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STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING



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**Air Toxics Workgroup (ATW)
Meeting Summary
August 1, 2013**

Members Present:

James Clift, MI Environmental Council	Bob Sills, AQD
Kim Essenmacher, GM	Brad Venman, NTH
Kory Groetsch, MDCH	Carrie Houtman, Dow Chemical Co. (phone)
Stuart Batterman, UM	Greg Ryan, DTE Energy
Joy Taylor Morgan, AQD, Facilitator	John Caudell, Fishbeck Thompson Carr & Huber
Steve Kohl, Warner Norcross & Judd (phone)	
Cindy Smith, AQD, Permit Unit Supervisor for Mary Ann Dolehanty	

Members Absent:

Mary Ann Dolehanty, DEQ and Brad van Guilder, Sierra Club

Guests/Observers Present:

Andy Such, Michigan Manufacturers Association; Mike Depa, AQD; Teresa Seidel, AQD Supervisor of Field Operations; Tracey McDonald, AQD, SIP Unit; Mary Maupin, AQD, SIP Unit Supervisor; Erica Wolf, SIP Unit; and Chris Flaga, Toxics Unit Supervisor of Remediation and Redevelopment Division.

Summary

The meeting began with the Facilitator informing the Members that Bob Sills gave an ATW summary presentation to MEC members on July 31, 2013 and that his power point will be posted to the ATW Web Site. The Facilitator said that although 8/1/13 was the deadline in their official charge, she had heard from some Members that they would like some additional time to review the draft discussion papers. They would like to see as detailed language as possible before they could vote and agree on the last remaining issues. The Facilitator stated that she had spoken with AQD management and they agreed that another meeting could be held, but that the meeting process should end by 10/1/13. The Workgroup was agreeable to this proposal. Therefore, another meeting will be scheduled for September to discuss the draft final Workgroup report, draft rule language, and final recommendations.

Andy Such then stated that his members were not comfortable voting on language that is not specific, similar to what the rule language might actually look like. The Facilitator said that the Workgroup should be able to accomplish this and thought they should first start discussing the A-1(2) Meaningful Change recommendation.

A-1(2) Meaningful Change

The Facilitator began the discussion by presenting the summary language that was shared with the group in an email prior to the meeting.

Bob then gave an overview of the 7/30/13 Meaningful Change updated draft Discussion Paper. Although the ORR report recommendation was for an exemption from toxics analysis (R 225) for permitting relatively small changes in air toxics emissions at existing sources that are not "meaningful," it is the opinion of the AQD staff and at least some of the Members that the most

effective program streamlining would be to clarify and support the Rule 285 exemption from permitting for such circumstances. If that can be accomplished and the R 285 exemption process is retained, then a separate exemption from R 225 would not be particularly needed for streamlining the permitting program. Bob reiterated that AQD supports clarifying and retaining the R 285 meaningful change exemption for air toxics, with some adjustments and with the addition of key definitions in the rules. The criteria pollutant aspects of the R 285 exemption need to be worked out between AQD and EPA, and are outside the scope of this Workgroup.

The 7/30/13 redraft of the discussion paper proposes to focus on only the future listed TACs in the proposed change in emissions, although a baseline Hazard Potential (HP) can be based on non-TACs as well as TACs. Further, it is proposed that changes that may have occurred in SLs since the baseline HP was established should not affect the validity of that baseline HP. This and other circumstances are shown in Examples that have been added to the discussion paper. It is also proposed that carcinogens and noncarcinogens be kept separate in the HP comparison procedure. Members stated that they needed more time to review the redraft and the Examples, and some Members were interested in evaluating more data and situations. One Member thought that additivity should be accounted for in the HP for compounds with a common mode of action.

Bob mentioned that we are getting AQD District staff review and input on the approach, since the AQD district inspectors will be the staff that primarily utilize the rule and will be responsible for evaluating compliance. Therefore the draft definitions for the rules, and an accompanying AQD Policy and Procedure should be very clear, for staff as well as the regulated community.

