

**APPENDIX 3.10-A**

## **Potential Impacts on Schools from Hazardous Materials**

---



**MEMORANDUM**

---

# **California HST Merced to Fresno Section – Potential Impacts on Schools from Hazardous Materials**

**TO:** Program Management Team  
**COPIES:** Administrative Record File  
**FROM:** Kirstin Skadberg/CH2M HILL, Jessica Babcock/Parus,  
Karin Lilienbecker/CH2M HILL  
**DATE:** July 13, 2011

This memorandum describes requirements associated with California Public Resources Code Section 21151.4 and describes potential impacts resulting from constructing or operating the Merced to Fresno Section that could affect schools within 0.25 mile of the construction footprint. In addition, it discusses the approach that will be taken to comply with the Code for the Merced to Fresno Section.

## **California Public Resources Code Section 21151.4**

The California Public Resources Code Section 21151.4 states that, for projects that might reasonably be expected to emit or handle hazardous materials and are located within 0.25 mile (402 meters) of a school site, consultation with the school district is required regarding potential hazards. Specific language in the code states:

- a. *An environmental impact report shall not be certified or a negative declaration shall not be approved for any project involving the construction or alteration of a facility within one-fourth of a mile of a school that might reasonably be anticipated to emit hazardous air emissions, or that would handle an extremely hazardous substance or a mixture containing extremely hazardous substances in a quantity equal to or greater than the state threshold quantity specified pursuant to subdivision (j) of Section 25532 of the Health and Safety Code, that may pose a health or safety hazard to persons who would attend or would be employed at the school, unless both of the following occur:*
  1. *The lead agency preparing the environmental impact report or negative declaration has consulted with the school district having jurisdiction regarding the potential impact of the project on the school.*
  2. *The school district has been given written notification of the project not less than 30 days prior to the proposed certification of the environmental impact report or approval of the negative declaration.*
- b. *As used in this section, the following definitions apply:*
  1. *"Extremely hazardous substance" means an extremely hazardous substance as defined pursuant to paragraph (2) of subdivision (g) of Section 25532 of the Health and Safety Code.*
  2. *"Hazardous air emissions" means emissions into the ambient air of air contaminants that have been identified as a toxic air contaminant by the State Air Resources Board or by the air pollution control officer for the jurisdiction in which the project is located. As determined by the air pollution control officer, hazardous air emissions also means emissions into the ambient air of a substance identified in subdivisions (a) to (f), inclusive, of Section 44321 of the Health and Safety Code.*

## Location of Schools along the Merced to Fresno Section Alternatives

Twenty-one schools have been identified within the evaluated study area for the HST alternatives (see Table 1 and attached Figures 1 through 4 for maps of alternatives and proximate schools). Schools located within 0.25 mile of the Merced to Fresno Section HST study area include nursery schools, elementary schools, high schools, religious schools, adult/continuing education centers, and professional schools. The Joe Stefani Elementary School (2768 Ranchero Lane, Merced) and Merced Union High School District's Adult Center (2120 Spacecraft Drive, Atwater) are located within the construction footprint of the Castle Commerce Center Heavy Maintenance Facility (HMF) or the guideway connecting it to the Merced Station (Figures 5 and 6, respectively). The schools would require relocation. Table 1 lists contaminated sites located within 0.25 mile of schools and their respective primary contaminant(s) of concern, as well as potential hazardous air emissions in the vicinity of schools during project construction and operation.

## Hazardous Materials and Wastes and Air Quality

Potential hazardous materials and emissions could occur in the vicinity of these schools, as described in the Merced to Fresno HST Project EIR/EIS:

**Hazardous Materials and Wastes:** As discussed in Section 3.10 of the Draft Project EIR/EIS, the project could emit hazardous air emissions or handle extremely hazardous wastes above threshold quantities during construction, demolition, and excavation activities. Potentially hazardous materials that could be used during construction of the project include fuels, lubricants, paints, curing compounds, and sanitizers. Compliance with various federal, state, and local regulations is expected to minimize the risk of a spill or accidental release of hazardous materials.

During operations of the HST, hazardous waste would be limited primarily to maintenance and repair of trains at the HMF. Stationary sources of toxic air contaminants from HST operations would include use of solvent-based materials (cleaners and coatings). Although these hazardous materials are anticipated to be within the state threshold quantities, accidental spills or upsets of hazardous materials could affect schools near the HMF facility. Sources of toxic air emissions resulting from the operation of the HMF may include welding, material storage, abrasive blasting, and paint booths.

