: 29
OPPOSE: 127

SUMMARY OF CR 02-097

The revisions to NR 445:

1. Increase the number of toxic substances regulated (144)
2. Adjust the emission thresholds for some previously regulated substances
3. Make substantial changes in the rule that reduce regulatory burdens to incidental emitters (streamline permits, Safe Harbor)
4. Provide compliance alternatives for some emitters
5. Clarify administrative requirements to show compliance with the rule

QUESTIONS

This proposed rule would be three times as large as the federal hazardous air pollutants (HAPs) program. How can the agency greatly expand their list and program and state there will be no increased workload on current staff?

Is this the beginning of an ever-burgeoning list? Will this list continue to expand?

Why can't we just streamline the permitting process and then just look at small batches of HAPs?

There seem to be some discrepancies with the fiscal impact this rule will have on Wisconsin business. But, if we were to use the DNR conservative estimate of $28 million cost to business, why do that now during these tough economic times?

This bill has a Safe Harbor provision, which somewhat mirrors what we offered in Senate Bill 61. But the Doyle has stated his opposition to such provisions. Double standard?

Envir. Imp. Program

To: Committee on Environment and Natural Resources *and* Committee on Natural Resources
Senator Kedzie, Chairman
Senators Stepp, Zien, Risser, Wirch

Representative Johnsrud, Chairperson
Rep. Gunderson, Vice-Chairperson
Representatives Ott, Pettis, Bies,
Krawczyk, M. Williams, Black
Gronomus, Steinbrink, Miller

Re: Clearinghouse Rule 02-097
Relating to the control of hazardous air contaminants

Date: May 22, 2003

The League of Women Voters of the Wisconsin Rapids Area (LWVWRA), representing local citizens - families, neighbors, and others, is testifying today on the Clearinghouse Rule 02-097 - the revisions to Administrative Rule NR445 relating to the control of hazardous air contaminants.

The LWVWRA has been both interested and concerned about air quality in South Wood County for over a decade. We have: testified at public hearings, requested the toxic air monitor for Witter Field, assisted the State Division of Health with the asthma study of nearly 4000 Wood County children, held informal study sessions with state toxicologists, sponsored and moderated three public forums for air quality, and tried for two years (albeit unsuccessfully) to create a formal partnership with the Department of Natural Resources, similar to the one which industry now enjoys. Since the beginning, our involvement has been to <u>educate</u> the citizens of South Wood County about air quality and to <u>advocate</u> for preventive action to protect public health.

For one and one-half years, the LWVWRA served as a delegate to the Technical Advisory Group (TAG) for the revisions of NR445, the administrative rule controlling hazardous air contaminants. We participated as volunteers - <u>not</u> as paid staff of either industrial or environmental groups to press their view, but to listen and learn about this complicated rule, complete with its hundreds of numbers, chemical names, SIC codes, business and environmental considerations, and more. It's confusing for even the savviest professional, and nearly impossible for the lay citizen, which we represented in this endeavor.

For nearly two years, Administrative Rule NR445 was carefully reviewed, scrutinized, and revised. The result is a rule that more accurately reflects scientific knowledge of air pollution's effects on human health. It adds 144 new chemicals to the list of hazardous air contaminants, many of which are strong respiratory irritants affecting our local citizens. And although it includes more chemicals, the revisions are crafted to achieve better compliance by industry. They are, simply stated, easier to understand. And contrary to what the Wisconsin Manufacturers and Commerce wants you to believe, the rule revisions actually streamline the administrative costs for many companies. There is simply no basis for the claim that it will cost $100 million dollars to implement in the first year.

But, just for the sake of argument, let's say that it did cost $100 million dollars. Do any of you have a child with asthma? How much would you pay to take their discomfort away? How much would you pay to erase your uncertainty when they go to play ball or run on the track? What exactly is your price for human health in Wisconsin? If it's yours or one of your loved ones, it's difficult to assess. Are you willing to name that price today, in front of your colleagues and your constituents?

The members of the League of Women Voters of the Wisconsin Rapids Area live in a paper town. Paper runs the economy of Wood County. We have the 10th highest per capita income in Wisconsin. We have good schools and a vibrant community. But, as the good senators and representatives know, nothing comes without a price. And the "price" for our standard of living is compromised public health, backed by years of data and research. We have the second highest asthma rates in Wisconsin, outpaced only by the urban center of Milwaukee. We have the dubious distinction of being the most polluted county in the state, both for water and air emissions. The primary sources – paper. Tons and tons of environmental releases pour into our county, and yet we live it, breathe it, work it. What price should <u>we</u> pay for this distinction of being the most polluted in the state of Wisconsin?

Please consider those residents whose health you now balance. We are certain that you will accept the hard work demonstrated by the DNR, industry, and public health agencies to complete the first comprehensive rule revisions to NR445 since 1988! We, the citizens of the most polluted county, are counting on you. We look forward to breathing a collective and cleaner sigh of relief. Thank you.

Respectfully submitted,

Sharon Schwab, Natural Resources Chairperson
League of Women Voters of the Wisconsin Rapids Area

UW Extension

Solid & Hazardous Waste
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May 22, 2003

Joint Public Hearing: Senate Committee on Environment and Natural Resources
Assembly Committee on Natural Resources

Clearinghouse Rule 02-097 - Relating to the Control of Hazardous Air Contaminants

The University of Wisconsin Extension, Solid and Hazardous Waste Education Center (SHWEC) was created to assist Wisconsin manufactures in improving the efficiency and profitability of their operations through Pollution Prevention and wise environmental management.

SHWEC works closely with Wisconsin Manufactures and Commerce, The Department of Commerce-Small Business Clean Air Assistance Program, The Department of Natural Resources and Small Business Development Centers around the state to provide education and technical assistance on environmental compliance, toxic chemical use reduction, and high volume industrial waste. SHWEC works with manufacturers to reduce or eliminate air emissions, waste water discharges and hazardous waste by the most economical means.

The Revisions to NR445, as adopted by the DNR Board, will affect many Wisconsin manufacturers. We have worked closely with both WMC and DNR on developing cost estimates of the impact of these rules, and on educational strategies to assist manufacturers as they come into compliance with NR445.

We stand ready to assist companies that emit significant amounts of hazardous air pollutants, to find ways to reduce or eliminate them completely. Our experience has shown that this can often be done at a low cost, or economic gain to the company.

