Case study: housing recreational areas and bathing facilities disaster sanitation...

Housing and Habitability The apartment complex has two high-risk health hazards that need immediate attention. Its walls are ticking time-bombs withthe presence of the highly toxic lead and the allergen mold. The residents are in grave health danger but the most susceptible are the children and pregnant women. And according to U. S. Department of Housing and Urban Development (HUD) " children from low income families are eight times more likely to get lead poisoned." The lead in paint enters the body when children ingest the paint chips. Lead may also be inhaled when it turns into dust by scraping, sanding or rubbing. Aside from poisoning, excessive amount of lead in the body may cause damage to vital organs, seizures and even death. In children, the effects could include behavioral and developmental problems (HUD). On the other hand, molds are living microorganisms which have existed on earth long before humans. Microscopic as they are, they emit even tinier spores which could be inhaled and may cause allergic reactions like headaches, sinusitis and asthma attacks. In worse cases, molds produce mycotoxins which can lead to more serious health problems. My report shall include immediate and long-term recommendations. First, the residents need to be tested for lead levels to identify those that need medical attention. Then, the residents need to be oriented on the dangers of lead and molds and how to properly remove them from their homes while the city health and sanitation department shall deploy personnel to professionally remove the peeling lead-based paints. In terms of prevention and maintenance, regular cleaning with soap and a damp cloth should do the trick with recurring molds and left-over paint chips and dust. Finally, I shall recommend that the apartment complex be included in a request for grant from the HUD. The grant shall be used to rehabilitate

the entire complex to make it compliant with current health and environmental laws and regulations. (HUD, EPA) Swimming Pools Swimming is a favorite form of recreation and exercise for people of all ages. And for majority of the population who do not have the luxury of a backyard swimming pool, a regular trip to a public pool satisfies our cravings for splash. There are two popular systems of cleaning and maintaining swimming pools: by chlorination and by ozonation. On the one hand, chlorination is done by adding a specified amount of chlorine in proportion to the volume of water in the pool. Chlorine then breaks down into two compounds, the chloric acid and hydrochloric acid. The compound that actually cleanses and oxidizes the water is the chloric acid (BBC). Chlorine's germicidal properties make it the ideal method in ensuring sanitation in public swimming pools where the daily traffic it gets makes it virtually impossible to monitor swimmer's individual hygiene practices. However, its downside includes skin and eye irritations as well as respiratory problems for frequent swimmers. On the other hand, ozonation is a relatively new method in swimming pool sanitation. An ozone generator injects ozone into the water that oxidizes and destroys water impurities. However, there is much debate as to its capacity to kill germs and actually sanitize the waters. There is doubt as to the measurement of its germicidal effects like chlorination has and it is feared that using the chlorine measurements would only produce false results (Rushall 2005). Nevertheless, ozonation is gaining popularity because it the " natural" method that decreases if not eliminate chlorine. I believe that the best method of sanitizing public swimming pools would be to take the best of both worlds. The waters shall be cleaned first by ozonation to oxidize impurities and then followed by a little chlorination to totally kill all

germs and bacteria. References: Environmental Protection Agency. Simple Steps To Protect Your Family From Lead Hazards. Accessed on June 5, 2011. Available at http://www. epa. gov/lead/pubs/leadpdfe. pdf Department of Housing and Urban Development. Mold. Accessed on June 5, 2011. Available at http://portal. hud. gov/hudportal/documents/huddoc? id= DOC_12335. pdf Department of Housing and Urban Development. Lead. Accessed on June 5, 2011. Available at http://portal. hud. gov/hudportal/documents/huddoc? id= DOC_11875. pdf Rushall, B. Comaprisons of Chlorine and MIOX Treated Pool Water. 18 September 2005. Accessed on June 5, 2011. Available at http://coachsci. sdsu. edu/swimming/chlorine/MIOXCl. pdf Operating a Chlorinated Swimming Pool. 18th September 2006. BBC. Accessed on June 5, 2011. Available at http://www. bbc. co. uk/dna/h2g2/A13264292