In the Discussion Paper it describes that there will not be a floating baseline, and no grandfathering will be allowed. For example, it is proposed that if a permit was issued before the air toxics rules were promulgated on 4/17/92, then those air toxics emissions cannot be relied on by the source for establishing the baseline for an HP calculation for the R 285 exemption.

For the evaluation of a "Meaningful change in the quantity and nature," a Member stated a concern that if a baseline is set for a chemical and SL, and then that SL is subsequently reduced, then a proposed process change could be inappropriately exempted based on comparison to that old higher SL. Since the level of protectiveness is not current, the Member reasoned, then the reliance on that baseline is not legitimate and the exempted HP increase could actually be much greater than 10%. Bob stated that he did not believe that the HP calculation procedure would have that unintended result. The emission estimates that form the basis for the baseline permit application and review establish a level of acceptability under the air toxics rules. When a proposed change is considered, the HP comparison is utilized as a surrogate for modeling. Even if the SL used in the baseline situation has decreased, the original SL and modeling assessment still relates the emission rate to an acceptable impact. This finding should mean that the baseline HP is still legitimate, even if the SL has since been lowered. However, this needs to be better explored in detail in some examples, so that all can see how it would work and ensure that the HP comparison appropriately limits exemptions to small increases.

For the evaluation of a "Meaningful increase in the quantity of the emission," a Member asked how this would work if the substance had a change in the SL over time. For example, if the SL decreased significantly, it does not seem appropriate to allow an exemption for up to a 10% increase in the emission rate. Bob said that would be a concern, and we haven't yet developed examples to show how it should be handled; that will be done next for Workgroup review.

Another Member asked if we could run an example using xylene, which has had a significant SL change.

The HP was described as being different from a hazard index or hazard quotient, and, the units in the calculations should be consistent but otherwise are not really meaningful. The HP does not relate to a specific level of hazard or risk; it is simply the ratio between the emission rate and the SL for a specific emission.

A Member had a concern that companies could perform their own meaningful change calculations and take the exemption without DEQ review or approval. Another Member noted that companies do so at their own risk of retroactive enforcement, and they do get inspected, therefore there is a strong incentive for companies to apply the exemption carefully and correctly, and there is a potential check by DEQ.

A Member suggested that AQD could provide a standard template for performing the meaningful change calculations, to promote consistency and clarity. Another Member suggested that the rules should contain as much detail as possible, therefore reducing the remaining details to appear in a Policy and Procedure document.

The proposed definition of the key terms stated that a change that is not meaningful should not cause an exceedance of odor thresholds in the ambient air, among other things. Bob stated that the process changes could result in odor issues, and we might not find out about the odor issue until it is a problem. The proposal does not include calculating an HP for odors. Inclusion of this language raised concerns for several Members. It was mentioned that a lot of compounds don't have published odor threshold data. Further complicating this, unexpected chemical reactions or transformations could cause odor problems. Several Members disagreed with involving odor assessment as a regulatory tool in permitting, including exemptions from permitting; R 901 addresses odor problems, and exemptions do not allow a public nuisance. The Workgroup agreed that the odor language should be removed from the proposed definitions that would appear in the rules, but that the Policy and Procedures document should state that odors could potentially be an issue with the process changes, that odor impacts should be considered as appropriate, and that R 901 would apply.

It was suggested that DEQ staff develop a table for the "Meaningful Change Discussion Paper" that summarized the examples, HP and risk or SL to help understand the issues.

The language with the generally agreed upon changes at the meeting was as follows: (without yet having a formal consensus vote on the recommendation)

A-1(2) Meaningful Change

"The ATW recommends that the AQD clarify Rule 285 permit exemptions for relatively small changes in air toxics emissions for existing processes by adopting the definitions and procedures described in the July 30, 2013 ATW discussion paper on this issue.