The revisions to NR445 will bring an opportunity to reach out to companies around that state that are not directly affected by the rule. No company prefers to manufacture using toxic chemicals, but many feel that they have no alternative if they are to remain competitive and profitable. By raising awareness about toxic air emissions, we can show companies that there may be alternatives to toxics in the workplace.

SHWEC's mission as an educational program is to provide companies with information and tools that will allow them to make informed decisions about the use of toxic chemicals . Given the opportunity, most companies will choose to eliminate the use of chemicals that may be a hazard to their workers and the communities they live in, thus avoiding costs and liabilities beyond those of regulatory compliance.

It is our expectation that the revised NR445, like other similar regulations that have come before it, will lead to reductions in the current and future use of toxic chemicals by Wisconsin manufacturers.

5/22/03

REPRESENTING WISCONSIN BUSINESS

Wisconsin Manufacturers & Commerce

Memo

TO: **Senate Committee on Environment and Natural Resources and Assembly Committee on Natural Resources**

FROM: **Jeff Schoepke, Director, Environmental Policy**

DATE: **May 22, 2003**

RE: **NR 445**

Thank you Chairman Kedzie and Chairman Johnsrud for the opportunity to speak this afternoon on the DNR's revisions to NR 445, the state air toxics program. With me today is Bob Fassbender of the Hamilton Consulting Group, who will discuss concerns regarding the rule's listing protocol, and Tom Kunes of Kestrel Management Services who will discuss the cost study developed by his firm.

Wisconsin Manufacturers & Commerce (WMC) is a statewide, non-profit association representing Wisconsin business. WMC has 4,300 members that include both large and small manufacturers, service companies, local chambers of commerce and specialized trade associations. WMC has been engaged in this rulemaking effort for nearly four years and has submitted seven sets of comments to DNR.

While WMC has significant concerns about the general approach of NR 445, we do support several provisions in the proposed rule that will clarify, streamline or otherwise reduce costs associated with this ever-expanding program. Specific provisions that WMC supports include:

- The concept of due diligence in the search and inquiry process, and the accompanying safe harbor provisions.
- Additional criteria added to the rule's listing protocols, allowing, among other things, exclusions for substances adequately regulated by other programs. (Although we believe, as discussed later, the concept of a more refined evaluation must be taken to another, more detailed level.)
- Language clarifying that sources subject to federal requirements are exempt to the extent the federal standards address NR 445 substances.
- Language imposing less onerous burdens for incidental emitters, such as non-industrial operations.
- Provisions adding modeling off-ramps that allow sources to demonstrate compliance based on risk analysis or avoid regulation through "simple" modeling.

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- The addition of lower thresholds based on stack heights, and the DNR's approach to handling terrain concerns on a case-by-case basis.
- Final rule draft proposals which remove wood dust and crystalline silica from the rule's tables.

These changes improve the rule. If these revisions were to move forward on their own, WMC would support this rule as consistent with our "regulatory reform" agenda to reduce regulatory burdens on Wisconsin businesses.

However, the rule is still fundamentally flawed. WMC continues to oppose the general approach of NR 445: reliance on third party lists to "dump" chemicals on a list with little consideration of actual risk or occurrence in Wisconsin, as well as the absence of meaningful evaluation of costs and related benefits associated with regulating the listed substances. This listing protocol results in expansive applicability and extraordinary administrative costs. As we will discuss in more detail later, the vast majority of these costs relate to businesses proving no environmental or health threats actually exist. We believe this shifting of burden on industry is inconsistent with the clear legislative directive that DNR prove an environmental or health need before regulating substances beyond federal law.

WMC's general concerns with NR 445 include:

- The continued use of third party chemical lists as the primary source for NR 445, even though one of those lists (ACGIH) specifically advises against use for ambient air quality standards.
- Regulatory thresholds, particularly for carcinogens, that are overly conservative.
- A state toxics program three times as large as the federal program (578 substances in NR 445 vs. 189 in the federal HAPS program) adding a significant additional layer of regulatory burdens.
- An on-going process of adding chemicals to a state only list that will by its very nature eventually add hundreds of more substances and related burdens on Wisconsin industry.
- Administrative and related paperwork costs that are still significant, despite efforts to reduce these burdens, with no corresponding environmental benefits.

Early in this process WMC worked with the DNR to establish a cost study for the rule which would quantify overall rule costs and identify

cost pressure points. The result was a cooperative process that included WMC's retention of Kestrel Management Services to assist in the effort.

To the surprise of few, the study shows significant administrative costs associated with the rule. The measure of administrative costs is summarized in the table below:

Rules Version[1]	Administrative costs of First-Year Implementation of NR 445				
	Estimated Average Cost per Facility		Estimated Statewide Costs		
	$	% Increase Over Existing Rules	Number of Facilities	Total	% Increase Over Existing Rules
Existing Rule	$126,900	0 %	800	$101,520,000	0 %
Extended Rule	$221,400	75 %	1,620	$358,668,000	253 %
Streamlined Rule	$204,000	61 %	1,237	$252,348,000	149 %
Rule as Approved for Hearings	$163,700	29 %	1,223	$200,205,100	97 %

The study protocols are described in the report, and this memo does not discuss them in detail here. However, it is important to note that these costs are administrative only, and do not reflect capital costs of compliance.

WMC's concerns over the $100 million price tag for this rule is two-fold. First, the rule by itself is too costly in light of expected benefits. Second, the additional $100 million burden imposed on manufacturers is not an isolated "cost of doing business," but is in addition to many other regulatory burdens on Wisconsin businesses not imposed in other states.

[1] The "extended rule" assumes the addition of new substances and thresholds, with implementation under existing provisions. The "streamlined rule" contains streamlining measures presented at the onset of the study. The "rule as approved for hearing" reflects the latest version of the rule now the subject of these comments.

On the first point, DNR was helpful in determining the regulatory burdens associated with this proposal. While there remains certain disagreement on the expected price tag, DNR and WMC generally agree that a substantial effort will be required to determine whether and to what extent the rule applies. On the other hand, DNR did little to assess what Wisconsin citizens gain by these efforts. The Administrative requirements identified to cost more than $100 million in the first year rarely identify substances in levels that require controls. That is, the overriding regulatory mandate of this rule is to require an extensive "search and inquiry" of business operations to discern: whether any of the now 578 substances are present at their facilities; if so, whether emitted above threshold level; and finally (for noncarcingens), whether present at the fence line above the prescribed air quality standards. This process almost always provides a negative response to the question "do we have substances at levels of concern?"

