

## **APPENDIX A: IMPACT AVOIDANCE AND MINIMIZATION FEATURES FOR HAZARDOUS MATERIALS AND WASTES**

The Authority and FRA will implement the following IAMFs to address potential Central Valley Wye effects from hazardous materials and wastes:

### **HMW-IAMF#1: Property Acquisition Phase I Assessments**

During the right-of-way acquisition phase, Phase I environmental site assessments will be conducted in accordance with standard ASTM methodologies to characterize each construction site. The determination of parcels that require soil testing and the locations for testing will be informed by a Phase I environmental site assessment and made in coordination with state and local agency officials. Testing and appropriate remediation will be conducted prior to acquisition. Prior to construction, the contractor shall conduct remediation activities that may include removal of contamination, in situ treatment, or soil capping in full compliance with applicable state and federal laws and regulations.

### **HMW-IAMF#2: Landfill**

Prior to construction (any ground-disturbing activities), the contractor shall verify to the Authority through preparation of a technical memorandum that methane protection measures will be implemented for all work within 1,000 feet of a landfill, including gas detection systems and personnel training. This will be undertaken pursuant to State of California Title 27, Environmental Protection—Division 2, Solid Waste, and the hazardous materials best management practices (BMP) plan.

### **HMW-IAMF#3: Work Barriers.**

Prior to construction (any ground-disturbing activities), the contractor shall verify to the Authority through preparation of a technical memorandum the use of work barriers. Nominal design variances, such as the addition of a plastic barrier beneath the ballast material to limit the potential release of volatile subsurface contaminants, may be implemented in conjunction with site investigation and remediation.

### **HMW-IAMF#4: Undocumented Contamination**

Prior to construction, the contractor shall prepare a Construction Management Plan (CMP) addressing provisions for the disturbance of undocumented contamination. The plan will be submitted to the Authority for review and approval. Undocumented contamination could be encountered during construction activities and the contractor will work closely with local agencies to resolve any such encounters and address necessary cleanup or disposal. Copies of all required hazardous material documentation shall be provided within 30 days to the Authority.

### **HMW-IAMF#5: Demolition Plans**

Prior to construction that involves demolition, the contractor shall prepare demolition plans for the safe dismantling and removal of building components and debris. The demolition plans will include a plan for lead and asbestos abatement. The plans shall be submitted to the project construction manager (PCM) on behalf of the Authority for verification that appropriate demolition practices consistent with federal and state regulations regarding asbestos and lead paint abatement have been followed.

### **HMW-IAMF#6: Spill Prevention**

Prior to construction (any ground-disturbing activities), the contractor shall prepare a CMP addressing spill prevention. A Spill Prevention, Control, and Countermeasure (SPCC) plan or, for smaller quantities (if total aboveground oil storage capacity is less than 1,320 gallons in storage containers greater than or equal to 55 gallons), a spill prevention and response plan that prescribes BMPs to follow to prevent hazardous material releases and cleanup of any hazardous

material releases that may occur. The plans will be prepared and submitted to the PCM on behalf of the Authority.

### **HMW-IAMF#7: Transport of Materials**

During construction, the contractor will comply with applicable state and federal regulations, such as the Resource Conservation and Recovery Act (RCRA), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Hazardous Materials Release Response Plans and Inventory Law, and the Hazardous Waste Control Act. Prior to construction, the contractor will provide the Authority with a hazardous materials and waste plan describing responsible parties and procedures for hazardous waste and hazardous materials transport.

### **HMW-IAMF#8: Permit Conditions**

During construction, the contractor will comply with the State Water Resources Control Board Construction Clean Water Act Section 402 General Permit conditions and requirements for transport, labeling, containment, cover, and other BMPs for storage of hazardous materials during construction. Prior to construction, the contractor shall provide the Authority with a hazardous materials and waste plan describing responsible parties and procedures for hazardous waste and hazardous materials transport, containment, and storage BMPs.

### **HMW-IAMF#9: Environmental Management System.**

To the extent feasible, the Authority is committed to identifying, avoiding, and minimizing hazardous substances in the material selection process for construction, operation, and maintenance of the HSR System. The Authority will use an Environmental Management System to describe the process that will be used to evaluate the full inventory of hazardous materials as defined by federal and state law employed on an annual basis and will replace hazardous substances with nonhazardous materials. The contractor shall implement the material substitution recommendation contained in the annual inventory.

### **HMW-IAMF#10 Hazardous Materials Plans**

Prior to operations and maintenance activities, the Authority shall prepare hazardous materials monitoring plans. These will use as a basis source, such as a hazardous materials business plan as defined in Title 19 California Code of Regulations and an SPCC plan.