**Air Quality and Global Climate Change:** As described in Section 3.3 of the Draft Project EIR/EIS, the Merced to Fresno Section of the California HST system would include an HMF to service and repair the HST rail cars and electric locomotives. The facility would contain heavy-duty equipment (such as cranes, backhoes, loaders, and emergency generators), heavy-duty delivery trucks, and a spray booth for painting the trains. Although measures would be incorporated to minimize atmospheric emissions from these sources, such as the use of electric yard trains to move rail cars and electric locomotives around the site and the use of diesel retrofits on heavy-duty diesel engines, the activities at the HMF would generate emissions that could affect nearby schools. The major sources of emissions at the HMF would include the following:

- Diesel yard or switch locomotive activities associated with maintenance-of-way operations
- Spray booth painting operations
- Heavy-duty diesel-fuel equipment
- Heavy-duty delivery trucks

Although only one HMF would be needed for the HST project, several sites are being considered both inside and outside the Merced to Fresno Section of the HST system. Of those sites being considered within the Merced to Fresno Section, the only public school located within approximately 1,000 feet (300 meters) of an HMF site boundary is located adjacent to the tracks leading to the Castle Commerce Center site, and therefore is not expected to be affected by hazardous air emissions from the HMF, if that site were selected.

## **Compliance Approach**

To comply with Section 21151.4 of the California Public Resources Code, the emission of hazardous materials and air pollutants during construction and operation will be limited and affected school districts will be notified.

### **Requirements during Construction and Operations**

The contractor will be required to not exceed state threshold quantities specified pursuant to subdivision (j) of Section 25532 of the Health and Safety Code during construction of the project. During operation of the project, the contractor will be required to not store materials exceeding the state threshold on the HMF property.

### **Consultation with School Districts**

School districts, which include the districts for the 21 schools listed in Table 1, will receive a notification letter regarding potential impacts on district schools, including the potential to encounter substances classified as "extremely hazardous," and the use of diesel-fueled heavy equipment during construction of the HST system. School districts with a school located within 0.25 mile of a potential HMF site will be notified of the potential proximity of the HMF to the school; however, no schools are located within 0.25 mile of an HMF site in the Merced to Fresno Section.

There are eight school districts with schools within 0.25 mile of the construction footprint, and two private schools, as follows:

- Merced City School District (5 schools)
- Merced Union High School District (4 schools)
- Merced County Office of Education (1 school)
- Le Grand Union Elementary School District (1 school)
- State Center Community College District (1 school)
- Madera Unified School District (2 schools)
- Central Unified School District (3 schools)
- Fresno Unified School District (2 schools)
- Private schools (2 schools)

**Table 1**  
Schools Located Within Designated Study Areas of HST Alternative and HMF Sites

School Address	Approx Distance from Construction Footprint (dated 4-12-11)	Potentially Contaminated Sites within 1/4 mile; Contaminant of Concern	Existing Environment	Perceived Potential to Release Hazardous Air Emissions - Construction	Perceived Potential to Release Hazardous Air Emissions - Operation
Charles Wright Elementary 900 E 20th Street Merced, CA 95340	Merced City School District  0.27 mile		Residential	Unlikely	Unlikely
Community Day 1180 E Street Merced, CA 95341	Merced City School District  0.25 mile	Bartlett Petroleum; petroleum, MTBE	Residential	Unlikely	Unlikely
Don Stowell Elementary/Galen Clark Preschool 251 E 11th Street Merced, CA 95341	Merced City School District  0.25 mile		Residential	Unlikely	Unlikely
Franklin Elementary/Franklin Preschool 2736 Franklin Road Merced, CA 95348	Merced City School District  0.22 mile		Residential	Unlikely	Unlikely
Joe Stefani Elementary School 2768 Ranchero Lane Merced, CA 95348	Merced City School District  within footprint for track leading to Castle Commerce Center HMF		Residential	Unlikely	Unlikely
Yosemite (Continuation)/Independence (Alternative)/Sequoia High 1900 G Street Merced, CA 95340	Merced Union High School District  0.15 mile		Residential	Low - Located on G St, which would be modified and may be used as a haul route.	Unlikely
Golden Valley High 2121 E Childs Avenue Merced, CA 95341	Merced Union High School District  0.25 mile		Commercial	Unlikely	Unlikely