On the second point, the $100 million cost for manufacturers is only part of the cost of doing business in Wisconsin. Earlier this year, WMC conducted listening sessions on Wisconsin's regulatory climate and heard some disturbing stories on how the DNR continues to create disincentives for manufacturers to expand or locate in Wisconsin.[2] The common theme throughout the state is that Wisconsin is becoming increasingly uncompetitive when businesses assess their investment options. Delays in obtaining needed air permits top the list of concerns, but the continual expansion of state only rules with little or no environmental benefit are a close second. We have little doubt that the expansive nature of this rule will be an additional impediment to economic development. In fact, we know companies are being advised not to locate in Wisconsin because of the potential regulatory costs associated with this rule.

Simply put, the current process of adding hundreds of substances from third-party lists is the fundamental flaw with NR 445. The Kestrel study confirms that this listing process creates an enormous regulatory burden on Wisconsin industry that will continue to compound as more and more substances are added. The most discouraging aspect of DNR's approach is the fact these burdens will be incurred without any meaningful effort by the Department to quantify corresponding environmental benefits.

WMC's position is that the Legislature should allow streamlining measures outlined earlier to move forward, lessening the already too high regulatory burdens on Wisconsin's manufacturing sector. Allowing companies to take advantage of the streamlining provisions and cut implementation costs of the rule now will remove at least some disincentives when companies evaluate whether to invest in

[2] The findings from those hearings are assembled the WMC report *The Case for Regulatory Reform*, released May 15, 2003.

Wisconsin. Timing is critically important as we expect business opportunities, and related investment decisions, will present themselves when the nation emerges from its current economic doldrums.

On the other hand, now is not the time to add more disincentives to invest in Wisconsin. It is WMC's position that there must be a compelling showing that such Wisconsin-only burdens are necessary to protect public health or the environment. And, as we learned in our evaluation of coal dust and diesel exhaust, part of this substance-specific scrutiny must include alternatives to the NR 445 cookie-cutter approach. Wisconsin industry cannot afford a "regulation for regulation sake" rule. The Legislature should not proceed with the listing of additional substances and related lower regulatory thresholds.

Again, thank you for the opportunity to comment on this rule.

Testimony of the Department of Natural Resources on
Clearinghouse Rule 02-097, relating to the control of hazardous air pollutants

Senate/Assembly Joint Public Hearing
Senate Committee on Environment and Natural Resources
Assembly Committee on Natural Resources
May 22, 2003

Thank you Chairperson Kedzie and members of the Senate Committee on Environment and Natural Resources and Chairperson Johnsrud and Members of the Assembly Committee on Natural Resources for the opportunity to testify today.

My name is Lloyd Eagan. I am the Director of the Bureau of Air Management at the Wisconsin Department of Natural Resources. With me today is Caroline Garber. She is the Chief of the Environmental Studies Section in the Bureau of Air Management.

This April, the Natural Resources Board adopted the proposed revisions to Wis. Administrative Code, Chapter NR 445 and related chapters. These revisions will result in improved public health protection for our citizens and a reduced regulatory burden on Wisconsin industry. They are the product of an intensive three year stakeholder process involving representatives from industry, public health, environmental and citizen organizations.

Chapter NR 445 is at the heart of Wisconsin's air toxics regulation. It sets emission standards for hazardous air pollutants, or air toxics, so that the air that the public breathes is not harmful to their health. Air toxics include pollutants that can lead to asthma, lung and other respiratory ailments, cancers, reproductive problems and neurological problems such as learning disabilities and

hyperactivity. Examples of air toxics include benzene, chromium, formaldehyde and ammonia.

Air toxics can have their greatest impacts at the local neighborhood level. Sources of air toxic emissions include large manufacturers with tall smokestacks and smaller companies with shorter stacks that are often in or near residential neighborhoods.

The Department of Natural Resources has successfully regulated air toxic emissions since 1988. The Wisconsin hazardous air pollutant rule benefits Wisconsin citizens by filling in the gaps left by the federal air toxics program when the Clean Air Act was amended in 1990. Only about a third of the companies that report air toxics emissions to the Department are regulated under the federal program. For the other two thirds, about 550 companies, the only public health protection provided is through the state program. While federal requirements reduce hazardous emissions from some of the largest sources in the nation, they often miss smaller levels of pollutants that can cause devastating effects in local communities where our families live, work and play. In addition, the state program better protects public health by setting standards for some 430 toxic pollutants compared to 188 under the federal program. Hydrogen sulfide and ammonia are two examples of common industrial air toxics that are regulated under the state but not the federal program.

The state program works -- it has reduced air toxic emissions. For example, small incinerators used to be commonplace at supermarkets, apartment buildings and other commercial establishments. These were sources of dioxin, metals, formaldehyde, and benzene – all known or suspected carcinogens. These incinerators and their hazardous emissions no longer exist today, because of the state program. By comparison, Illinois had some 70 incinerators at supermarkets alone in 1998.

The Department began the process of updating NR 445 in February 2000 with two major objectives. One was to put Wisconsin's air toxics program back on a firm science base. The second was to improve the regulatory system. I believe we have been successful in achieving both objectives. I will cover each of these objectives in a little more detail as well as provide you information related to the projected costs of this rule.

Chapter NR 445 was adopted in 1988. Scientists' knowledge of the health effects of different chemicals has advanced over the intervening 15 years. The Department, in collaboration with the Department of Health and Family Services, reviewed the work of three national and international health organizations that are recognized worldwide for their expertise, professionalism and objectivity. Based on this review and the application of a second set of criteria, the Department is proposing to add 144 substances to NR 445, to remove 6 from the regulation, and to revise the standards for about half of the currently regulated substances.

A few examples, based on actual situations we know of in Wisconsin, will illustrate the public health benefits from these revisions.

