RE: REQUEST TO VETO SENATE BILL 1244 REGARDING REVISIONS TO THE STATE CLEANUP PROGRAM AND CLEANUP CRITERIA

Dear Governor Snyder,

We are writing as concerned citizens of Michigan who also happen to be Michigan Department of Environmental Quality (MDEQ) employees with extensive knowledge of the cleanup program and the development of cleanup criteria. We are advocates for all Michigan's citizens who rely on the MDEQ to ensure they are safe from contact with soil, water and air that has been contaminated from chemical releases to the environment. Neither the department nor Michigan's citizens has had a voice during negotiation of these amendments.

In 2016, after contamination of Flint's drinking water, you sent a letter to all state employees that included the following language:

> ***"The people of Michigan are relying on you to continue the hard work you are doing on their behalf around the clock every day."***
> ***"I am also relying on you to raise to the highest levels, including my desk, any situation that you feel threatens the health or safety of the people of Michigan. Together, through our continuing commitment to doing the right thing, we can restore people's trust in government."***

Your message has been used as one of our guiding principles as we strive daily to make the best decisions to fulfill our statutory obligations to protect the health and environment of all Michigan's citizens. We believe you were sincere in your message and as a result, we want to raise to your attention the cleanup program amendments that threaten the health and safety of the people of Michigan.

The amendments were developed by members of the regulated community and benefit companies that are responsible for the contamination of many properties in Michigan. The amendments are based solely on the cost of cleanups for those companies and have no basis in the protection of health and the environment. The amendments represent the issues the regulated community stakeholders (representing manufacturing, utility and chemical industries) has advocated in the stakeholder processes held by the MDEQ for the past several years and do not represent recommendations of other stakeholders or agreements reached during the stakeholder process. Over the past several years, many issues were addressed by the department in the spirit of compromise, collaboration and promise of long-term funding support. When they were unable to convince other stakeholders and the department that their recommendations were based on sound rationale, the best available science and in the best interest of Michigan's citizens, this special interest group took their issues to the legislature. There is nothing in the proposed legislation that represents "consensus" of all or most stakeholders.

As public servants charged with protecting current and future Michiganders, it is our position that the agency and your office cannot negotiate away protection of public health and the environment to resolve the regulated community's concerns and for the promise of funding. If the amendments are not vetoed, state employees will be placed in the untenable position of defending and implementing a state statute that is not defensible and does not meet the constitutional mandate for the legislature to pass suitable laws protective of the public health and provide for protection of the air, water and other natural resources from pollution, impairment and destruction. Michigan's citizens, believing that the department and their elected officials have their best interest at heart, will have a false sense of security at best and at worst, their health and the environment will be impaired and the cost of cleanups in the future will become their burden as well as the burden of their children and grandchildren.

The amendments will make many of the cleanup criteria <u>less protective</u> than the current criteria which, with a few exceptions, are based on scientific information published before 1998. Implementation of

the amendments will result in criteria based on outdated science for some of the most toxic substances commonly existing in the environment. This will allow the contamination that these companies released to remain in place without any type of warning for anyone, current or future generations, who has the potential to be exposed to the unacceptable risks. Details regarding why the amendments are not protective and are not consistent with inclusive stakeholder recommendations are provided in the attachment.