Additional detail for A-1(2):

These small changes in air toxics emissions will be considered a change that is less than "meaningful". Both a "meaningful increase in the quantity of the emission" and a "meaningful change in the quality and nature" of emissions will be defined in the AQD's Part 2 Rules. The proposed definitions continue the AQD policy and practice of considering air toxics emission increases or hazard potential (HP) increases of less than 10% as not meaningful for purposes of

the Rule 285 exemption. A policy and procedure document should clarify that the applicant shall consider odor impacts as appropriate.

“Meaningful increase in the quantity of the emission” means an increase in the potential to emit (hourly averaging time) of a toxic air contaminant that is 10% or greater compared to a baseline potential to emit, or which causes an exceedance of a permit limit. The baseline is the potential to emit established in an approved PTI application on or after 4/17/92 that has not been voided or revoked, unless it has been voided due to incorporation into a renewable operating permit.

“Meaningful change in the quality and nature” means a change in the toxic air contaminants emitted that results in an increase in the cancer or noncancer hazard potential that is 10% or greater, or which causes an exceedance of a permit limit. The hazard potential is the value calculated for each toxic air contaminant involved in the proposed change, before and after the proposed change, and it is the potential to emit (hourly averaging time) divided by the IRSL or the adjusted annual ITSL, for each toxic air contaminant and screening level involved in the proposed change. The adjusted annual ITSL is the ITSL that has been adjusted as needed to an annual averaging time utilizing averaging time conversion factors in accordance with the models and procedures in 40 C.F.R 51.160(f) and Appendix W adopted by reference in R 336.1299. The percent increase in the hazard potential is determined from the highest cancer and noncancer hazard potential before and after the proposed change. The potential to emit before the proposed change is the baseline potential to emit established in an approved PTI application on or after 4/17/92 that has not been voided or revoked, unless it has been voided due to incorporation into a renewable operating permit.”

A-1(6) TAC List

The Facilitator presented three summary paragraphs that were distributed by email prior to the meeting for discussion. The proposed draft recommendation language was discussed and modified as follows:

“In order to rationalize the list of TACs while still assuring protection of the public health, it is recommended that the AQD pursue development of rules to implement the approach described in the May 13, 2013 draft discussion paper to establish a defined list of TACs subject to R 225, (while otherwise retaining the authority to address other air toxics of concern on a case by case basis in a specific PTI application under a modified R 228), and with the authority to add and delete from the list based on the application of the same criteria described in the May 13, 2013 discussion paper for establishing the list (i.e., proposed additions would be carcinogens and air toxics that would have ITSLs lower than the 75th %tile SL cutoff values that are reasonably anticipated to appear in a PTI application.

Rule development will also provide that the proposed initial TAC list and basis for each SL should be public noticed for comment. The rule will define the procedure for posting for public comment the initial list and initial SLs, any proposed additions/deletions to the TAC list, and any proposed changes to the SLs. The agency should have the authority to immediately implement those changes prior to public comment (as necessary to address significant issues in permit applications while not slowing down the permitting process). Aggrieved parties should have the ability to request AQD to review the basis for a listing or an SL. Justifications for the SLs should be posted on the AQD web site. The justifications should indicate the date of the SL derivation, the algorithm used, the

uncertainty factors used, a brief description of the key studies or information sources for the SL, and citations for those key studies and information sources.”

The AQD should adopt rule language to give assurance that only reliable studies will be utilized in deriving screening levels, such as the following adaptation of the DEQ RRD’s current rule definition for “Best available information,” which “...means, when used in relation to a risk assessment or the development of screening levels, the most scientifically credible and relevant data available for a particular air contaminant. Such information may include, but is not limited to, any of the following:

- (i) The peer reviewed scientific literature.
- (ii) Information sources recognized by the risk assessment community, such as the integrated risk information system maintained by the USEPA or other scientifically reliable databases.
- (iii) Other scientific studies acceptable to the department.”