**Table 1**  
Schools Located Within Designated Study Areas of HST Alternative and HMF Sites

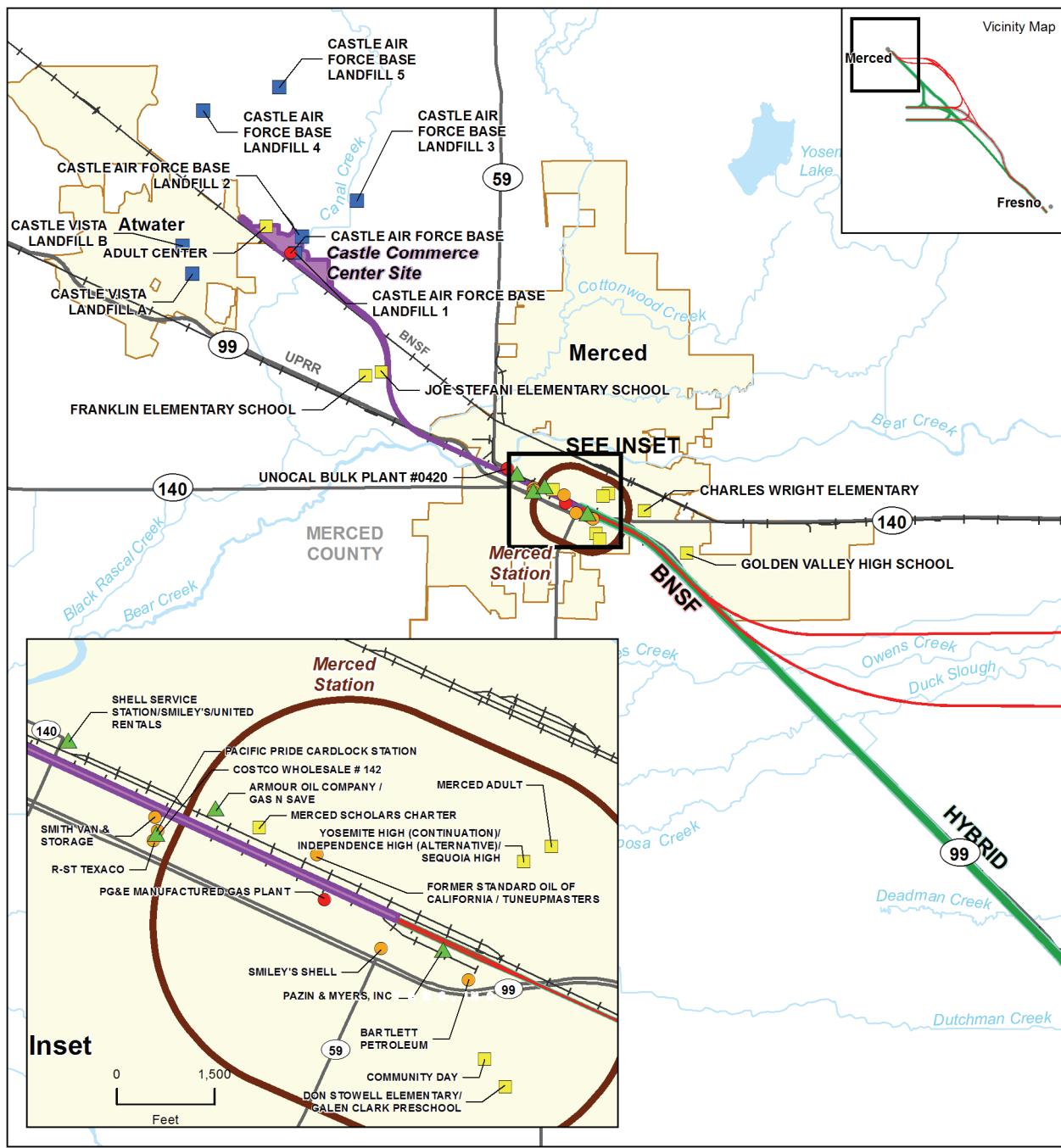
School Address	School District	Approx Distance from Construction Footprint (dated 4-12-11)	Potentially Contaminated Sites within 1/4 mile; Contaminant of Concern	Existing Environment	Perceived Potential to Release Hazardous Air Emissions - Construction	Perceived Potential to Release Hazardous Air Emissions - Operation
Merced Adult 50 E 20th Street Merced, CA 95340	Merced Union High School District	0.23 mile		Residential	Unlikely	Unlikely
Merced Union High School District's Adult Center 2120 Spacecraft Drive Atwater, CA 95301	Merced Union High School District	within footprint of Castle Commerce Center HMF		Industrial	Potential – Castle Commerce Center is a known area of contamination.	Low – HMF would be near school site
Merced Scholars Charter 808 W 16th Street Merced, CA 95340	Merced County Office of Education	0.03 mile	Armour Oil; petroleum Texaco Bulk Plant; BTEX, petroleum, VOCs Tinetti-William: petroleum Dave Cook Front End Shop; diesel Former Standard Oil; oil Southern Pacific Transportation Co; petroleum	Commercial	Low – history of contamination nearby	Unlikely
Le Grand Elementary 13071 E Le Grand Road Le Grand, CA 95333	Le Grand Union Elementary School District	0.28 mile	D+S Market; petroleum	Rural Residential	Unlikely	Unlikely
Madera Community College Center 30277 Avenue 12 Madera, CA 93638	State Center Community College District	0.18 mile		Rural	Unlikely	Unlikely