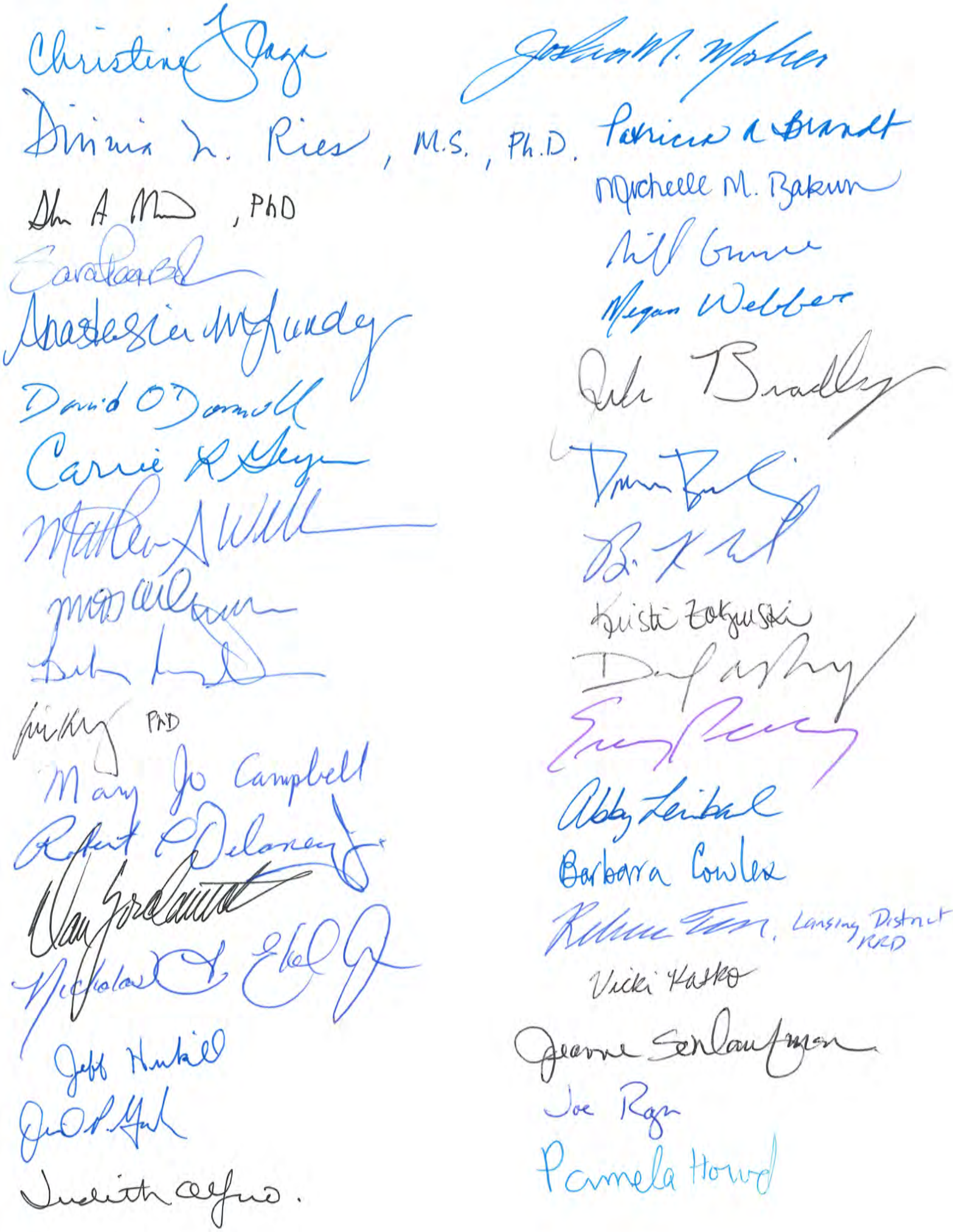
Historical industrial uses throughout the state have resulted in a disparate amount of contamination in the most industrialized areas where populations face socio-economic challenges. The results of these amendments will mean leaving behind additional contamination that represents risks to those citizens. This does not meet the expectations of the Environmental Justice Work Group Report or your goal of ensuring that every Michigander has the same protection from environmental hazards. Instead the amendments will further contribute to existing health disparities in these communities.

