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Director

Segment No. 10-23-13

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MEMORANDUM

January 23, 1986

To: Jon Neel

Through: Bill Yake BY

From: Dale Norton D.N.

Subject: Review of EPA Region X Technical Assistance Team Preliminary Site Assessment of PCB contamination at the Lewis County PUD/Ross Electric Coal Creek Site

In response to your request, I have reviewed the EPA Region X Technical Assistance Team's (TAT) preliminary site assessment of the Lewis County PUD/Ross Electric Coal Creek site. As you specified, I have focused on the technical aspects of the report and the potential for off-site impacts on Coal Creek. My comments concerning the report are as follows:

Sampling Activities

page 14: The method used to collect sediment from the main drainage ditch on site and Coal Creek is inappropriate and likely resulted in the loss of surface fines.

page 25: Table 2; Water-level measurements are reported to the nearest foot (should be to 0.01 foot), and exact dates these measurements were taken are not specified.

More importantly, serious discrepancies exist between water-level measurements made in wells MW01 - MW04 by CH_2M Hill in 1983 and the TAT in 1985. These discrepancies could have substantial implications regarding conclusions about the direction of ground-water movement at the site. An additional set of water-level measurements should be taken (reported to the nearest 0.01 foot) simultaneously from all monitoring wells on site. Elevations (in feet) of the top of the well casings for wells MW05 and MW06 should also be measured relative to a datum.

Results

page 27: It is incorrectly stated that drainage ditch water contains 200 ppb PCBs (should be 30 ppb, Table 5). Septic tank water contained 200 ppb PCBs (Table 3).

page 29: The conclusion that an artesian aquifer is present is based on limited information. Additional water-level measurements should be made to verify this conclusion.

page 31: No detection limits are given for water and sediment samples.

page 32: Table 5. Station numbers are incorrectly matched with sample types. The result of duplicate sediment analysis from the mouth of the main drainage ditch (station SSDD04) is not shown.

No detection limits are specified for soil samples. In addition, it is not indicated whether analytical results are expressed on a dry- or wet-weight basis.

page 33: No sediment samples were collected and analyzed for PCBs from the small drainage ditch present in the southern portion of the site near core OC03.

page 34: No detection limits are given for acid/base-neutrals scan of ground-water samples. The presence or absence of some compounds in this class can greatly affect the mobility of PCBs in ground water.

page 38: Quality assurance/quality control is discussed but no mention is made of whether problems were encountered.

Recommendations

page 44: Point A also should address removal of the furnace and associated ash from the site.

page 45: Point B, why was the 5 ppm cleanup level chosen? Would another level be more appropriate in light of estimated removal costs?

page 47: Point F, testing for 2,3,7,8-TCDD is not adequate in itself for determining if ditch sediments should be totally removed from the site.

page 48: Until ground-water characteristics at the site are better understood, monitoring wells should be sampled quarterly rather than annually as suggested. Target compounds and associated detection limits should also be specified for future monitoring activities.

In general, the TAT report seems to be a comprehensive assessment of on-site contamination at Ross Electric. However, based on PCB concentrations found in water (30 ppb) and sediment (229 ppb) in the main drainage ditch, it is likely that off-site migration of contaminants has occurred. I agree with you that the extent of contaminant migration off-site into Coal Creek has not been adequately addressed, especially with respect to fish tissue.

Therefore, I recommend that sampling be conducted in Coal Creek which focuses on (1) evaluating the extent of PCB, dioxin, and furan contamination in Coal Creek sediments for possible remedial action, and (2) determining the levels of these contaminants present in Coal Creek fish.

DN:cp

cc: Dick Cunningham
Denis Erickson