Literature Building Update January 15, 2009

Steps taken in response to EMF concerns:

- **Completed** Replaced older motor starting devices with newer solid-state soft starts to reduce current surge from motor start ups which reduces corresponding EMF.
- **Completed** Removed older magnetic fluorescent light ballasts and replaced with solid state equipment to reduce EMF and save energy throughout the building including room 122.
- **Completed** Removed electric powered exit signs and installing photo-luminescent signs to save energy and minimize EMF.
- Completed Shut down of elevator closest to room 110.
- **Completed** Installed "Secured" sign on elevator.

Steps taken in response mold concerns:

- **Completed** Replaced ceiling tiles found to be water damaged.
- **Completed** All building pipe insulation has been repaired. Poor pipe insulation led to condensation on the outside of the pipes which dripped down onto and damaged the ceiling tiles.
- Completed Outside walls have been hydro washed.
- In process Cleaning or replacing all air register grilles throughout the bldg. Any grille showing rust will be replaced or repainted. Expected completion 2/9/09.

Possible Options (Pending EH&S/Campus guidance and identification of funding):

- Replace air-conditioning fan coils throughout building. Current system includes areas of leaks and deteriorated insulation and condensate pans, leading to high moisture levels and possibility of mold. Estimated cost (\$200K) and duration six months from start.
- Install shielding around electric room to contain EMF. Estimated cost is \$65K and duration 45 days from start.
- Improve grounding of building electrical panels (12). Estimated cost is \$120K and duration 90 days from start.
- Change the operating voltage of the elevator equipment from 48VDC to 24VDC; incorporate a submersible tank with the motor enclosed. Estimated cost is \$275k-\$375k and duration 120 days from start.
- Move the existing elevator machine room to the exterior of the building. Estimated cost is \$400k-\$600k and duration one year from start.
- Change the elevator design from a hydraulic to a traction type. The elevator shaft will require major structural modifications. Estimated cost \$600k \$850k and duration one year from start.
- Install a new exterior elevator. This will probably result in a loss of square footage due to new entrance way and access issues. Estimated cost \$3M \$4M for the two elevators and duration 1.25 years from start.

Key Meeting Dates

- 9/10, at the request of EH&S, FM had SDG&E conduct additional readings.
- 12/12, FM held a meeting with Elevator, Electric, and Project Management leadership to determine how to proceed. Also, met with Rich Moore from Power Testing & Energization (PTE). Rich has worked on several projects in San Diego concerning EMF.
- 12/12, FM Elevator Supervisor had State Elevator Inspector on site to determine feasibility of elevator options.
- 12/13 and 12/15, with the help of FM personnel, PTE consultant went through the building to assess the situation and to take their own readings.
- 12/15, a meeting with VC Relyea, Interim AVC Thackston, EH&S, and FM was held to discuss and determine how to help make progress. Independently determined, both EH&S and FM would like to use Field Management Services Corp (FMSC). They are highly thought of in this industry. PTE has a working history with FMSC.