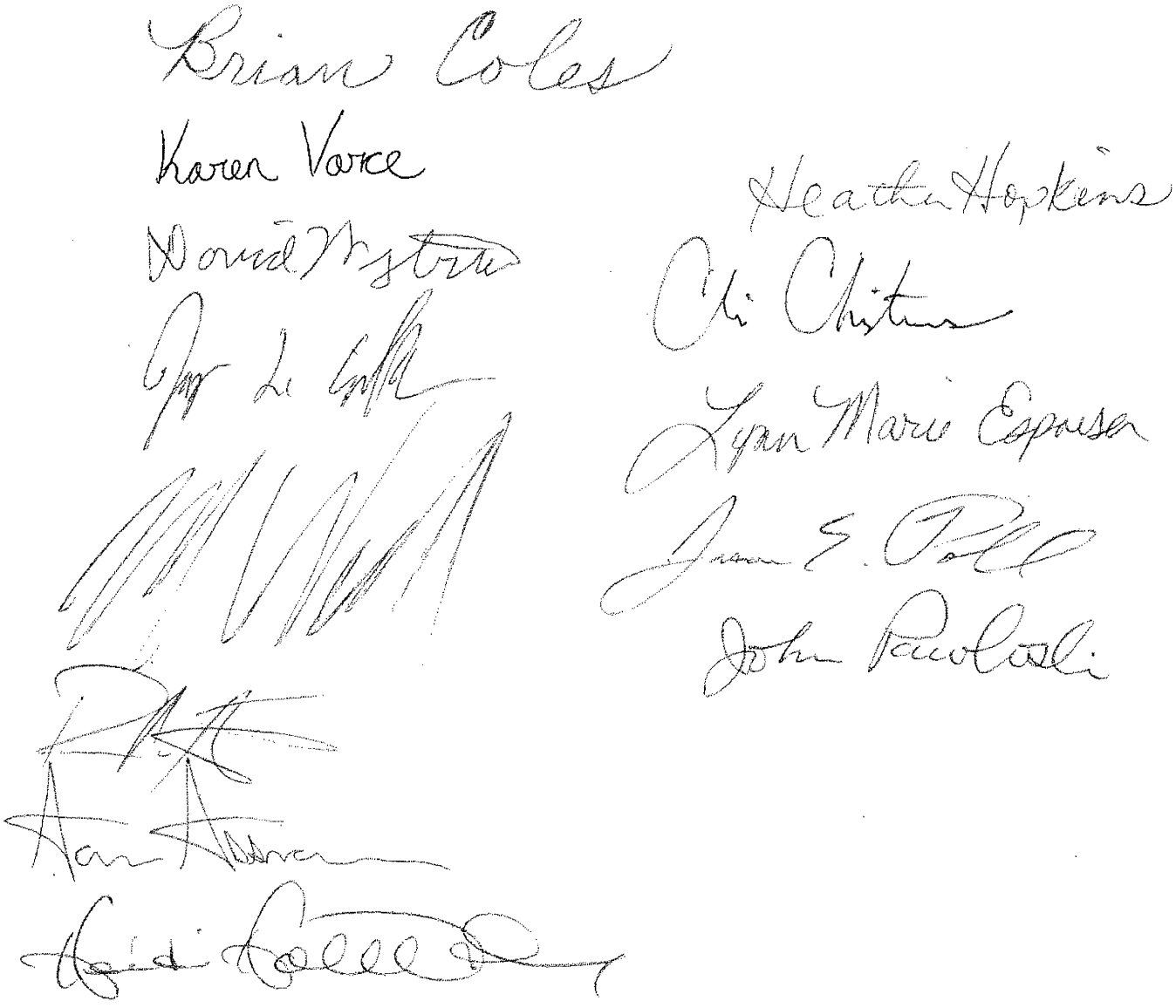
We understand that political bartering is occurring in attempt to garner additional support for long-term funding for the department including the cleanup program. A House Substitute to SB 1244 has been prepared but not publicly distributed. A version of these amendments has been provided to MDEQ staff. The proposed revisions do not address our concerns. Although appearing to incorporate language allowing greater flexibility to the department, the revisions establish requirements that the MDEQ will not be able to meet. The language also creates uncertainty in implementation that will only further delay cleanups and the protection of public health and the environment.

