

### **Aberdeen MGP Amortization**

- 5-8) The ARCADIS November 6, 2010, evaluation of projected Aberdeen MGP site clean-up costs puts the 2011 expenditure at \$3.8 million while Mr. Kliewer explains at page 7, lines 12-14, that NWE estimates these costs to be "at least \$2,800,000". (The estimates for 2012 and 2013 in the ARCADIS report are identical to the estimates cited by Mr. Kliewer for those years.) Explain the difference between the two estimates for 2011.

The difference is due to Arcadis' initial budget of \$1.0 million for third-party property owner compensation. This was an initial estimate and we do not believe these costs will be incurred in 2011. \$500,000 for property owner compensation is now assumed to be incurred in 2012 and \$500,000 is assumed to be incurred in 2013 under the optimal schedule described below.

While testimony was being finalized for this rate case, we were also coordinating with Arcadis to update our remediation projections and develop a Remedial Action Plan (RAP) for presentation to the South Dakota Department of Environment and Natural Resources (SDDENR). Arcadis prepared a memo dated May 16, 2011 (see Exhibit 5-8-1), presenting cash flow scenarios for a base case schedule and an optimal schedule. The optimal schedule described in Exhibit 5-8-1 was the basis for the RAP and Coal Tar Recovery Project summary (see Exhibits 5-8-2 and 5-8-3) presented to SDDENR in June 2011. The RAP was approved by SDDENR on July 14, 2011 (see Exhibit 5-8-4).

- 5-9) Explain and demonstrate how the ARCADIS estimates of \$3.8 million for 2011 and the \$4.2 million and \$3.3 million for 2012 and 2013 are derived from the ARCADIS Alternative 2 Cost Estimate attached to its summary sheet.

These estimates are no longer relevant. Revised estimates are \$2.6 million for 2011, \$1.3 million for 2012 and \$6.5 million for 2013. See Exhibit 5-8-1 for supporting documentation to these estimates.

- 5-10) The ARCADIS Alternative 2 Cost Estimate indicates that the cost estimates include allowances for specific activities and additional allowances for "Contingencies" calculated at 25% of the specific activity costs. Why is an additional contingency allowance required and what is the basis for the 25% factor?

This engineering estimate followed standard procedures as outlined by the United States Environmental Protection Agency in their July 2000 guidance "A Guide to Developing and Documenting Cost Estimates During the Feasibility Study" (<http://www.epa.gov/superfund/policy/remedy/pdfs/finaldoc.pdf>). A bid and scope contingency of 25% was applied based on engineering judgment, which is within the range recommended in this guidance for the level of analysis and conceptual design performed at the time these costs were developed.

- 5-11) What would be the effect on the 2011 thru 2013 annual cost estimates of excluding the contingency allowances?

Excluding the contingency allowances from the optimal schedule would reduce the estimated costs for each year by approximately \$400,000, \$200,000, and \$900,000 respectively.

- 5-12) Does NWE's estimate of "at least \$2,800,000" for 2011 include any contingency allowances and, if so, what would that estimate be without these allowances? Provide and explain the development of the \$2.8 million estimate.

The \$2.8 million estimate includes a 25% contingency factor. The updated 2011 projection of \$2.6 million included in Exhibit 5-8-1 also includes a 25% contingency factor. This contingency factor was applied for costs pertaining to institutional controls, third party property owner compensation, remedial construction capital costs, and long-term operations and maintenance costs (no contingency factor was applied for engineering, project management, and construction management). The estimate would decrease by approximately \$400,000 without the contingency factor.

- 5-13) "General Notes", Note 2 to the ARCADIS Alternative 2 Cost Estimate indicates "This cost estimate is expected to be within [a range of] -30% to +50% of the actual projected cost." Is it correct to say that this means that the ARCADIS cost estimate is expected to lie somewhere between (1) 30% lower than the actual cost and (2) 50% above the actual cost?

**Yes. As noted in reply to request 5-10, this engineering estimate followed standard procedures as outlined by the United States Environmental Protection Agency in their July 2000 guidance "A Guide to Developing and Documenting Cost Estimates During the Feasibility Study", where an accuracy range of -30% to +50% is expected.**

- 5-14) Is it reasonable to expect that during the actual engineering design of the remedial alternative and again during the actual conduct of the remedial action that the engineering designers and, later, the contractors would continuously look for ways to improve task efficiencies?

**Yes. Engineering design and contracting discussions are taking place at this time, and through a careful design process we have been able to optimize various design features and reduce some work elements that will ultimately lead to a safe, efficient, and cost-effective remediation project. This imperative will be carried out through the construction and long-term operational phases of the program as well.**

**A very relevant example of continuously looking for ways to improve task efficiencies was the development and presentation of the optimal schedule (as described in Arcadis memo dated May 16, 2011, provided in response to 5-8). We are very cognizant of the impact to customers and want to ensure the site is cleaned up in an efficient and effective manner. After reviewing the initial estimate provided by Arcadis on November, 16, 2010, we requested Arcadis to review other alternatives that might satisfy SDDENR's remediation requirements while mitigating the impact to customers. Bill Thompson, NorthWestern's Senior Project Engineer responsible for remediation of this site, coordinated with Arcadis to develop the schedule approved by SDDENR that we believe will provide a better schedule allowing sufficient time during 2012 to test initial remediation efforts before proceeding with significant additional work. The optimal schedule is estimated to save \$400,000 as compared to the initial schedule contemplated in Arcadis November 16, 2010 memo.**