Currently, chrome VI, or hexavalent chrome, is regulated under NR 445 for its non-cancer health effects. However, we now know that is also a carcinogen and is about **240 times more hazardous** than was thought 15 years ago. Company ABC uses hexavalent chrome in its manufacturing process. It is located in Milwaukee County, surrounded by commercial, residential and other industrial uses. Its reported emissions of hexavalent chrome last year posed a health risk that was greater than 1 in a million within a half-mile radius of the company. The

company is meeting current NR 445 standards and is not regulated under the federal air toxics program. In the first map behind Tab 3, the yellow portion shows the areas where the cancer risk level from this facility exceeds 1 in a million. As can be seen in the second map, the concentration of hexavalent chrome in the air in Milwaukee County (as well as several other Wisconsin counties) was among the highest in the nation, in the 95 percentile. This is a cause of concern.

Hexamethylene-1,6 Diisocyanate is one of the new chemicals proposed to be added to NR 445. It causes severe lung irritation and may cause asthma with repeated or prolonged inhalation exposure. It is primarily used in painting and coating operations. Last year, a metal tank manufacturer reported emissions **over 700 times greater than the proposed NR 445 threshold level.** The threshold level is the level above which there may be a health concern, depending on the site and source specifics of the company.

Concentrated sulfuric acid mist is another substance that is currently not regulated but proposed to be. It is carcinogenic. An electroplating company **reported emissions of these at 120 times greater** than the proposed NR 445 threshold.

Tab 2 contains additional information on some of the other chemicals that are being added or whose standards are being substantially revised in the proposed rule revision.

In summary, these rule revisions will provide our citizens with public health protection based on sound and up-to-date science.

The second major objective of this rule revision is to reduce the regulatory burden on industry by simplifying the regulation and by designing the system to provide industry with more flexibility in achieving the desired outcome – air that is healthy for our citizens to breathe. We are introducing some innovative concepts that start moving our regulations beyond the traditional "command and control" model of air pollution regulation towards a system that is outcome (i.e., public health) based, as well as simpler to meet.

Our thinking is that if we simplify the regulatory system, we will achieve greater environmental benefits at less cost. We have been willing to acknowledge that in simplifying the system by reducing regulatory oversight, we potentially create situations where a small number of facilities are not regulated for their air toxics emissions as they should be. They slip between the cracks, so to speak. We have established mechanisms in the rule that allow the Department to correct these as they occur, without penalizing the companies that followed the procedures and made good faith efforts to comply with the rule. We call this our "backstop" provision.

Some examples may help you understand what we have proposed.

INCIDENTAL EMITTERS

In the rule, we have identified types of industries and companies that are unlikely to be significant sources of air toxic emissions. These include most non-manufacturers and over 90% of manufacturing companies --in other words, **most** Wisconsin businesses. We call companies in this category "incidental emitters".

We have also identified a set of air toxics and activities/processes that we are particularly concerned about either because they are widely used in industry or because they are highly toxic. Under the rule revision, incidental emitters are only responsible for compliance with regulatory requirements for these 81 chemicals

or processes. By narrowing the scope of their responsibility, we believe that we will achieve greater compliance by these companies than if they were faced with the entire NR 445 list of chemicals. And, through our backstop provision, we can address those situations where other air toxics are emitted at levels that do not protect public health.

DUE DILIGENCE/SAFE HARBOR

Another example is the introduction of the due diligence and safe harbor provision.

Under the revised rule, a company will be deemed to be in compliance if it conducted a reasonable (not exhaustive) investigation to determine whether or not it has air toxic emissions above threshold levels, and took appropriate action if it did. We believe that this will serve as an incentive for companies to do their best to comply with the regulations. Again, our backstop authority will allow us to correct individual, but rare, situations that inadvertently fall through the cracks.

COMPLIANCE OPTIONS FOR CARCINOGENS

A final example of how industry will benefit from the revised rule concerns companies that emit **carcinogens**. Under the rule revision, we are setting risk (or health) based threshold levels for carcinogens.

This change allows us to greatly simplify the compliance requirements for most sources, from a regulatory perspective. We are able to design the system now so that a company can decide for itself how to reduce or manage its emissions as long as the end result meets a certain risk level. Under the old system, the only alternative was a labor intensive and costly engineering analysis of available control technology options.

Again, let me use real life examples to illustrate how this will benefit industry:

- An industrial boiler at a major manufacturer currently operating under a variance is expected to be able to demonstrate compliance under the revised rule by showing that the risk at the property line is less than 1 in a million for arsenic. Under the current rule, the company must have the variance reviewed by the DNR every five years. The review includes a detail engineering analysis, public health protection showing and public hearing.

- About half of the 26 foundries currently operating under NR 445 variances will either be able to stay below thresholds or demonstrate compliance by showing that the risk at the property line is less than 1 in a million for benzene. Under the current rule, companies must have the variance reviewed by the DNR every five years. The review includes a detailed engineering analysis, public health protection showing and public hearing. These 12 manufacturers employ between 70 and 250 people each.

- A paperboard mill currently has enforcement pending for noncompliance with the existing rule. Under the revised rule, the company will be able to demonstrate compliance for formaldehyde by staying below the threshold after making minor modifications to its emission stack.

- A government agency needs to install new ethylene oxide sterilizers and is considering installing them on the roof of the building. Under the existing rule, they would need to either install control technology equipment or apply for a variance. Under the revised rule, their emissions would be below the risk-based threshold levels for ethylene oxide and they would be in compliance without installing control technology equipment or applying for a variance.

IMPACT ON WISCONSIN INDUSTRY

- The issue of cost to Wisconsin's industry of the rule revision is one that has received a lot of attention. I want to spend a few minutes on this question and talk about both the initial first year costs and the continuing costs. One of our primary objectives was to reduce the regulatory burden, not only for companies that need to comply with the new or revised standards but also for all companies that are currently regulated under NR 445. These reduced regulatory burdens will benefit industry on a continuing basis – both in terms of time and dollars.

There will be initial costs for many companies to determine whether or not they emit any of the NR 445 chemicals at levels that are above the standard. The Department estimates this first year cost to be between $15 and $20 million statewide. This estimate is based on the work of the Wisconsin Manufacturers and Commerce and the work of the Department of Commerce.

We have categorized and assigned first year costs to companies along the following lines:

1. Companies that currently report emissions of 5 or more hazardous air pollutants to the Department. These tend to be larger companies, with complex manufacturing processes. The average first year cost for this type of company is estimated to be $25,000.

2. Companies that report annual air emissions to the Department and report fewer than 5 hazardous air pollutants. Currently, sixty percent of the 2000 reporting companies report NO air toxic emissions. The average first year cost for these companies is estimated to be $10,000.