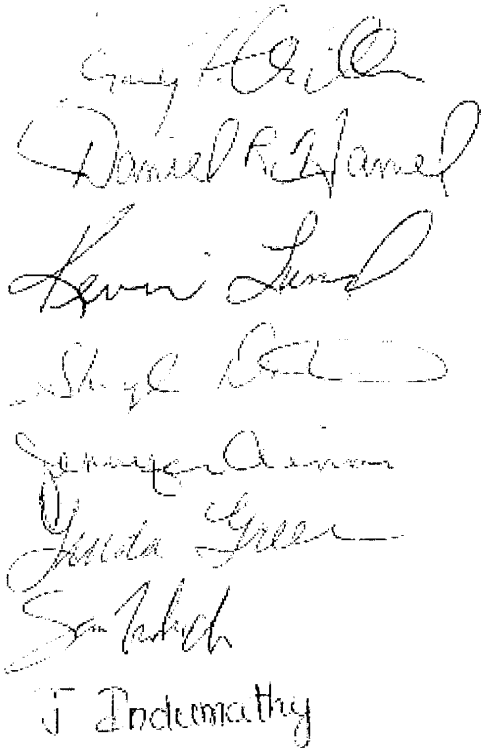
There have been six statutory changes in the last eight years to the cleanup program that have been "traded" for support of future funding that has yet to materialize. Funding to manage risks at sites with no viable liable party is vitally important for the protection of public health and the environment. Even if funding becomes available, having funds to manage risks based on criteria that are not protective defeats the purpose of the cleanup program.

In addition to the potential health effects associated with embedding unprotective criteria in law, the amendments also create an overwhelming financial burden on the current and future citizens of Michigan. Allowing companies responsible for contamination to leave unacceptable concentrations unbated in the environment today shifts the burden of addressing risks from that contamination on the public. During your governorship and as part of Michigan's reinvention, you have strived to ensure fiscal responsibility for future generations. Over the last few years, you have supported and requested supplemental funding for the MDEQ to address emerging contamination, vapor intrusion, and contaminants in the public water supply. As science evolves and future generations of Michiganders understand more about exposure to contaminants and their effects on health and the environment, funding needs for legacy contamination will continue to increase. Signing the amendments will have far reaching effects not just on the physical, but also on the financial health of our state.

Please help us fulfill our ethical, moral, and constitutional obligations as public servants to protect public health and the environment and cement your legacy for fiscal responsibility by vetoing these amendments. Thank you for your consideration.




Brian Coles
Karen Vorce
Heather Hopkins
Lynn Marie Esposito
John Paviolitis



ATTACHMENT - DETAIL REGARDING WHY THE AMENDMENTS ARE NOT PROTECTIVE AND ARE NOT CONSISTENT WITH INCLUSIVE STAKEHOLDER EFFORT RECOMMENDATIONS

PROPOSED AMENDMENTS REGARDING DEVELOPMENT OF CLEANUP CRITERIA

A. SECTION 20120a(3)(A) SELECTION OF TOXICITY VALUE INPUTS

Use of outdated United States Environmental Protection Agency Integrated Risk Information System (US EPA IRIS) toxicity values prevents the MDEQ from using the best and most current toxicity information available. Stakeholders from the regulated community have insisted that IRIS represents the gold standard for toxicity information even if the IRIS value is decades old (i.e., has not been updated), the IRIS review resulted in no toxicity values due to the lack of sufficient information at the time, and new more protective toxicity information is available in the scientific literature. Use of IRIS as required in the amendments results in