**Table 1**  
Schools Located Within Designated Study Areas of HST Alternative and HMF Sites

School Address	School District	Approx Distance from Construction Footprint (dated 4-12-11)	Potentially Contaminated Sites within 1/4 mile; Contaminant of Concern	Existing Environment	Perceived Potential to Release Hazardous Air Emissions - Construction	Perceived Potential to Release Hazardous Air Emissions - Operation
St. Joachim Elementary 310 N I Street Madera, CA 93637	Private	0.27 mile	Valee Foodstore; petroleum	Commercial/Residential	Unlikely	Unlikely
Faith Tabernacle Christian Academy 745 N H Street Madera, CA 93637	Private	0.2 mile		Residential - .01 mile from SR 99	Low – possibility SR 99 will be used as a haul route.	Unlikely
George Washington Elementary 509 E South Street Madera, CA 93638	Madera Unified School District	0.23 mile		Residential	Unlikely	Unlikely
Sierra Vista Elementary 917 E Olive Avenue Madera, CA 93638	Madera Unified School District	0.2 mile	JW Myers; petroleum	Residential/Industrial	Unlikely	Unlikely
Rio Vista Middle School 6240 W Palo Alto Avenue Fresno, CA 93722	Central Unified School District	0.26 mile		Residential	Unlikely	Unlikely
River Bluff Elementary 6150 Palo Alto Avenue Fresno, CA 93722	Central Unified School District	0.22 mile		Residential	Unlikely	Unlikely
Saroyan Elementary 5650 W Escalon Avenue Fresno, CA 93722	Central Unified School District	0.16 mile		Residential	Unlikely	Unlikely
Addams Elementary 2117 W McKinley Avenue Fresno, CA 93728	Fresno Unified School District	0.02 mile	Fuels 4 U; petroleum	Residential/Commercial – approx .08 miles west of SR 99	Low – construction would be close to schools. SR 99 is a potential haul route.	Unlikely

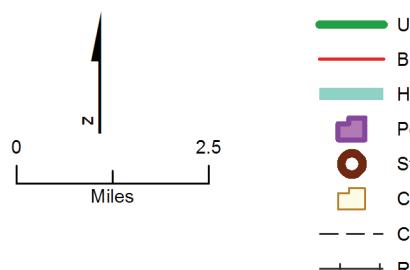
**Table 1**  
Schools Located Within Designated Study Areas of HST Alternative and HMF Sites

School Address	School District	Approx Distance from Construction Footprint (dated 4-12-11)	Potentially Contaminated Sites within 1/4 mile; Contaminant of Concern	Existing Environment	Perceived Potential to Release Hazardous Air Emissions - Construction	Perceived Potential to Release Hazardous Air Emissions - Operation
Lincoln Elementary 651 B Street Fresno, CA 93706	Fresno Unified School District	0.2 mile		Residential	Unlikely	Unlikely