3. Companies that are Incidental Emitters. The average first year cost for these companies is estimated to be between $2,000 and $5,000.

GRAIN DUST

Any company that emits more than 3 tons of volatile organic compounds or more than 5 tons of particulate matter is required to report its emissions annually to the Department's air emissions inventory. These companies have had to quantify their emissions and compare them to regulatory thresholds for a number of years. If they emit hazardous air pollutants, they have been subject to NR 445 since 1988 and should have the systems in place to identify the chemicals that they use or handle in their business and should be familiar with the regulation.

The companies most likely to be impacted by the rule revision are those who use or handle multiple chemicals. About 2000 companies report to the Air Emissions Inventory; 780 of these report emissions of one or more hazardous air pollutant (excluding power generation). Only 195 of these companies (or less than 10% of all reporting companies) report emissions of 5 or more hazardous air pollutants.

Most small businesses are unlikely to have emissions of chemicals that would present a public health problem. Under the revised rule, these companies fall into the newly created category I described earlier, called "incidental emitters". These are companies that do not currently report air emissions to the Department. Their analysis should be relatively quick and the cost would be the amount of time it would take to understand the rule's requirements and make a reasonable estimate of the likelihood that they emit one or more of the 81 chemicals of concern.

There will also be initial savings for many companies. Our analysis of the Air Emissions Inventory identified at least 250 companies whose emissions exceed the current NR 445 threshold levels and who, as a result of the revised rule,

would have the ability to look at less expensive alternatives than allowed under the existing regulation.

These are estimates of first year costs. The first year costs are estimated to be on the order of 2 to 10 times more than subsequent year costs, according to the WMC survey. The experience with the federal Toxics Release Inventory Reporting is that first year costs are 3 to 4 times more than subsequent year costs.

There will be savings to industry that will extend into the future and over time, these will be far greater than the initial costs. Some examples include:

- Except for some isolated cases, companies will no longer need to get a construction permit because of NR 445 when they are building a new facility or making a major modification to an existing facility. Instead, all they will need to do is submit a simple compliance certification form. This will allow them to proceed without first having to get approval from the Department.

- All companies that emit carcinogens will have the ability to look at alternatives to control technologies. This will save them time and money that would have been spent on detailed engineering analyses and reviews as well as subsequent permit requirements. In many cases, significant capital and operation costs can be avoided through lower cost non-technology-based practices.

NR 445 TAG

I want to close by saying a few words about the process that we followed in developing these rule revisions. They are the product of 3 years of meetings with a Technical Advisory Group composed of industry, public health agencies and

environmental and citizen groups. Groups representing very different public policy positions were able to work together toward some common interests.

This process was open, deliberate and inclusive. For the most part, all sides were able to move beyond their positions and tried to understand and accommodate others' concerns.

As a result of this process, there was general agreement among the Technical Advisory Group members on a large number of potentially very controversial issues. Among these are:

- The concept of risk-based threshold levels for carcinogens
- The Incidental Emitters provisions
- Due diligence and safe harbor
- Self-certification of compliance rather than re-opening or securing an air permit
- Alternatives to control technology for emissions of carcinogenic substances

As a result of this stakeholder process, we were able to develop a proposed rule package that improves public health protection **and** reduces the regulatory burden on industry. This rule revision is good for the environment and it is good for industry.

Thank you.

ADDITIONAL ITEMS WILL BE ADDED IN THE FUTURE
DNR WILL REVIEW EVERY 3 YEARS AND THEN UPDATE
EVERY 6 YEARS

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

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Scott Hassett, Secretary

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May 20, 2003

L192

Senator Dale Schultz
State Capitol
P.O. Box 7882
Madison, WI 53707-7882

Subject: Hazardous Air Pollutant Rule Revision

Dear Senator Schultz:

I am writing in response to your letter requesting information on how the proposed revision to Wisconsin's Hazardous Air Pollutant program (Ch. NR 445, Wis. Adm. Code) might impact the businesses in your district.

Before going directly to a discussion on potential costs related to the proposal, I'd like to share some background with you to help put the expected impacts into perspective. In developing the rule proposal, the DNR spent nearly 3 years in discussions with Wisconsin Manufacturers and Commerce (WMC), other business groups and companies, public health agencies, and environmental and citizen groups, in an effort to maximize the environmental benefits of the proposal while imposing as little additional administrative costs as possible. Many ideas for streamlining the regulatory process were suggested by stakeholders. The resulting revised rule is considerably simpler, more flexible and less paperwork-intensive than the current rule. The Department continues to work closely with the Department of Commerce's Small Business Clean Air Assistance Center and with the UW-Solid and Hazardous Waste Education Center to develop workshop and guidance documents to help companies, particularly smaller ones, understand the regulations, determine whether or not they may have hazardous air emissions that exceed the standards and learn about options for reducing emissions. This assistance will further reduce their level of effort in meeting the requirements in the revised rule.

To estimate first year costs to comply with the revised rule, the Department used the results of interviews with companies conducted by both the Department of Commerce's Small Business Clean Air Assistance Center and WMC. It is important to note that these are first year costs and that they are likely to be anywhere between 3 and 10 times less in subsequent years. These impacts are expected to vary depending on the number and amount of hazardous materials a company handles in the course of doing business. The Department has categorized and assigned average costs to companies along the following lines:

- Companies that currently report 5 or more hazardous air pollutants annually to the DNR's Air Emissions Inventory. These companies tend to be larger companies, with complex manufacturing processes. The average cost is estimated to be $25,000.
- Companies that currently report less than 5 hazardous air pollutants annually to the DNR's Air Emissions Inventory. This includes companies that report no hazardous air pollutants but report other air emissions. The average cost is estimated to be $10,000.

- Companies that report hazardous air pollutants created during combustion (power generation). The average cost is estimated to be $2,000.
- Companies that do not report any emissions to the DNR's Air Emissions Inventory or report to the Air Emissions Inventory but fall into the "Incidental Emitters" category. Most of these companies will have no NR 445-related costs since they do not have any air emissions. However, a small fraction may have some air emissions. The average cost for this fraction of companies is between $2,000 and $5,000.