- Criteria that do not protect for the most sensitive harmful effect for all exposure pathways [Section 20120a(4)].
- Inconsistent public health protection and risk information between the MDEQ and the Michigan Department of Human Health Services required by the Public Health Code.
- Inconsistent regulation of substances for inhalation risks between MDEQ's Air Quality Division (AQD) and Remediation and Redevelopment Division programs.
- The absence of criteria (when MDEQ cannot use available non-IRIS toxicity values) for substances known to exist in the environment will lead to unnecessary risk to exposed populations.
- Use of IRIS toxicity values that the MDEQ cannot defend as representative of the best available scientific information or being health protective.
- Situations like PFAS contamination where current studies are under review by the state's scientific experts, but criteria revisions are not allowed until studies are incorporated into IRIS.
- Inconsistencies with US EPA application of IRIS in developing federal regional screening levels. In the absence of IRIS toxicity values, even where IRIS identified insufficient data are available to develop the toxicity value, the US EPA has adopted alternative toxicity values for regional screening levels for some hazardous substances recognizing the limitations of the outdated data and that more current and relevant data are available
- Implementation would be inconsistent with inclusive stakeholder recommendations that require a demonstration that IRIS represents the best available information.

Chemical-specific Examples of Preferential Use of IRIS Results

Ethylbenzene is a component of petroleum products and a solvent in many common products. *Use of IRIS, which has no cancer toxicity value, means the MDEQ could not develop criteria protective of cancer effects.*

- IRIS (1988) does not identify oral or inhalation cancer toxicity values because cancer data were not available in the scientific literature at the time of their assessment.
- The National Toxicology Program published the findings of a cancer study in 1999.
- California EPA (CALEPA) cancer toxicity values are used by US EPA to develop the federal regional screening levels recognizing the use of the IRIS data in this situation is not protective.
- The International Agency for Research on Cancer identifies ethylbenzene as a carcinogen.
- MDEQ AQD developed an inhalation cancer value and uses it to develop an air toxics screening level.
- MDEQ Water Resources Division developed an oral cancer value and uses it to develop water quality values.

Hexavalent chromium (CrVI) is a highly toxic metal and a common environmental contaminant used in many industrial applications, including electroplating. *Use of IRIS, which has no cancer toxicity value, means the MDEQ could not develop criteria protective of cancer effects.*

- IRIS (1998) does not identify an oral cancer toxicity value because the cancer data were not available in the scientific literature at the time of their assessment.

- EPA uses the CALEPA cancer value to develop the federal regional screening levels, recognizing the use of IRIS data in this situation is not protective.
- The International Agency for Research on Cancer identifies CrVI as a carcinogen.
- US EPA identifies CrVI as a mutagenic carcinogen in the Regional Screening Level tables.

Cadmium is a highly toxic metal used and released from the following processes: pigment production for paint, plastics, and inks and in electroplating processes. *Use of the IRIS toxicity value, rather than a more current evaluation of its toxicity, means the soil direct contact criteria would be less protective.*

- IRIS (1994) derived an oral toxicity value based on a 1985 toxicity study.
- The Agency for Toxic Substances and Disease Registry (2012) includes evaluation of more recent studies that were not available at the time of the 1994 IRIS assessment and used a more contemporary approach for deriving the toxicity value.

1,2,4-Trichlorobenzene: *Use of IRIS (1991) means the department could not regulate this chemical as a carcinogen because the IRIS file does not provide an oral cancer slope factor (CSF) due to the fact that the studies had not yet been conducted.*

- An oral CSF has been derived subsequent to the IRIS evaluation by US EPA Provisional Peer Reviewed Toxicity Values (2009).
- This CSF is used by US EPA to develop cancer-based federal regional screening levels, recognizing the use of IRIS data in this situation is not protective.

The use of the toxicity hierarchy as required by the amendments will limit the ability of the MDEQ to develop generic criteria to protect for substances known to cause human health effects with short-term exposures. This would be the result because the vast majority of the toxicity values available from these sources are based on chronic, or long-term exposures.

- This results in generic criteria that do not protect for the most sensitive harmful effects [Section 20120a(4)].
- This is inconsistent with MDEQ's Toxics Steering Group recommendations for inhalation screening levels that were approved and have been implemented by MDEQ and DHHS Executive Management.