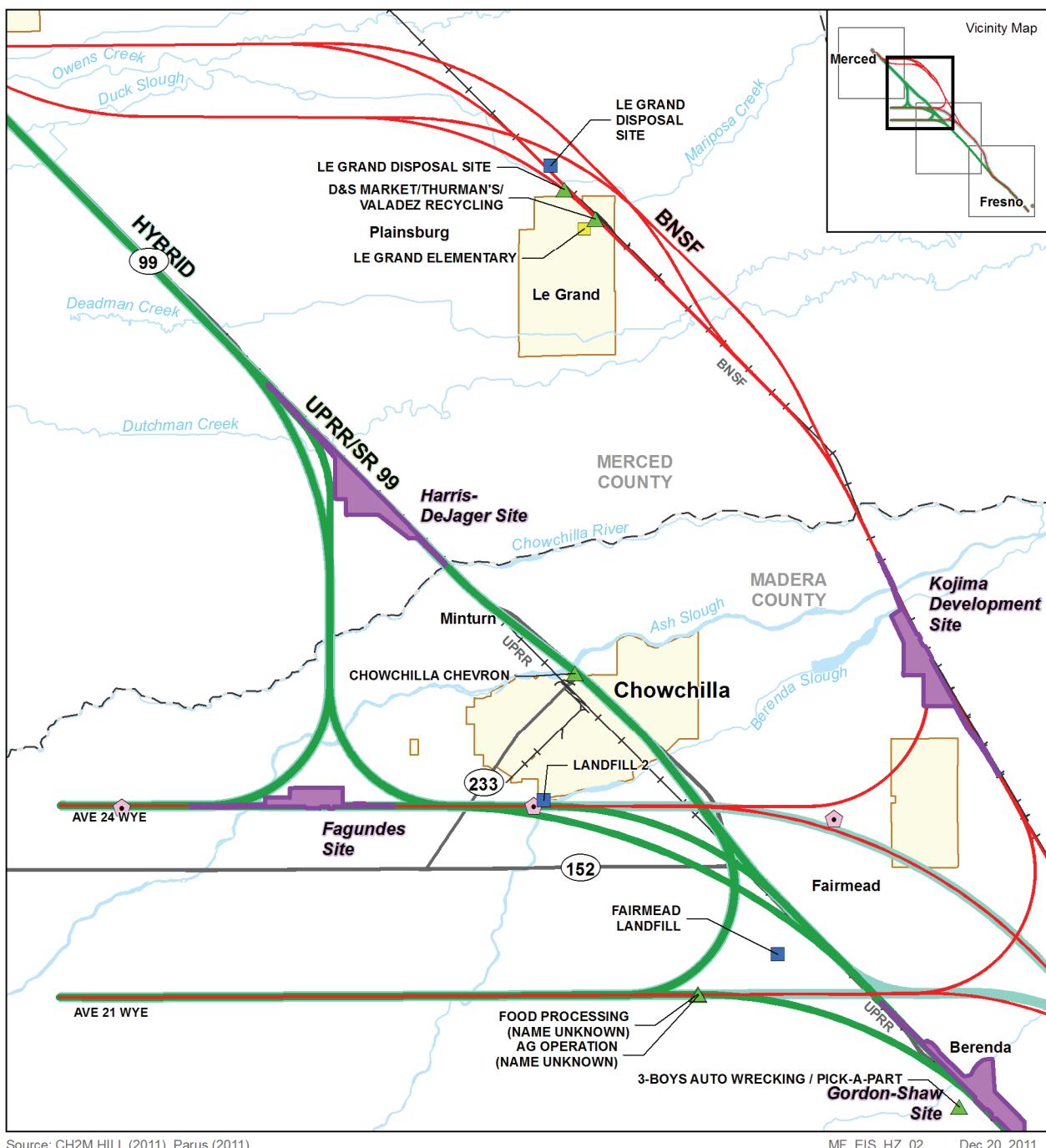
Source: CH2M HILL (2011), Parus (2011).

MF\_EIS\_HZ\_01 Dec 20, 2011

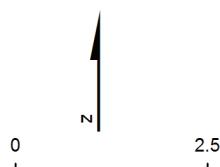


- |                                      |                        |   |                  |
|--------------------------------------|------------------------|---|------------------|
| UPRR/SR 99 Alternative               | (Green line)           | Oil Well                                    | (Pink diamond)   |
| BNSF Alternative                     | (Red line)             | Landfill                                    | (Blue square)    |
| Hybrid Alternative                   | (Teal line)            | School                                      | (Yellow square)  |
| Potential Heavy Maintenance Facility | (Purple polygon)       | Conceivable Potential Environmental Concern | (Green triangle) |
| Station Study Area                   | (Brown circle)         | Current Potential Environmental Concern     |                  |
| City Limit                           | (Orange outline)       | Medium Risk                                 | (Yellow circle)  |
| County Boundary                      | (Dashed line)          | High Risk                                   | (Red circle)     |
| Railroad                             | (Black line with dots) |   |                  |

