

ILLINOIS POLLUTION CONTROL BOARD
December 20, 1990

ALLIED-SIGNAL INC.,)
)
 Petitioner,)
)
 v.) PCB 88-172
) (Variance)
 ILLINOIS ENVIRONMENTAL)
 PROTECTION AGENCY,)
)
 Respondent.)

ORDER OF THE BOARD (by M. Nardulli):

This matter comes before the Board on a two separate motions entitled "Joint Motion for Modification of Variance" filed on November 19, 1990 and November 28, 1990 by petitioner Allied-Signal Inc. (Allied) and respondent Illinois Environmental Protection Agency (Agency).

By the November 19, 1990 motion, the parties seek to modify conditions 2 and 5b of the Board's order granting Allied a variance from the arsenic effluent limitation set forth at 35 Ill. Adm. Code 304.124 until February 17, 1991. The parties are not seeking an extension of the termination date of the variance. In their motion, the parties seek to extend the due-date for submittal of an engineering evaluation of the treatability of hexafluoroarsenate from November 17, 1990 as required by condition 2 of the variance order to November 28, 1990. This report was filed on November 28, 1990. The Board accepts the filing of this report and the variance condition is modified accordingly.

The parties also seek modification of condition 5b of the variance which provides:

If the LC50 of hexafluoroarsenate is less than 25 times higher than the LC50 of pentavalent arsenic oxide as determined under (a) above, petitioner shall perform a Phase II early life stage (28 days post-hatch) bioassay of the chronic toxicity and bioaccumulations potential of hexafluoroarsenate. The test shall be performed as a single, combined test of both the chronic and bioaccumulative effects of a prepared effluent sample on minnows. The prepared effluent sample should be made up of concentrations of potassium hexafluoroarsenate and pentavalent arsenic oxide in a ratio that is consistent with the ratio of hexafluoroarsenate and conventional arsenic forms in the effluent from Allied's final outfall 002. These samples should

include one at the arsenic levels found in the actual effluent 002, and at 5 times that level, and one at 10 times that level.

The parties ask that condition 5b be modified to provide for a "seven day static test" rather than a 28 day test and that Allied be required to test concentrations of hexafluoroarsenate alone, rather than testing of both hexafluoroarsenate and more conventional arsenic forms in the same ratio as found in the effluent in Allied's facility. The parties propose the following modification to condition 5b:

If the LC50 of hexafluoroarsenate is less than 25 times higher than the LC50 of pentavalent arsenic oxide as determined under (a) above, petitioner shall perform a Phase II seven day static test of chronic toxicity of hexafluoroarsenate to minnows. this test should be performed be evaluating the chronic effects on minnows of hexafluoroarsenate at a dilution series based on known acute toxicity levels. The results shall be expressed as Maximum Acceptable Toxicant Concentration (MACT).

The Board finds that the "seven-day static test" is an acceptable replacement to the 28-day test currently provided for in the variance. The Board notes that the correct terminology of this test is a "seven-day static renewal test" because the toxicant concentration is renewed each day of the test so that the fish are exposed to the same amount of toxicant over the seven-day test period. Regarding the proposed deletion of the bioaccumulative test, the Board believes that such testing using the seven-day static renewal test would not be able to provide information on bioaccumulative potential. The record indicates that the chemical nature of potassium hexafluoroarsenate is such that it is unlikely to bioaccumulate and is different from organic contaminants that accumulate fatty tissue. (R. 26-27.) The Board believes that, in lieu of testing, the bioaccumulation potential of hexafluoroarsenate should be estimated by using the regression equation based on the compound's octanol-water partition coefficient prescribed at 35 Ill. Adm. Code 302.663(c). Therefore, condition 5b is modified as follows:

If the LC50 of hexafluoroarsenate is less than 25 times higher than the LC50 of pentavalent arsenic oxide as determined under (a) above, petitioner shall perform a Phase II bioassay using a seven-day static renewal test of the chronic toxicity of hexafluoroarsenate to minnows. This test should be performed by evaluating the chronic effects on minnows of

hexafluoroarsenate using a dilution series based on final effluent concentrations and known acute toxicity levels. the results shall be expressed as Maximum Acceptable toxicant Concentrations (MACT). The bioaccumulation potential of hexafluoroarsenate shall be estimated by calculating the bioconcentration factor in accordance with 35 Ill. Adm. Code 302.663(c).

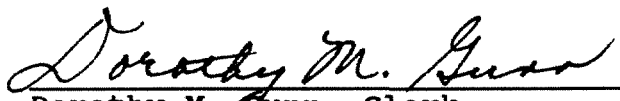
The Board now addresses the parties motion for modification filed November 28, 1990. By this motion, the parties seek modification of condition 3 of the variance order requiring that Allied submit its petition for an extension of variance no later than October 20, 1990. The parties seek to modify that condition to extend the deadline for filing the petition for extension of variance to and including December 31, 1990. The parties state that such an extension is needed to allow the Agency to review the engineering evaluation report discussed above. The Agency expects to complete this review and provide guidance to Allied by December 21, 1990. The requested extension will allow Allied ten days to file its petition for extension if needed.

The Board finds that the parties have presented adequate support for their request for modification of the deadline for filing any petition for extension of variance. Condition 3 is modified to allow Allied to file its petition for extension of variance no later than December 31, 1990.

Lastly, the Board must address Allied's claim that its engineering evaluation report is a trade secret under 35 Ill. Adm. Code 120.201(a). In accordance with 35 Ill. Adm. Code 120.203, Allied submitted a limited waiver of statutory deadline. The Board is unsure as to what statutory deadline Allied is waiving since this is a motion for modification to which no deadline applies. The Board will proceed to treat Allied's engineering evaluation report as confidential in accordance with the procedures found at 35 Ill. Adm. Code Part 120, Subpart C pending Allied's submittal of a statement of justification as set forth at 35 Ill. Adm. Code 120.202. Allied is directed to file its statement of justification with the Board no later than January 7, 1991.

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the illinois Pollution Control Board hereby certify that the above Order was adopted on the 20th day of December, 1990 by a vote of 7-0.


Dorothy M. Gunn, Clerk
Illinois Pollution Control Board