B. SECTION 20120a(3)(B) SELECTION OF CHEMICAL OR PHYSICAL VALUE CLEANUP CRITERIA INPUTS

This requires the MDEQ to use measured data regardless of the quality of the data. The MDEQ potentially would not be able to rely on high quality estimated data if poor quality measured data are available.

C. SECTION 20120a(3)(C) USE OF DAILY EXPOSURE TIME FOR NONRESIDENTIAL WORKER

The current nonresidential inhalation criteria are based on a 12-hour worker exposure. The amendments require the use of an <u>average</u> number of hours, not to exceed 10 hours, according to the most appropriate governmental data or information. This reduction in hours results in inadequate protection of public health for the majority of workers.

- A generic risk assessment goal is protection of 95% of the exposed population. Use of an AVERAGE number of work hours does not represent a reasonable maximum exposure value (as recommended by US EPA guidance) and leaves 50% of the worker population unprotected.
- At face value the 10-hour work day seems conservative. However, the use of a 10-hour exposure time is not based on any supporting data and conflicts with Michigan-specific employment census data that supports the use of 12 hours.

D. SECTION 20120a(3)(D) LIMITS THE USE OF PREGNANT WOMEN AS SENSITIVE RECEPTOR TO ADDRESS PRENATAL DEVELOPMENT EFFECTS UNLESS US EPA DETERMINES IT IS WARRANTED FOR FEDERAL REGIONAL SCREENING LEVELS

This provision prevents the MDEQ from protecting pregnant women and their unborn children since US EPA does not have a process to establish federal regional screening levels based on a prenatal receptor.

- This is inconsistent with inclusive stakeholder recommendations.
  - The 2012 Inclusive Stakeholder Process recommended that a child be the receptor for residential exposure to noncarcinogens. The MDEQ Director, to garner support for future funding and based on regulated community objections, determined that the department would not pursue this recommendation. If a child receptor had been allowed, the criteria would have been more protective and the need to address developmental toxicants would be less important.
  - One of the fundamental guiding principles developed as part of the 2014 inclusive stakeholder process was that cleanup criteria need to be protective of public health and natural resources such that there are no unacceptable exposures to hazardous substances. In addition, the criteria must be protective of the most sensitive toxic effect, which is a statutory mandate that remains unchanged by the amendments. Recommendations specific to developing a process to address documented developmental or reproductive effects were provided to the MDEQ and implemented.
- MDEQ requested review from US EPA of the process and received acknowledgement that determined the approach was consistent with US EPA guidance on assessing risks for developmental toxicants.
- The amendments not only disregard the science and US EPA concurrence of the proposed process to address the risk, it is a step that makes future criteria less protective for 27 hazardous substances that currently have criteria developed based on developmental effects.

E. SECTION 20120a(20) Authorize use of toxic equivalency factors (TEF)

This provision determines without any scientific basis that the harm from commingled dioxins, furans, and PCB-like dioxin and furans is divisible in all instances. This is inconsistent with the requirements for divisibility of harm and apportionment of liability under Section 20129(1). It requires there be a reasonable basis for division of harm according to the contribution of each person and that a person seeking to limit liability on the grounds that the entire harm is capable of division has the burden of proof as to the divisibility of the harm and as to the apportionment of liability.

F. SECTION 20120a(21) DIOXINS AND FURANS ARE NOT LIKELY TO LEACH
SECTION 20120a(22) DIOXINS AND FURANS ARE NOT LIKELY TO VOLATILIZE FROM SOIL OR GROUNDWATER

The determination that dioxin and furans are not likely to leach is not supported by US EPA and should be consistent with how the determination is made for all other hazardous substances to develop numeric criteria where data are available. This provision places the burden on the MDEQ to demonstrate unacceptable leaching is occurring. A person can conduct leach testing to demonstrate that these substances are not leaching. This demonstration should remain the responsibility of the person responsible for the contamination.