**Figure 1**  
Locations of Schools and Conceivable and Current PECs in the Merced Project Vicinity

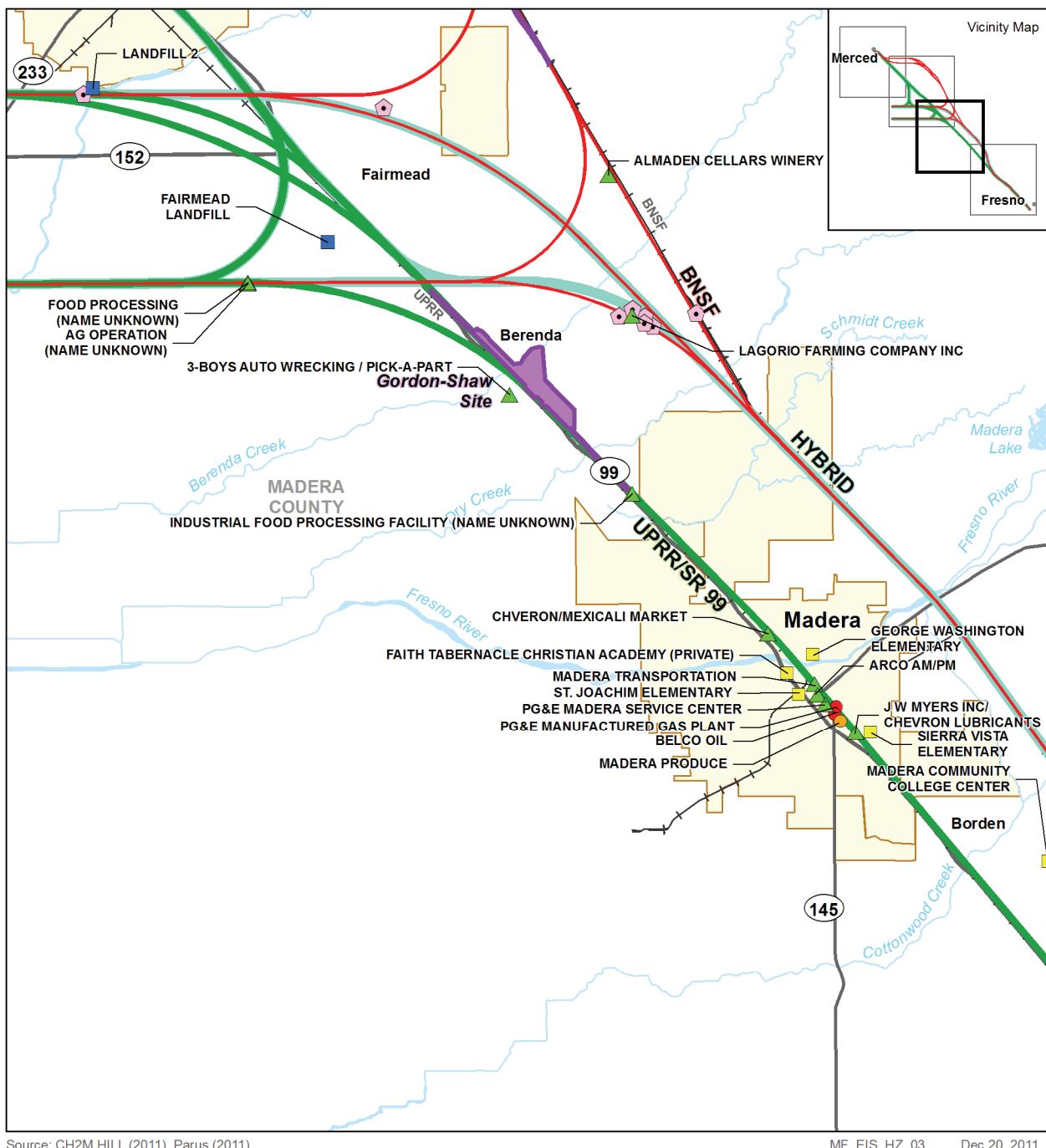


Source: CH2M HILL (2011), Parus (2011).