Any company that emits more than 3 tons of volatile organic compounds or more than 5 tons of particulate matter is required to report its emissions annually to the Department's air emissions inventory. These companies have had to quantify their emissions and compare them to regulatory thresholds for a number of years. If they emit hazardous air pollutants, they have been subject to NR 445 since 1988 and should have the systems in place to identify the chemicals that they use or handle in their business and should be familiar with the regulation. The companies most likely to be impacted by the rule revision are those who use or handle multiple chemicals. Data from the Wisconsin DNR Air Emissions Inventory shows that about 2000 companies report to the Air Emissions Inventory, 780 of these report emissions of one or more hazardous air pollutant (excluding power generation) and 195 of these 780 companies (or less than 10% of all reporting companies) report emissions of 5 or more hazardous air pollutants.

Most small businesses are unlikely to have emissions of chemicals that would present a public health problem. Under the revised rule, these companies fall into a newly created category called "incidental emitters". In order to reduce the regulatory burden for these companies, the list of chemicals for which they are responsible has been reduced to 81 chemicals of concern. Their analysis should be relatively quick and the cost would be the amount of time it would take to understand the rule's requirements and make a reasonable estimate of the likelihood that they emit one or more of these 81 chemicals into the air.

In order to assess the impact of the rule revision on companies in your district, we used data from the Department of Workforce Development's Worker's Compensation database and the 2001 Wisconsin DNR Air Emissions Inventory. The "big picture" is that of the approximately 275 companies in your district that are listed in the Workers Compensation database, 201 did not report any emissions to the 2001 Wisconsin Air Emissions Inventory. Of the 74 that did report emissions, 34 facilities reported hazardous air emissions and only 4 companies reported emissions of 5 or more hazardous air pollutants. The attached table displays this information for all of the industrial sectors in Senate District 17 and highlights the specific industries that you inquired about in your letter.

Thank you for writing to me regarding your concerns. If you have any questions, please feel free to contact Caroline Garber, Environmental Studies Section Chief, Bureau of Air Management, at (608) 264-9218.

Sincerely,

Scott Hassett
Secretary

Attachment

Cc: Secretary Nettles, WI Department of Commerce
Renee Lesjack-Bashel, WI Department of Commerce
Caroline Garber, Bureau of Air Management-AM/7
David Liebl, UW-Solid and Hazardous Waste Education Center
Lloyd Eagan, Bureau of Air Management-AM/7

NR 445 Briefing Table of Contents

May 2003

NR 445 BRIEFING OUTLINE
May 2003

OVERVIEW

1. Why do we have a state air toxics rule?
2. What does the rule revision do?
3. What are the potential impacts of the rule revision?
4. What are some of the cost savings of the rule revision?
5. How was the public involved?

1. WHY DO WE HAVE A STATE RULE?

- Air toxics include pollutants that cause or may cause cancer or that can harm the respiratory, reproductive and other life-sustaining systems.
- Air toxics have the greatest impacts at the local neighborhood level.
- DNR adopted NR 445 in 1988 in response to public concerns about lack of policy and regulation at federal level.
- NR 445 continues to fill gaps left by the Clean Air Act Amendments
  - Federal program regulates large sources. About two thirds of Wisconsin companies that report air toxic emissions are not covered by federal program (about 550 companies)
  - NR 445 sets standards for 438 air toxics compared to 188 under federal program.
- NR 445 is designed to ensure, to the extent possible, that air emissions from a facility (e.g., a factory) are safe to breathe by the general public at the business' property line.

2. WHAT DOES THE RULE REVISION DO?

PUTS STATE'S AIR TOXICS PROGRAM BACK ONTO A FIRM SCIENCE BASE

- Current rule based on scientific knowledge of mid 1980's (15 years ago)
- Adding 144 chemicals; removing 6 chemicals (438 to 576 chemicals).
  - All of the chemicals being added have gone through a very rigorous scientific review and have been found to be hazardous to human health by one or more national or international organizations that are recognized worldwide for their expertise, professionalism and objectivity.
  - The UW Solid and Hazardous Waste Education Center (UW-SHWEC) has identified 12 chemicals among the 144 new additions that it considers to be fairly commonly used by industry in Wisconsin and that have the potential to result in air emissions. The attached table lists these chemicals with their health effects and their most likely industrial uses.
  - Example of a company that emits Chrome VI (a newly added carcinogen) at levels exceeding 1 in 100,000 within a residential area.
- Setting health based (risk based) thresholds for carcinogens
  - Current NR 445 established thresholds based on whether the substance was a known or suspected carcinogen – which is not at all related to the potency of the substance

- Revising standards for 216 of the 438 currently regulated air toxics
  - 130 substances will have more stringent standards
  - 86 currently regulated air toxics will have less stringent standards.

Risk based compared to Fed Reg Standards

- Of the 576 chemicals, 107 apply only to manufacturers of pesticides or pharmaceuticals.
- Of the 576 chemicals, 361 are listed on the Toxics Release Inventory (63% are on TRI)

IMPROVES THE REGULATORY SYSTEM

- The current rule is rigid, confusing and too much administrative work that is not related to environmental gain

- Innovative approaches to reduce work for everyone (facilities and DNR staff) and that result in lower costs, improved compliance, better air quality, and increased regulatory certainty.

  - New compliance options for sources of carcinogens that allow them to determine for themselves how to manage their emissions so that they do not exceed the risk level (setting outcome based compliance options)

  - Most non-manufacturers and manufacturers with low levels of air emissions are only responsible for a short list of chemicals of concern (incidental emitters) *

  - Safe harbor for facilities if they exercise due diligence, promptly disclose and take timely corrective action if they later find that they have emissions of a NR 445 chemical that exceeds the emission standard.

Safe harbor ?? like the Self audit Envirn Improve-ment

- The revised rule makes it easier for the public to understand what chemicals are regulated and what the standards are.

- The revised rule clarifies the inter-relationship between the federal and state hazardous air pollutant regulations.

• State law says WI cannot be more restrictive than fed law, unless there is a specific finding

3. WHAT ARE THE POTENTIAL IMPACTS OF RULE REVISIONS?

WHO IS MOST LIKELY TO BE IMPACTED?

- Industrial sectors that are already regulated for air emissions
  - Printing and publishing
  - Pulp and paper
  - Foundries
  - Wood products
  - Chemical manufacturing
  - Coating and engraving
  - Food processing
  - Metal working

WHAT IS THE COST OF RULE REVISION?