Regarding the last paragraph, a Member stated that the overall approach seems backwards, to remove over 250 TACs (with default ITSLs) from the list, and to require much scientific evidence for listing. That Member supports the status quo with the retention of the default SLs and the listing of those air toxics. Another Member also had a concern that the proposed TAC list excluded substances with default ITSLs. The Facilitator noted that this comment on the default value would affect the previous agreed upon language for recommendation A-1(7) (AQD should be consistent with nearby states). Another Member pointed out that this is a huge philosophical issue: whether something should be regulated when there is no evidence of harm; such regulation would be arbitrary because there is no rational basis for regulation. Other Members felt that, in the absence of sufficient chemical-specific toxicity data, decisions on whether to regulate substances should consider persistence, bioaccumulation, hazards, listing by other agencies, or structure-activity relationships. Staff responded that substances will be evaluated using the best available information, whether they appear on the TAC list or using the authority under R 228 for non-TACs. A Member agreed that permit applications would continue to identify all air contaminants in proposed emissions, and the AQD would retain authority to safeguard the public health for non-TACs.

A Member distributed draft rule language that included a provision for a contested case review. AQD staff asked if that was considered an important provision, given that there are other ways for parties to interact with AQD to resolve issues. The Member reiterated that it was important to the regulated community to have a formal process to contest agency determinations, outside of when the agency applies it in a permitting action, and that the environmental community may also want that provision. The provision may be rarely utilized, but it would create an incentive for the agency to listen to a legitimate technical argument.

A Member asked if the 75th percentile cutoff criterion for the TAC list could be coupled with an emission rate, because high emissions could raise concerns even if ITSLs are relatively high. Staff responded that it did not seem feasible to do that for the list creation; however, AQD can develop internal procedures to help ensure that proposed emissions of non-TACs in permit applications will be assessed in view of their emission rates. The Member questioned the application of the 75th percentile cutoff for ITSLs with a 1-hour averaging time, because the cutoff seems relatively low (300 µg/m³) and the number of substances is relatively small; perhaps the TAC list should be more inclusive of this group. Staff responded that this group presumably has a relatively lower ITSL distribution because it is a relatively more acutely toxic subset of the substances that have TLV occupational exposure levels. Staff will re-evaluate this group of 1-hour ITSLs and present findings to the Workgroup with a recommendation.

A Member's draft rule language was discussed with regard to the "fast backstop" issue for addressing non-TACs in permit review. It was explained the Member's draft rule language for the TAC list does not include a provision for that, because it will be included in R 228.

A consensus vote was postponed until the September meeting.

There was some discussion as to whether or not the ATW charge was met, which is:

The Air Toxics Workgroup (ATW) of the Air Quality Division (AQD) will provide meaningful input to the AQD in addressing ORR Recommendation A-1 and other air toxics rule issues as identified by the ATW and AQD members. The ATW will help ensure that the rules are updated, streamlined, protective of public health and not excessively burdensome. By August 1, 2013 the ATW shall have recommendations to the AQD."

The Members felt that the first part of the charge has been met and that meaningful input has been provided on all of the ORR report's air toxics recommendations. However, they felt that they would need to see specific rule language before they could provide final recommendations.

A-1(5) Pollution Control Projects

The Workgroup agreed that this topic overlaps with the meaningful change and the TAC list issues, and the exemptions being evaluated by the AQD Permit Exemptions Workgroup. Therefore, this issue is in a "holding pattern" pending resolution of the other issues, and, staff and this Workgroup should coordinate with the Permit Exemptions Workgroup.

Action Items to be Completed Prior to the Next ATW Meeting

- Workgroup Members will review the updated "Meaningful Change Discussion Paper" and submit specific examples, as appropriate.
- Bob will add more meaningful change example to the Discussion Paper, utilizing xylene, and add more detail to all examples.
- The AQD will develop a table for the "Meaningful Change Discussion Paper" that summarized the examples, HP and risk or SL to help understand the issues.
- The Facilitator will send out meeting summaries of the July and August meetings.
- A final meeting in September will be scheduled.
- A draft summary report will be developed by Joy and Bob and sent out before the September meeting.
- The Exemptions Workgroup will be contacted for coordination.

Meeting Summary prepared by: Joy Taylor Morgan, Facilitator, and Bob Sills; August 12, 2013.