Progress Report for Fugitive Dust and Fumes Assessment
February 1, 2000

Introduction

This report outlines the progress made to date for the Fugitive Dust and Fumes Assessment. This work plan, which can be reviewed in its entirety on a separate page on this web site, is being carried out by The Department of Mining Engineering at West Virginia University. The purpose of the work plan is to identify the extent of fugitive dust and fumes from surface blasting (those dusts and fumes which escape the mining property) and determine whether they are negligible, occur at nuisance levels, or have any associated health risks. For further information, you may wish to contact Lloyd M. English or Yi Luo at the Department of Mining Engineering, West Virginia University.

Progress to Date

The project started at the beginning of October 1999, during which month the major tasks were the performance of literature reviews, interviews of experts, and the assessment of equipment needs. Although no equipment has yet been purchased, we have selected the supplier and reached our final experimental approach. The equipment dealer we have selected can not only fill our needs for resolution, they will offer no-cost training on site (that is, the university) and perform most repairs themselves rather than shipping to a separate repair shop.

Although some monitoring sites have been identified, we still have no formal in-place agreement. One potential cooperating company wants to see a full experimental protocol before agreeing, and we have not been able to generate one pending final equipment selection. We should now be able to do so.

A visit to a blasting seminar in Gillette, Wyoming, this month enabled us to be sure that we were absolutely current with the state-of-the-art regarding blasting fumes. Participation in this seminar made us comfortable with the plans we have made to date. Also, one thing that is becoming increasingly clear is that establishing monitoring points in front of the moving clouds that result from blasting will be no trivial matter — others have tried without success. In light of this problem we have altered our monitoring layout from a linear down-wind arrangement to a semi-circular partial enclosure (hopefully 180 degrees, terrain permitting) that will increase our chances of intercepting moving clouds. Should this not prove workable, we may have to consider a more exotic approach to fume and dust measurement methods which would entail delivering the instruments to the cloud rather than waiting to intercept it. This would require use of a remote control delivery system to avoid exposing technical personnel to the cloud.

The slippage indicated in the timetable on the next page should not impact our overall schedule.

Timetable for Completing the Technical Study

Unchanged from Gantt chart included in the November 1 report.

Task	*Duration*	*Start*	*Completion*	
Start	0 days	Mon 10/4/99	Mon 10/4/99	
Lit Review	6 weeks	Mon 10/4/99	Fri 11/12/99	
Interview experts	6 weeks	Mon 10/4/99	Fri 11/12/99	
Arrange cooperating sites	4 weeks	Mon 10/4/99	Fri 10/29/99	Substantial slippage
Assess equipment needs	2 weeks	Mon 11/15/99	Fri 11/26/99	Re-evaluation complete
"Obtain equipment, supplies"	6 weeks	Mon 11/29/99	Fri 1/7/00	Under way
Design data collection efforts	4 weeks	Mon 11/29/99	Fri 12/24/99	Re-evaluation complete
Train data collectors	4 weeks	Mon 1/10/00	Fri 2/4/00	Arrangements made for outside trainer
Data collection efforts	12 weeks	Mon 2/7/00	Fri 4/28/00	
Interim draft required	1 weeks	Mon 4/3/00	Fri 4/7/00	
Analysis of data	8 weeks	Mon 5/1/00	Fri 6/23/00	
Final report	4 weeks	Mon 6/26/00	Fri 7/21/00	
Terminate	0 days	Fri 7/21/00	Fri 7/21/00	