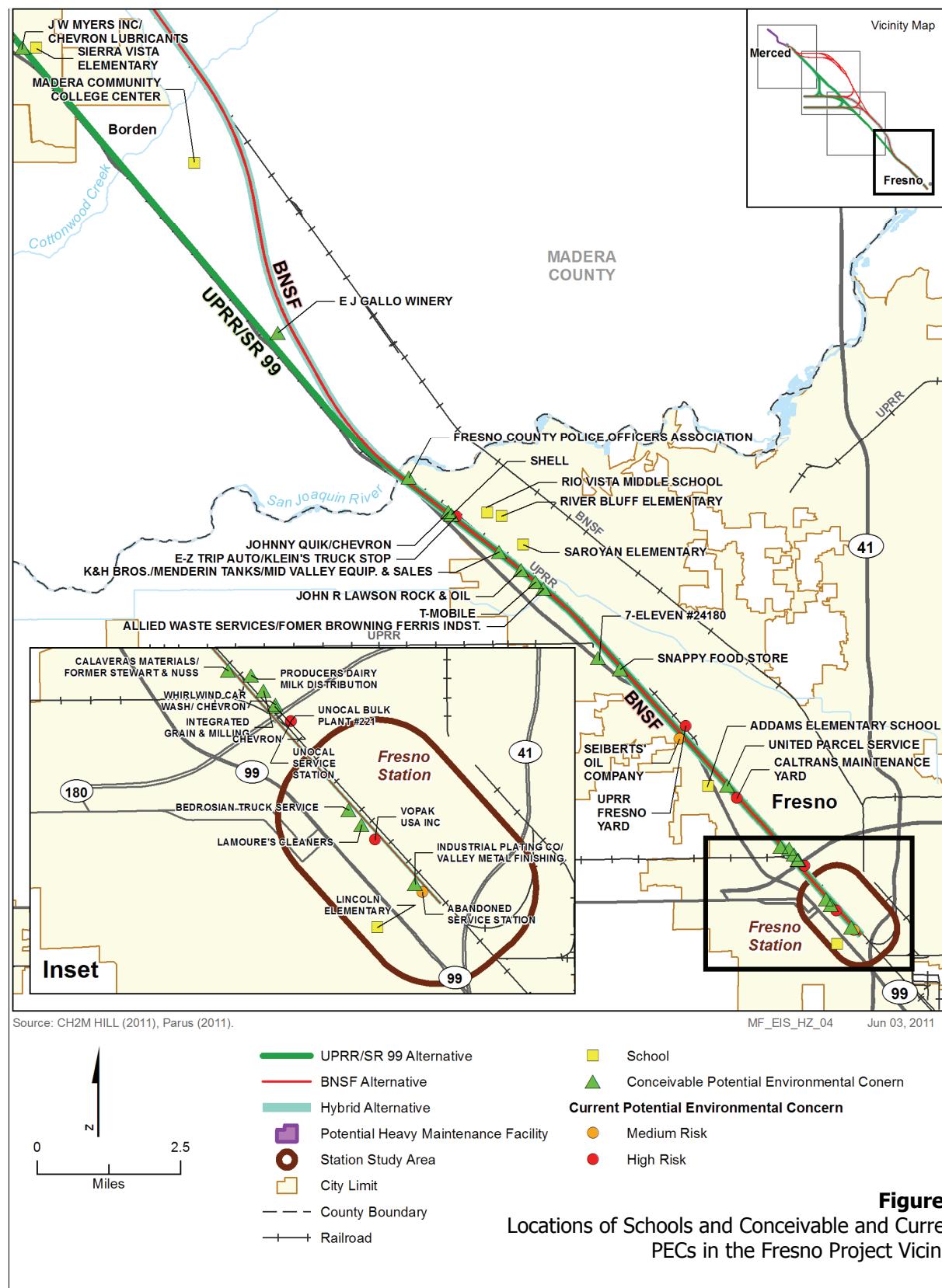
- UPRR/SR 99 Alternative
  - BNSF Alternative
  - Hybrid Alternative
  - Potential Heavy Maintenance Facility
  - Station Study Area
  - City Limit
  - - - County Boundary
  - Railroad
  - ◊ Oil Well
  - Landfill
  - School
  - ▲ Conceivable Potential Environmental Concern
- Current Potential Environmental Concern**
- Medium Risk
  - High Risk

**Figure 2**  
Locations of Schools and Conceivable and Current  
PECs in the Chowchilla Project Vicinity



- |                                      |   |
|--------------------------------------|---|
| UPRR/SR 99 Alternative               | Oil Well                                    |
| BNSF Alternative                     | Landfill                                    |
| Hybrid Alternative                   | School                                      |
| Potential Heavy Maintenance Facility | Conceivable Potential Environmental Concern |
| Station Study Area                   |   |
| City Limit                           |   |
| County Boundary                      |   |
| Railroad                             |   |
- Current Potential Environmental Concern**
- Medium Risk
  - High Risk

