

**APPENDIX D-1**  
**CALCULATION OF OPTIMAL PRODUCTION RATE**  
 Lehigh Southwest Cement Company  
 Cupertino Facility

<b>Material</b>	<b>2008/2009 Average Production (current low production) (short tons)</b>	<b>2005 Production (2008 CEIR) (short tons)</b>	<b>2008-09 Average Production/ 2005 Production<sup>1</sup></b>	<b>Optimal Production Ratio<sup>2</sup></b>	<b>Optimal Production<sup>3</sup> (short tons)</b>
Clinker	767,619	1,399,692	0.55	0.68	951,791
Cement	851,545	1,461,796	0.58	0.68	994,021

Notes:

1. Production ratio applied to 2005 production (2008 CEIR emissions) to estimate emissions for the average of 2008 to 2009 production (current low production scenario). The ratio of production was used to develop a conservative estimate of emissions. Calculated as follows: (Average Production for 2008 and 2009) / (2005 Production)
2. The optimal production ratio applied to the 2005 production (2008 CEIR emissions) that results in potential off-site cancer risks below the notification level of  $1.0 \times 10^{-5}$  (specifically  $9.5 \times 10^{-6}$ ) at the MEIR.  
 Calculated as follows:  $[(2005 \text{ Production}) \times (9.5 \times 10^{-6})] / (\text{Predicted Risk at 2005 Production})$ .
3. Optimal production expected to result in potential off-site cancer risks below the notification level of  $1.0 \times 10^{-5}$  (specifically  $9.5 \times 10^{-6}$ ) at the MEIR. Calculated as follows: (2005 Production) x Optimal Production Ratio.