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MINUTES FROM 6 JANUARY 1993 TECHNICAL REVIEW COMMITTEE TO DISCUSS
INTERIM CORRECTIVE MEASURES SCREENING INVESTIGATION AT NSB KINGS BAY GA
1/6/1993
ABB ENVIRONMENTAL

**CTO 041 - NSB Kings Bay, Georgia
INTERIM CORRECTIVE MEASURES SCREENING INVESTIGATION SITE 11**

MEETING MINUTES

**United States EPA and Georgia EPD
United States EPA Region IV
6 January 1993 1300 Hours**

Attendees:

James Barksdale	EPA - Federal Facilities Branch	(404) 347-3016
Julie Keller	EPA - Office of Health Assessment	(404) 347-1586
Donna Wilkerson	EPA - RPS	(404) 347-3433
Randall Manning	Georgia EPD	(404) 656-4713
Madeleine Kellam	Georgia - EPD	(404) 656-2833
Reginald Young	Georgia - EPD	(404) 656-2833
LCDR. Mike Patterson	APWO NSB Kings Bay	(912) 673-4604
Ed Lohr	Southern Division NAVFACCOM	(803) 743-0355
Connie Merting	Southern Division NAVFACCOM	(803) 743-0386
Frank Cater	ABB-ES - Tennessee	(615) 531-1922
Marland Dulaney	ABB-ES - Tallahassee	(904) 656-1293

Note: These minutes are not an official transcript. They are recreated to show only pertinent conversations and resulting action items.

John Johnson of EPA Region IV stopped in to begin the meeting. His comment was that this is recognized as an important project. Georgia and the Navy will continue to be the lead agencies. EPA will assume an advisory role and be available to help out. EPA is presently focusing on the HRS II scoring for the site to see if it will go NPL. The calculations are not yet complete.

Frank reviewed briefly the history of the investigations at the site.

James requested that he be provided with a copy of the private irrigation well survey forms we used to determine water usage in the subdivision.

It was decided that the hydrocone data is acceptable data and an acceptable methodology, provided it is qualified. All data whether level B or level D would be acceptable, if appropriately qualified. A suggestion was made to calculate the 95% confidence limit using only the level D data and see if the level B data affects the confidence limit.

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ABB will discuss the acetone and carbon disulfide detection in detail in the text. A discussion of the QA/QC that lead to the conclusion of not using these compounds will also be discussed.

When the baseline risk assessment process is started, the arsenic background levels will need to be discussed with the Georgia EPD. Porcupine Lake will need to be included in the future Ecological Assessment. Also for planting, the discussion should be included and qualified. The first 12 inches of soil should be considered.

Concerning risk evaluation and assessment factors, the following items were discussed:

- lifetime span is 70 years;
- a trespasser is a 45 kg. 7 year old;
- exposure scenarios include inhalation, dermal contact while swimming, dermal contact while using the water for washing, and incidental swimming ingestion at 50 ml an hour.

Julie will get back to Marland on number of exposure days for swimming and hours per day. EPA will review the handout of exposure scenarios and advise if any additional one are appropriate. EPA will advise as to the appropriate drinking water amounts that may be required. Julie will contact Marland by the end of the week.

Marland explained that the irrigation modeling ABB is using assumes a 100% release of all the VOCs. The EPA model Screen was used. This is a Gaussian dispersion model, using an area source algorithm. It assumes a virtual point source in a square and a distance of concentration from one to 50 meters. A source dimension of 600 feet by 1000 feet was used, and the dispersion model was a 600 feet by 600 feet square. There were 18 irrigation wells in the area and a geometric mean of 12 gallons per minute was used. The irrigation wells had field survey flow rates of 6 to 63 gallons per minute. The sprinkler are assumed to run 2 hours a day for 365 days a year. The 2 hours a day was based on the private irrigation well survey forms.

Ed requested that the actual pumping rate of the 18 irrigation wells, as derived from the irrigation well survey, be compared to the 18 wells times the geometric mean of 12 gallons per hour.

The Nearfield Box Model was considered, but it was deemed inappropriate. ABB is using 20 cubic meter for inhalation rate with 350 days exposure.

ABB would like guidance on the RFD used for three chemical, 2 Hexanone, MIBK, and MBK. ABB is assuming that a Estimated Permissible Concentration Dose for these chemicals can be derived with TWA/4.2/100.

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Julie will advise Marland as to systemic toxicity (commonly called hazard index) methodology. Marland is to look at systemic toxicity, add it up, and if the total hazard index is greater than 1.0, then we should discuss it.

Concerning synergistic effects, ABB should do some type of estimation. Perhaps a tenfold factor and discuss it.

Marland asked at what point is an unacceptable health risk present. It is an objective decision, but basically if it is greater than 10^{-4} there is a problem. This does not rule out risk management and further discussions.

James closed the meeting with the comment that EPA is very proactive at moving this site into remediation and will continue to work with the Navy to accelerate the process.

Meeting adjourned at 1530 hours.

cc Attendees
CTO 041 Files