

APPENDIX 3.5-A

# **Applicability of Laws, Regulations, and Standards for EMI/EMF**

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**Table 3.5-A1**  
Applicability of Laws, Regulations, and Design Standards for Electromagnetic Interference/Electromagnetic Fields (EMI/EMF)

| Impact Category                                                                              | Project Features                                                                             | Applicable Laws and Regulations                                                                                                                             | Applicable Design Standards                                                                                                                     |
|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Construction Impacts</b>                                                                  |                                                                                              |                                                                                                                                                             |                                                                                                                                                 |
| Licensed radio communications between construction vehicles                                  | Alignment, including access track to Castle Commerce Center heavy maintenance facility (HMF) | Federal Communication Commission (FCC) regulations for the authorized use of two-way radio communications (47 Code of Federal Regulations [CFR] 01 et seq.) |                                                                                                                                                 |
| <b>Project Impacts</b>                                                                       |                                                                                              |                                                                                                                                                             |                                                                                                                                                 |
| EMI interference with other FCC licensed broadcasters                                        | Alignment, including access track to Castle Commerce Center HMF                              | FCC regulations for the prevention of interference with authorized broadcast radio communications (47 CFR 01 et seq.)                                       |                                                                                                                                                 |
| EMF exposure to passengers on high-speed train (HST) and in stations                         | Within the HST right-of-way                                                                  |                                                                                                                                                             | International Commission on Non-Ionizing Radiation Protection guidelines on allowable electric and magnetic field exposure to the public        |
| EMF exposure to HST employees                                                                | Within the HST right-of-way                                                                  |                                                                                                                                                             | International Commission on Non-Ionizing Radiation Protection Guidelines for electric and magnetic field occupational exposure to HST employees |
| EMF exposure to HST employees who have implanted medical devices                             | Within the HST right-of-way                                                                  |                                                                                                                                                             | American Conference of Governmental Industrial Hygienists Sub-radiofrequency (30 kilohertz [kHz] and below) magnetic fields                     |
| EMF exposure to the public outside of the alignment                                          | Outside the HST right-of-way                                                                 |                                                                                                                                                             | International Commission on Non Ionizing Radiation Protection guidelines on allowable electric and magnetic field exposure to the public        |
| EMF interference with track signaling systems on adjoining railroads                         | Alignment, including access track to Castle Commerce Center HMF                              | Federal Railroad Administration regulations (49 CFR 234, 236, 238 et seq)                                                                                   | UPRR and BNSF design standards for railway signaling systems                                                                                    |
| Electromagnetic compatibility with businesses using sensitive equipment outside of alignment | Alignment, including access track to Castle Commerce Center HMF                              |                                                                                                                                                             | HST Electromagnetic Compatibility Program Plan                                                                                                  |

| Impact Category                                                                                                   | Project Features                                                | Applicable Laws and Regulations                                                                | Applicable Design Standards |
|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------|
| HST alignment's proximity to schools and high-voltage power transmission lines that supply electricity to the HST | Alignment, including access track to Castle Commerce Center HMF | California Department of Education, California Code of Regulations, Title 5, Section 14010(c). |                             |