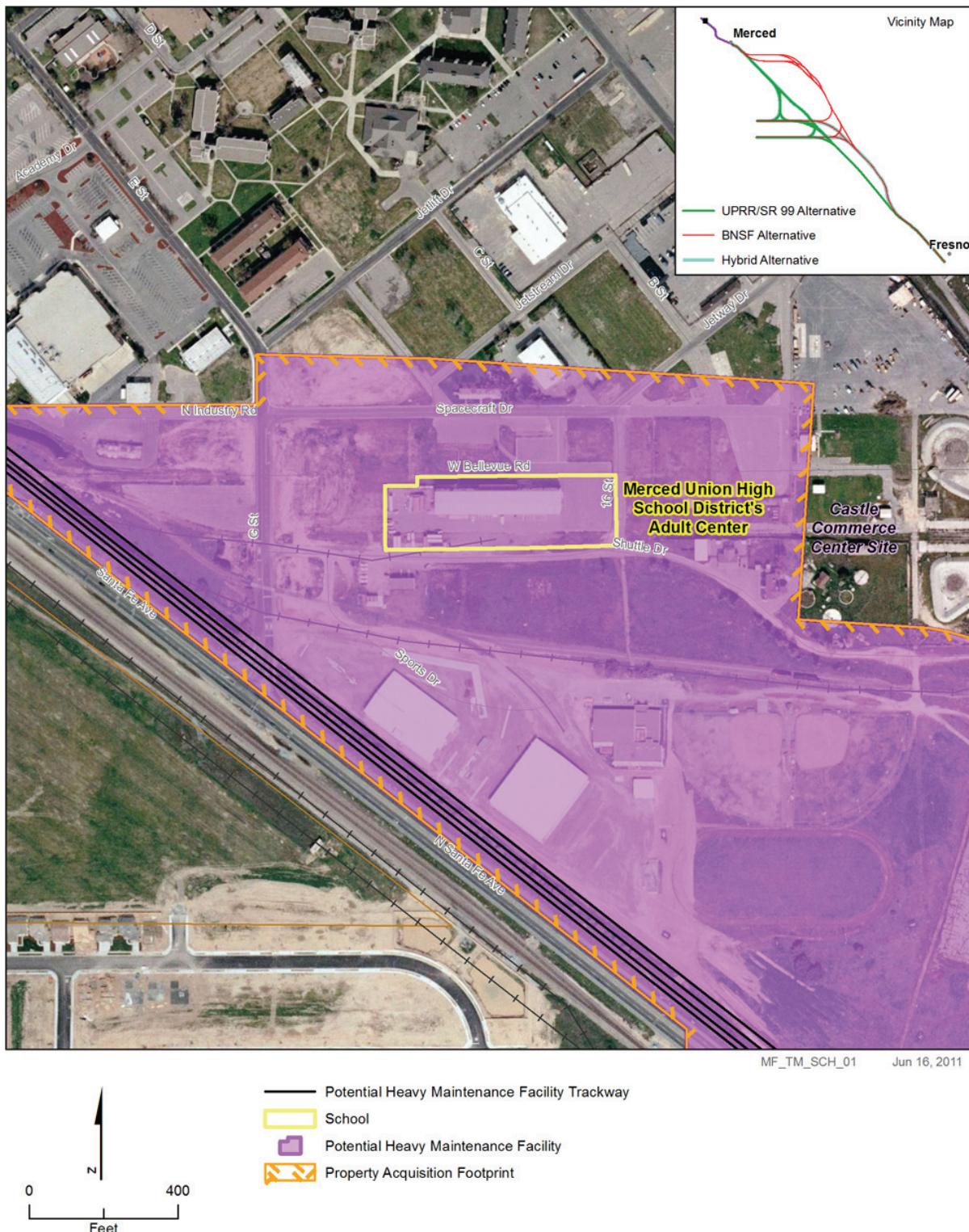
**Figure 3**  
Locations of Schools and Conceivable and Current  
PECs in the Madera Project Vicinity



**Figure 4**  
Locations of Schools and Conceivable and Current PECs in the Fresno Project Vicinity



**Figure 5**  
Joe Stefani Elementary School  
Merced City School District



**Figure 6**  
Merced Union High School District's Adult Center  
Merced Union High School District