



MONTGOMERY WATSON
Mining Group

October 31, 2000

Mr. David Cobrain
State of New Mexico
Environmental Department
Hazardous Waste Bureau
2044-A Galisteo Street
Santa Fe, New Mexico 87505



Gandy Marley
Red File

Re: Triassic Park Landfill Leachate Estimates for Closure and Post-Closure Cost Estimate

Dear Mr Cobrain:

This letter is in response to your questions regarding leachate volume estimates used in the closure/post-closure cost estimate. The initial closure/post-closure leachate volume estimates were calculated using approximately 100 gallons per acre per day as a leakage rate over an area of 11 acres. Multiplying these two quantities yields a leachate production rate of 1,100 gallons per day. The 100 gallons per acre per day (gpac) is a worst case scenario using EPA's recommended Action Leakage Rate which is discussed in Section 3.2.9 of Volume III. The area of waste placement for Phase 1A is approximately 11 acres. Multiplying 100 gpac by 11 acres and 365 days produces 401,000 gallons for the closure leachate volume. It was assumed that leachate generation would essentially diminish to zero at the end of the 30 year post-closure period due to the presence of the cover. Therefore, an average value of 401,000 gallons and 0 gallons was multiplied by 30 years to calculate the volume of leachate (approximately 6,000,000 gallons) generated during the post-closure period.

MW's original closure and post-closure cost estimate submittal was not fully accepted by NMED; therefore, a revised cost estimate was completed which required a revision to the leachate volume estimates. The revised leachate volume estimate is based on specific HELP modeling completed for the proposed liner system. These HELP analyses are discussed in Section 3.2.7 of Volume III. Using the HELP analysis output data, MW estimates that leachate volumes will be less than 32 gallons per acre per day. Combining the calculated leachate generation rate with the Phase 1A waste area (11.3 acres) yields a closure leachate volume of 132,000 gallons or 551 tons. This volume was assumed to decrease by one third every year after closure due to the presence of the cover. This is anticipated to be conservative because HELP modeling indicates that infiltration through the cover is essentially zero. Using the one third (1/3) annual reduction for leachate volumes over the 30 year post-closure period produces 396,000 gallons or approximately 1,652 tons.

If you require any additional information or care to discuss this matter contact the undersigned.

Sincerely,

Montgomery Watson, Mining Group

John Pellicer

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Reference: 2450192.02190200

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Charged Amt: _____

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Subject:

Dave - please see attached letter about leachate
volumes for post-closure & closure period.

If you do not receive all pages, or if there are any problems with this transmission, please call 970-879-6260

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