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June 18, 2010

Steve Zappe
New Mexico Environment Department (NMED)
2905 Rodeo Park Drive, Building 1
Santa Fe, NM 87505

RE: WIPP Class 2 Permit Modification – Submitted April 12, 2010

Dear Steve,

Southwest Research and Information Center (SRIC) provides the following comments on the class 2 permit modification request related to revising Volatile Organic Compound Concentrations of Concern.

SRIC appreciates that the permittees distributed an earlier draft of the modification request in advance and that they held a pre-submittal meeting on March 22, 2010 in Albuquerque. SRIC continues to support the pre-submitttal process and expects that it will be followed in future modification requests, after the renewal permit is issued. SRIC also appreciates NMED's support for such a pre-submittal process.

Nonetheless, SRIC has expressed its concerns about the temporary authorization request that accompanied the modification request submitted on March 31, 2010, as well as the temporary authorization request submitted on April 12 with the current modification request. SRIC's letter of April 13, 2010 to Sarah Cottrell and Marcy Leavitt (which NMED received on that date) should be considered as part of SRIC's comments on this modification request. As SRIC has repeatedly stated since December 23, 2009, other actions could have been and should have been taken to reduce the amount of carbon tetrachloride in the WIPP underground air supply.

SRIC also objects to approval of the permit modification request as submitted, because it does not meet the requirements for a class 2 modification. Thus, NMED must deny at least major parts of the request.

1. <u>At least a portion of the request is not appropriately classified as a class 2 modification and cannot be approved</u>.

The request states that a class 2 modification is appropriate based on 40 CFR §270.42, Appendix I, Item A.4.b. at 2. SRIC strongly objects to a complex permit modification that substantially alters WIPP's operations and reapportions risk being considered as a class 2 request. Such a complex modification should be considered a class 3 modification. 40 CFR §270.42(d)(2)(iii).

SRIC does acknowledge that changing some requirements based on the Environmental Protection Agency (EPA) revisions in its IRIS database could be considered a class 2 modification. As the request states, on March 31, 2010, the EPA changed the inhalation unit risk for carbon tetrachloride from 1.5 E-05 m3/µg to 6.0 E-06 m3/µg. at 2. An increase in the carbon tetrachloride concentration of concern in Table IV.F.2.c can be justified based on that change in the unit risk factor. However, the requested increase of ten times from the existing level of 165 parts per billion volume (ppbv) to 1,660 ppbv is not appropriate based on the IRIS database change, as the permittees acknowledge in the modification request by proposing other adjustments based on "reapportioning" risk.

2. The request does not adequately justify the basis for reapportioning risk.

The modification request states:

> The Permittees have concluded, based on actual repository monitoring data and a projection of the VOCs associated with future waste shipments that the portion of the risk assigned to carbon tetrachloride in the current Permit is underestimated and inconsistent with the actual data. Therefore the risk for each VOC should be revised based on these data. at 4.

However, that conclusion is not supported by adequate evidence. The request does not present or reference any document that has all of the 11 years+ of actual repository VOC monitoring data, but includes only a one-year period ending on December 22, 2009 in Table 1, without demonstrating that it is representative of actual monitoring data. SRIC repeatedly requested that the permittees provide comprehensive data and analysis of the VOCs during the lifetime of operations, but they have not done so. Page 8 of the request describes a link on the WIPP homepage that is supposed to provide the VOC data from the repository monitoring program, but no information is provided for the period of July to December 2006. For other time periods, in some cases summary data is provided and in other cases more extensive data. SRIC cannot compile a comprehensive 11-year analysis, since the data is not available. But a cursory review of some of the data shows that the one-year period in Table 1 is not representative of the 11 years of operations. For the period of July 1, 2002 to June 30, 2003, there were 0 detections of carbon tetrachloride, while there were numerous detections of toluene, methylene chloride, and 1,1,1-trichloroethane. For the following year, July 2003 to June 2004, by far the most detections were for toluene, which also had the highest maximum detected value and the highest detection average. In that year, methylene chloride and 1,1,1-trichloroethane also had more detections and higher maximum detected values than carbon tetrachloride. SRIC is not arguing that those two years are representative of the entire history of WIPP's operations, but neither should the permittees be allowed to pick one year as being representative and the basis for calculating risk, as they do in tables 1, 2 and 3 of the request. Thus, the permittees have not provided adequate data to support reapportioning risk, and the requested reapportionment must be denied.

