

March 10, 2003

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The Ohio Department of Health (ODH) has received and reviewed your response to our review of the Regulatory Review Draft of the Focused Remedial Investigation/ Feasibility Study Report .The purpose our review was to submit questions and comments regarding the RI/FS report. A majority of the questions required only one or two lines of elaboration. Your responses to these types of questions were more than adequate. However, some of the questions targeted issues requiring either clarification or supporting documentation that would support positions or conclusions presented in the study. Unfortunately your response to the latter provided neither. I will elaborate on this below.

Regards,

[REDACTED], MS, CHP

RESPONSE TO REMEDIAL INVESTIGATION COMMENTS

COMMENT 5: Section 3.1.4 Groundwater Sampling

You state that your computer model is verified by groundwater sampling performed in the past that showed no evidence of contamination presently in groundwater. Even the use of RESRAD default hydrological parameters will predict no contamination of groundwater presently. It does however predict groundwater to be a problem in the future. If we are to use your parameters, they should somehow be validated. Several of your parameters used in the groundwater model were labeled "measured or calculated". I was hoping to receive examples of calculations or procedures used in measuring the parameter that would assist us in evaluating the appropriateness of the use of the parameter.

COMMENT 6: Section 6.65 Radiological Risk Summary

We agree that radon will not present a problem outdoors. However Ra-226 concentration in the Industrial and Residential could present a radon exposure problem indoors. We do not agree that making apriori assumptions about future construction practices alleviates this concern.

COMMENT 7: TABLE 7.3 Remedial Action Objectives for the Painesville Site

We agree that for the most part the appropriate parameters that match the values used for the Subsistence Farmer scenario at Luckey were used. The site specific parameters however disagreed. We are not saying site specific parameters should not be used. We are saying we have no validation of those parameters.

You further state you would perform a thorough check of RESRAD runs and the results. Has this been done? In any event I did not receive them.

Consequently I tried to duplicate your results using your input parameters listed in Table 6.9. Runs for the Uranium, Thorium, and Radium nuclides were performed for the Subsistent Farmer and Industrial Worker scenarios using RESRAD version 6.2 There were considerable differences in some of the soil guidelines. Result will be included as an attachment to this communication.

COMMENT 9: Section 3.1 Soil Volume Estimation

The 25 mrem dose limit established in 10CFR20 contains an ALARA proviso which should be included in this statement. We agree that this should be inserted in the document. We do not agree however that the ALARA proviso is necessarily satisfied by over excavation and construction considerations. The ALARA process is an optimization. Optimization for radiological protection occurs when the total of the cost for radiological protection plus the cost of the detriment is minimal, which is also the condition for maximum benefit. These are variables that have established mathematical relationships that are used in a Cost-Benefit Analysis. If, however, you have indeed performed this analysis for the aforementioned scenarios, please forward the material that documents it.

One further comment which has been stated and restated but will be restated here once again, relative to Table 6.15 "Remedial Action Objectives for the Painesville Site. The citation of the OAC is correct, however its use is incorrect in that the bureau does not sanction **NOR** does the Ohio Revised Code 3748 allow for any type of release other than an unrestricted release. Unrestricted is to be demonstrated by use of the RESRAD model for a residential farmer scenario. On our licensed facilities, if a licensee can not meet an unrestricted use (25 mrem/yr TEDE; resident farmer scenario) then they must maintain a license in perpetuity. Consequently an "industrial worker" scenario and a "resident scenario" are deemed inappropriate.