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## INTEROFFICE MEMORANDUM

DATE: June 25, 1996  
TO: Mark Hickman, RMRS Project Management, T130F, X7154  
FROM: *Carol Patnoe*  
Carol Patnoe, Kaiser-Hill Air Quality Management, T130C, X2440  
SUBJECT: AIR QUALITY ANALYSIS FOR BUILDING 889 - CAP-090-96

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This air quality analysis addresses the compliance status of the Building 889 decontamination and decommissioning project to applicable state and federal air regulatory requirements. Most of the decontamination activities were completed prior to this analysis. Guidance in this letter pertains to the remaining decommissioning (demolition) of Building 889.

### Radionuclide Emissions

Radionuclide air effluent emissions from Department of Energy (DOE) facilities are governed by the Colorado Air Quality Control Commission's (CAQCC) Regulation No. 8A: Subpart H (40 CFR 61 Subpart H) Radionuclide National Emission Standards for Hazardous Air Pollutants (Rad NESHAPs). The regulation specifies requirements that are applicable to the Rocky Flats Environmental Technology Site (Site), including environmental monitoring, reporting, permitting, and quality assurance requirements. Every activity that has a potential to emit radionuclides must be assessed, *prior to start-up*, using a prescribed modeling protocol to determine whether that activity is required to continuously monitor its emissions and to determine whether that activity must be approved by the Environmental Protection Agency (EPA) and/or the Colorado Department of Public Health and Environment (CDPHE) per Section 61.96(b) of 40 CFR 61, Subpart H. Section 61.93 mandates continuous monitoring for all points that have a potential effective dose equivalent (EDE) to the nearest public of greater than 0.1 millirem per year (mrem/yr).

According to Building 889 decommissioning project personnel, rooms 105, 106, 107, and 108 were found to have radiological contamination. A maximum contamination level of 167,000 disintegrations per minute per 100 square centimeters (dpm/100 cm<sup>2</sup>) beta was found in room 108. The remaining rooms had significantly lower contamination levels. Potential radionuclide emissions from the Building 889 decommissioning project were calculated using a conservative contamination level of 200,000 dpm/100 cm<sup>2</sup> for all four rooms. Dose calculations were obtained using the EPA approved computer dispersion model CAP88PC. The total uncontrolled EDE to the nearest public was estimated to be 5.79E-05 mrem/yr. Based on this estimate, there are no requirements for filing a permit application or a notification of start-up for this project, and there are no continuous radiological monitoring requirements.

Non-radionuclide Emissions

Non-asbestos demolition activities are exempt from Air Pollutant Emission Notice (APEN) submittals and from obtaining air construction permits, per Colorado Air Quality Control Commission (CAQCC) Regulation Number 3 (Reg. 3), Part A, Section II.D.1.qqq. However, CAQCC Reg. 8, Part B details training, certification, and notification requirements for asbestos abatement. According to project personnel, Building 889 has been inspected for the presence of asbestos-containing material by a certified inspector, and abatement has been performed by a licensed contractor following all applicable notification and permitting requirements of Regulation Number 8. CAQCC Reg. 1 also applies to the Building 889 demolition project. It states that any owner or operator of any demolition activity from which fugitive particulate emissions will be emitted shall be required to use all available practical methods which are technologically feasible and economically reasonable in order to minimize such emissions. Reg. 1 also gives the CDPHE the authority to require a written fugitive emissions control plan for demolition activities. Please forward any information pertaining to Building 889 demolition methodologies to Kaiser-Hill Air Quality Management as soon as it becomes available.

It is imperative that all subcontractors at the Site provide project information to Kaiser-Hill Air Quality Management prior to project initiation, in order to demonstrate Site-wide compliance with all applicable air regulations. If you have any questions concerning this evaluation, please contact Mike Putney of Air Quality Management/Radian Corporation at X2692, digital pager 3716.

MTP

cc:  
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