G. SECTION 20120b(4) SITE-SPECIFIC CRITERIA APPROVED BY THE MDEQ ARE NOT INVALIDATED BY SUBSEQUENT CHANGES TO THE GENERIC CRITERIA

The provision allows site-specific criteria once approved by the MDEQ to not be invalidated even when there are changes in the toxicity, exposure or other factors used to develop generic criteria that would result in the site-specific criterion not being protective of public health, safety, welfare or the environment. This is inconsistent with the provisions that address the potential liability for an approved no further action report based on such site-specific criteria.

<u>PROPOSED AMENDMENTS THAT AFFECT RISKS FROM THE VOLATILIZATION TO INDOOR AIR PATHWAY</u>

A. SECTION 20120f(1) OPTIONS FOR A PERSON TO EVALUATE, ADDRESS AND MANAGE VAPOR INTRUSION

The amendments authorize a person to self-implement to evaluate, address and manage vapor intrusion. These options do not include sufficient requirements and/or MDEQ oversite to assure protection of public health.

- The guidance documents that are incorporated by reference simply outline processes for evaluation, addressing and managing vapor intrusion. The processes do not provide regulatory obligations that can be enforced to assure the application of that the results are protective of public health.
- The processes do not adequately address Michigan's shallow groundwater and basement construction that does not provide sufficient separation distance for contamination to attenuate, underestimating the potential risks to public health.
- Allowing indoor air sampling to demonstrate compliance with applicable indoor air inhalation generic criteria would require the MDEQ to develop criteria for a medium the MDEQ does not have authority to regulate. The observed variability of indoor air samples also increases the likelihood of unacceptable risks remaining unaddressed.

B. SECTION 20120f(2) INDOOR AIR INHALATION PATHWAY IS ONLY A REASONABLE AND RELEVANT PATHWAY IF THERE IS AN EXISTING OR PLANNED OCCUPIED BUILDING

This provision allows contamination to remain in place without adequate protections for future property uses that may include additional construction or exposures.

- If the pathway is determined adequately addressed for existing buildings and exposures there may be no means to trigger further evaluation for future uses.
- This is inconsistent with the provisions of Section 20102 that states "the liability for response activities to address environmental contamination should be imposed upon those persons who are responsible for the environmental contamination" and is inconsistent with the statutory provisions that address the potential liability for an approved no further action report.

PROPOSED AMENDMENTS THAT BENEFIT REGULATED COMMUNITY AT THE EXPENSE OF PROTECTION OF PUBLIC HEALTH, SAFETY, WELFARE AND THE ENVIRONMENT

A. SECTION 20120a(17) GENERIC CLEANUP CRITERIA APPLICATION TO SUBMITTALS

This provision allows the use of previous criteria if approved in any prior submittal unless the MDEQ Director demonstrates on a site-specific basis the use of the previous criteria is no longer protective of public health, safety or welfare or the environment. The use of the criteria at the time of any previously approved submittal allows self-implementation of activities with no requirement for subsequent submittal for further MDEQ approval that could trigger the Director's demonstration that the criteria remain protective. Cleanups often span generations, resulting in approvals early in the process that could result in exposures to unacceptable levels of contamination for decades.

B SECTION 20114d NFA REPORT REQUIREMENTS

The removal of the concept that an NFA Report is only appropriate when remedial action is complete would trigger the statutory liability protections for approval of an NFA Report prior to remedial action being complete and place the burden on the MDEQ to document conditions exist that require further action for protection of public health, safety, or welfare and the environment.

C. SECTION 20114e EXPANSION OF THE SCOPE OF MDEQ DECISIONS THAT THE RESPONSE ACTIVITY REVIEW PANEL MAY REVIEW

The expansion of the scope of MDEQ decisions that the Response Activity Review Panel may review broadens the exception to the pre-enforcement bar, allowing litigation rather than remediation while contamination that may pose a risk to public health and the environment remains in place.