Further, there is no projection of the amounts of VOCs in the future provided in the request, so there is no basis upon which to base any decisions regarding possible forthcoming shipments. Once again, risk cannot be reapportioned based on an unsupported conclusion about future shipments.

Moreover, providing and evaluating all of that historic and future projection data would be voluminous and complicated, and not consistent with the requirements of a class 2 modification. Thus, the request does not support the changes requested for reapportioning risk and those changes must be denied. If risk allocations that were established through the public hearing on the original permit application are to be changed and risk reapportioned, it should be done through another public hearing,

3. The request includes information about toluene that is not consistent with current scientific data.

In Tables 1, 2, and 3, the request lists toluene as a non-carcinogen. That classification was made by EPA in 1994, based on two epidemiological studies that "were limited due to the size of the study population and lack of historical monitoring data." http://www.scorecard.org/chemical-profiles/html/toluene.html. However, current scientific evidence in 2010 by the President's Cancer Panel states that carbon tetrachloride, methylene chloride, and toluene should all be classified as suspected carcinogens. http://deainfo.nci.nih.gov/advisory/pcp/pcp08-09rpt/PCP_Report_08-09_508.pdf at A-43 (attached). SRIC strongly objects to toluene being classified as a non-carcinogen as a basis for calculating risk. Instead, overall cancer risk calculations in the permit should include toluene as a carcinogen. Further, toluene's classification is another example of how complicated matters included in the request are not appropriate for a class 2 modification.

4. The request is premised on carbon tetrachloride approaching the concentration of concern of 165 ppbv, which may not occur.

SRIC has long been concerned about the permittees apparent lackadaisical attitude about the rising carbon tetrachloride levels until they discovered the error in calculations, which was reported to NMED on November 17, 2009. The permittees continued to ship containers with significant amounts of carbon tetrachloride, rather than curtailing such shipments. SRIC emphasized on numerous occasions the need to stop shipments of high carbon tetrachloride wastes, but the permittees ignored that repeated commonsense suggestion. Thus, to a great extent, the rising carbon tetrachloride levels are a self-imposed problem that could have been avoided. If shipments with large amounts of carbon tetrachloride had been stopped, then the effectiveness of the various measures that have been taken in the WIPP underground could have been better assessed. In any case, if additional amounts of carbon tetrachloride had not been shipped to panel 5 since November 2009, there would have been substantially less carbon tetrachloride at WIPP. Lesser amounts of carbon tetrachloride could have resulted in the running annual average not exceeding the 165 ppbv level, and the modification request and temporary authorization would not be needed and likely would not even have been submitted.

Because of the continued shipments with substantial amounts of carbon tetrachloride, additional methods were undertaken to reduce emissions and they have apparently had an effect, as the carbon tetrachloride amounts have not exceeded 165 ppbv running annual average. Thus, it is not clearly established that the modification to raise the concentrations of concerns is needed.

SRIC has not opposed the various efforts to reduce emission – additional bulkheads and installing the GAC system in panel 4. SRIC also has advocated to the Idaho National Laboratory (INL) that

it should take additional efforts to reduce the shipments of high carbon tetrachloride wastes. Further, SRIC has not opposed the use of TDOPs as overpacks over the past five weeks, as required by the Temporary Authorization of April 14, 2010.