- WMC Testimony at the NRB meeting: Listing so many chemicals puts an inordinate administrative burden on industry to determine whether or not they emit one or more of these chemicals, without measurable environmental benefit. WMC/Kestrel Analysis (based on industry workshops) concluded that there would be $100 million in initial additional administrative costs to industry. Their analysis assumes that 800 facilities already regulated under NR 445 will face an

90% of all co.'s in WI

* Incidental Emitters are the small companies

additional $36,800 in costs and that 423 facilities will be newly brought into the NR 445 regulations and will face a first-time administrative cost of $163,700.

- DNR Analysis (based on small business interviews by Dept. of Commerce and air emissions inventory data): $28 million in initial additional administrative costs to industry. This estimate groups sources into those that report emissions of 5 or more hazardous air pollutants, those that report emissions of fewer than 5 hazardous air pollutants, those that report air emissions but no hazardous air pollutant emissions, and incidental emitters. It assumes that the costs will be higher for those companies that use or handle larger numbers of potentially hazardous substances and uses the WMC/Kestrel average facility cost estimate for these companies. It also assumes that companies that submit annual air emission reports to the Department (most of whom also have air permits) have already established a basic management system and should not face a first-time administrative cost of $163,700 as a result of the NR 445 rule revision.

  The rationale for applying different average costs for different types of facilities recognizes that companies within Wisconsin have significantly different environmental footprints. In the WMC sample of 18 companies, 14 were regulated under NR 445, 15 had Title V federal air operation permits, and 17 reported to the federal Toxics Release Inventory. In contrast, in the Department of Commerce sample of 11 companies, 3 were regulated under NR 445, none had Title V federal air operation permits, and none reported to the federal Toxics Release Inventory. On average, these companies had an estimated $2,000 in initial additional administrative costs.

4. COST SAVINGS FROM THE REVISED NR 445

- The administrative streamlining provisions will result in significant cost savings that will benefit all companies that are or may be affected by NR 445. The most important of these are:
  - Incidental emitters
  - The ability to avoid permits for incidental changes in chemical usage (e.g., changing inks and coatings)
  - The ability to avoid the BACT/LAER engineering analyses, LAER variances, and installation of pollution control equipment
  - Due diligence/safe harbor protection

- Industrial boiler at a major manufacturer currently operating under a variance is expected to be able to demonstrate compliance under a revised rule by showing that risk at the property line is less than 1 in a million for arsenic. Under current rule, company must have the variance reviewed by the DNR every five years. Review includes detail engineering analysis, public health protection showing and public hearing.

- About half of the 26 foundries currently operating under NR 445 variances will either be able to stay below thresholds or demonstrate compliance by showing that risk at the property line is less than 1 in a million for benzene. Under current rule, companies must have the variance reviewed by the DNR every five years. Review includes detail engineering analysis, public health protection showing and public hearing. These 12 manufacturers employ between 70 and 250 people each.

- Paperboard mill currently has enforcement pending for noncompliance with existing rule. Source will be able to demonstrate compliance for formaldehyde by staying below threshold after minor modification to stack.

- A government agency needs to install new ethylene oxide sterilizers and is considering installing them on the roof of the building. Under the existing rule, they would need to either install control technology equipment or apply for a variance. Under the revised rule, their emissions would be below the risk-based threshold levels for ethylene oxide and they would be in compliance without installing control technology equipment or applying for a variance.

- Printers and others who use multiple coatings will be able to avoid construction permits for minor changes in their hazardous air pollutant emissions. In addition to the cost savings of about $1,000 per source, there are significant benefits in terms of reduced administrative costs, lost business opportunities, and lost time.

- The rule revisions will result in timesavings for DNR staff because of the decrease in number of permit reviews and the number of BACT/LAER reviews.

5. HOW WAS THE PUBLIC INVOLVED?

- Technical Advisory Group
- Many presentations and meetings
- Active web site
- Public hearings and comments
- Continued dialogue with stakeholders

OUTCOME
General consensus on many potentially controversial issues

- Risk based thresholds for carcinogens
- Most of the simplification and regulatory relief measures:
    - Incidental Emitters
    - Modeling compliance options
    - Definition of due diligence
    - Self-certification of compliance vs. re-opening permits

BUT… disagreement on other issues

- Scope of rule (too many chemicals are regulated vs. ignores health impacts from ingestion (e.g. mercury) and impacts from multiple sources)
- Risk levels too conservative vs. not protective enough

CHEMICALS BEING ADDED TO NR 445 THAT ARE LIKELY TO BE USED AND EMITTED BY INDUSTRY IN WISCONSIN

Chemical	Health Effects	Industry Uses
Yttrium (metal)	Pulmonary Fibrosis	Metal Alloys, Welding
Tantalum (metal)	Lung Toxicity, Respiratory Irritation	Metal Alloys, Welding
Vanadium Pentoxide	Irritation of respiratory system, eyes and skin. Inhalation of high concentrations may cause lung edema, bronchitis and bronchospasm.	Metal Alloys
Ferric Oxide	Pneumoconiosis	Welding, ferrous casting and smelting
Copper	Metal fume fever, gastrointestinal effects, respiratory irritation	Welding, brazing, metal casting
1,2-Epoxybutane	Irritation of respiratory system, eyes and skin. Exposure at high level could cause lowering of consciousness. May have effects on nervous system	Application of Urethane coatings and foams
Hexamethylene 1,6-Diisocyanate	Severe lung irritation; occupational asthma	Painting operations; metal coatings
Amyl acetate	Irritation	Acrylic lacquers, automotive enamels, epoxy coatings, polyurethane coatings
Triethanolamine	Irritation	Used in many cleaning compounds.
Graphite		Graphite powder is a component of a large number of industrial products. Emissions may occur in cases where abrasive action can release graphite
Strong inorganic acid mists containing sulfuric acid	Cancer	While sulfuric acid is a very common component of many industrial products and chemical mixtures, acid mists are usually created during the manufacture of fertilizers, chemicals and soaps, steel pickling, metal plating
Kaolin	Pneumoconiosis, fibrosis	Kaolin is a widely used additive to many paints, coating and refractory materials. Kaolin dust is most likely to be created during manufacture of another product or as a result of abrasive resizing of refractory materials containing kaolin.

Source: David Liebl, UW Solid and Hazardous Waste Education Center (SHWEC)

Looked @ which would end up as air emissions

(12) most common in industry in WI

Components Are Also New! 15

Cr (VI) Inhalation Risk

ESTIMATES OF FIRST YEAR ADMINISTRATIVE COSTS FOR IMPLEMENTATION OF NR 445 RULE REVISIONS

Facility Category		Administrative Costs for Initial Implementation of NR 445		
Air Emissions Reporting Status	**HAP Emissions**	**Cost Per Facility**	**Estimated Number of Facilities**	**Statewide Total Costs**
Sources reporting HAP emissions	5 or more HAPs	$25,000[1]	195	$ 4,875,000
	Less than 5 HAPs	$10,000[2]	586	$ 5,860,000
	Combustion Sources[3]	$ 2,000[4]	100	$ 200,000
Sources reporting emissions, but no HAP emissions	Incidental Emitters[5]	$ 2,000[4]	409	$ 818,000
	Non-incidental Emitters	$10,000[2]	654	$ 6,540,000
Sources that do not report emissions to the Air Emissions Inventory	Incidental Emitters[6]	$ 2,000[4]	1000	$ 2,000,000
TOTALS			**2944**	$20,293,000
SAVINGS	Variance Avoidance[7]	$30,000	50	$ (1,500,000)
	BACT Avoidance[8]	$20,000	200	$ (4,000,000)
NET COST[9]				$ 14,793,000

[1] $25,000 per source is based on WMC Workshop data. This figure represents the average cost estimated by the sources surveyed after removing costs estimated by 2 facilities that were much higher than the other 17. These outliers are 700% and 350% of the average cost estimated by all 19 facilities, respectively.

[2] $10,000 per source is based on WMC Workshop data, average cost of sources in the <$0 to $50,000 per source range plus an additional 50%. These sources represent approximately half of the sources surveyed by WMC, after removing the 2 outliers. It is expected that sources reporting less than 5 HAPs would incur, on average, costs that were no greater than this estimate.

[3] Combustion sources report HAP emissions, however these emissions are typically exempt from NR 445 regulations. In addition they are very easy to identify and quantify.

[4] Based on the Department of Commerce data for sources with few HAP emissions.

[5] These are sources that meet the criteria for Incidental Emitter status (less than 3 tons/year of volatile organic compound emissions and less than 5 tons/year of particulate matter emissions).

[6] All sources that do not currently report emissions to the inventory by definition will be incidental emitters. This is a conservative estimate of the number of sources that may have minimal air emissions and would need to evaluate their use of chemicals. This is based on the approximately 3000 sources that the DNR notifies annually for reporting toxic releases to the air, water and land.

[7] The savings from LAER variance avoidance include the detailed engineering analysis, public health protection showing and public hearing. It does not include control technology costs.

[8] The savings from BACT avoidance include the detailed engineering analysis. It does not include control technology costs.

[9] The EPA analysis of the burden hours for the Toxics Release Inventory Program estimated a first time burden for companies reporting on Form R (the more complex form) of $6,091 and for companies reporting on Form A (the simpler form) of $5,058. If one assumes the cost for incidental emitters and combustion sources to be $5,000 instead of $2,000, the total net cost comes to $31,561,000.

Note: These are first year costs only. The subsequent year costs will be substantially lower – on the order of 2 to 10 times less.

ESTIMATES OF FIRST YEAR ADMINISTRATIVE COSTS FOR IMPLEMENTATION OF NR 445 RULE REVISIONS

Facility Category		Administrative Costs for Initial Implementation of NR 445		
Air Emissions Reporting Status	**HAP Emissions**	**Cost Per Facility**	**Estimated Number of Facilities**	**Statewide Total Costs**
Sources reporting HAP emissions	5 or more HAPs	$37,000[1]	195	$ 7,224,250
	Less than 5 HAPs	$25,000[2]	586	$ 14,643,750
	Combustion Sources[3]	$ 2,000[4]	100	$ 200,000
Sources reporting emissions, but no HAP emissions	Incidental Emitters[5]	$ 2,000	409	$ 818,000
	Non-incidental Emitters	$12,500[6]	654	$ 8,175,000
Sources that do not report emissions to the Air Emissions Inventory	Incidental Emitters[7]	$ 2,000	1000	$ 2,000,000
TOTALS			2944	$ 33,061,000
SAVINGS	Variance Avoidance[8]	$30,000	50	$ (1,500,000)
	BACT Avoidance[9]	$20,000	200	$ (4,000,000)
NET COST[10]				$27,561,000

← DNR feels this is realistic

[1] Based on WMC Kestrel Analysis of average incremental first year costs for sources already regulated under NR 445

[2] Close to the WMC/Kestrel average without the two outliers, who are unlikely to be representative of facilities with fewer than 5 reported HAPs.

[3] Combustion sources report HAP emissions, however these emissions are typically exempt from NR 445 regulations. In addition they are very easy to identify and quantify.

[4] Based on the Department of Commerce data for sources with few HAP emissions.

[5] These are sources that meet the criteria for Incidental Emitter status (less than 3 tons/year of volatile organic compound emissions and less than 5 tons/year of particulate matter emissions).

[6] The conservative assumption is that the average cost per facility that currently reports no HAP emissions would be half of the cost of sources that currently report HAP emissions. Many may emit no HAPs and would thus have no costs; others may emit HAPs and incur costs. However, it is assumed that they have established at least a basic management system for air emissions because they needed to check for compliance with the existing NR 445, they report their emissions annually, and most have an air permit.

[7] All sources that do not currently report emissions to the inventory by definition will be incidental emitters. This is a conservative estimate of the number of sources that may have minimal air emissions and would need to evaluate their use of chemicals. This is based on the approximately 3000 sources that the DNR notifies annually for reporting toxic releases to the air, water and land.

[8] The savings from LAER variance avoidance include the detailed engineering analysis, public health protection showing and public hearing. It does not include control technology costs.

[9] The savings from BACT avoidance include the detailed engineering analysis. It does not include control technology costs.

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Note: These are first year costs only. The subsequent year costs will be substantially lower – on the order of 2 to 10 times less.

* Note: No Farm/Ag Group on committee

Participants in the NR 445 Rule Revision Process

In recognition of their exceptional effort, the Department would like to acknowledge those Technical Advisory Group (TAG) and non-TAG members who regularly participated in the TAG meetings or in TAG Working Groups, or both. We apologize if we have inadvertently omitted anyone.

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