The permittees efforts to have the carbon tetrachloride concentration of concern raised would allow increased amounts of carbon tetrachloride at WIPP, which, in turn, reduces protection of public health and the environment. Therefore, SRIC believes that some of those methods, such as overpacking high carbon tetrachloride containers, should continue to be used, regardless of the decision on the modification request. Further, SRIC continues to advocate that the explosion-isolation wall be considered. SRIC believes that the installation of the explosion-isolation wall should be required when panel 5 is filled. Such a wall would dramatically diminish or eliminate carbon tetrachloride emissions from panel 5 and avoid the need for further measures to reduce emissions from that panel.

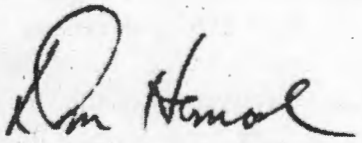
Conclusion

SRIC agrees that there is justification, because of the changed inhalation unit risk, to raise the concentration of concern for carbon tetrachloride above 165 ppbv, though not to the requested level of 1,660 ppbv. However, the reapportionment of risk for the VOCs has not been adequately supported and cannot be approved. NMED should continue to require use of overpacks for containers with significant amounts of carbon tetrachloride, and it should require installation of the explosion-isolation wall when panel 5 is filled.

The issue of VOC concentrations of concern and risk levels should be further discussed as part of the WIPP permit renewal.

Thank you very much for your careful consideration of these comments, and all other comments submitted regarding the request.

Sincerely,



Don Hancock

2008–2009 Annual Report President's Cancer Panel

REDUCING ENVIRONMENTAL CANCER RISK

What We Can Do Now

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES National Institutes of Health National Cancer Institute

The President's Cancer Panel

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This report is submitted to the President of the United States in fulfillment of the obligations of the President's Cancer Panel to appraise the National Cancer Program as established in accordance with the National Cancer Act of 1971 (P.L. 92-218), the Health Research Extension Act of 1985 (P.L. 99-158), the National Institutes of Health ReviteEzation Act of 1993 (P.L. 103-43), and Title V, Part A, Public Health Service Act (42 U.S.C. 281 et seq.).

April 2010

For further information on the President's Cancer Panel or additional copies of this report, please contact:

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CATEGORY	CARCINOGENIC AGENT	SOURCE/USES	STRONG*	SUSPECTED**
	Vinyl Chloride	Used in polyvinyl resins for the production of plastic pipes, floor coverings, and in electrical and transportation applications.	Liver/Biliary, Soft Tissue Sarcoma (angio-sarcoma of the liver)	
Solvents	**Benzene**	Used as an intermediate in the production of plastics, resins, and some synthetic and nylon fibers. Also used to make some types of rubbers, lubricants, dyes, detergents, drugs, and pesticides. Also found in crude oil, gasoline, and cigarette smoke.	Leukemia, Multiple Myeloma, Non-Hodgkin Lymphoma	Brain/Central Nervous System, Lung, Nasal/Nasopharynx
	Carbon Tetrachloride	Used primarily in various industrial applications. Before being banned, was used in the production of refrigeration fluid and propellants for aerosol cans, as a pesticide, as a cleaning fluid and degreasing agent, in fire extinguishers, and in spot removers.		Leukemia
	Methylene Chloride	Used primarily as a solvent in industrial applications and as a paint stripper. Also found in some aerosol and pesticide products and in the production of photographic film.		Brain/Central Nervous System, Liver/Biliary
	Styrene	Used in the production of rubber, plastic, insulation, fiberglass, pipes, automobile parts, food containers, and carpet backing.		Non-Hodgkin Lymphoma
	Toluene	Used in the production of paints, paint thinners, fingernail polish, lacquers, adhesives, and rubber. Also used in some printing and leather tanning processes.		Brain/Central Nervous System, Lung, Colorectum

*Strong evidence of a causal link is based primarily on a Group 1 designation by the International Agency for Research on Cancer.

**Suspected evidence of a causal link is based on the authors' assessment that results of epidemiologic studies are mixed, yet positive findings from well-designed and conducted studies [illegible]