

## **7.11 HAZARDS AND HAZARDOUS MATERIALS**

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### 7.11.1 INTRODUCTION

#### 7.11.1.1 Content

This section describes the impacts of the Monterey Amendment and the Settlement Agreement related to hazards and hazardous materials. No elements of the proposed project would have the potential to create hazards to human health as a result of use, transport or disposal of hazardous substances (see Table 7.11-1).

<b>TABLE 7.11-1</b>		
<b>IMPACTS OF PROPOSED PROJECT ELEMENTS RELATIVE TO HAZARDS AND HAZARDOUS MATERIALS</b>		
<b>Proposed Project Element</b>	<b>Potentially Affected Environmental Resources</b>	<b>Impact Number</b>
<b>Monterey Amendment</b>		
Reallocation of water supplies in droughts	Percolation pond construction and exposure of workers to hazardous materials	7.11-1A and 7.11-1B
Permanent transfers of water	Percolation pond construction and exposure of workers to hazardous materials	7.11-1A and 7.11-1B
Transfer of Kern Fan Element lands	Percolation pond construction and exposure of workers to hazardous materials	7.11-1A and 7.11-1B
Water supply management practices	Percolation pond construction and exposure of workers to hazardous materials	7.11-1A and 7.11-1B
Restructured financial arrangements	NA	NA
<b>Settlement Agreement</b>	NA	NA
<small>Note: NA – Not Applicable.</small>		

Hazardous substances are substances which, by their nature and reactivity, have the capacity of causing harm or a health hazard during normal exposure or an accidental release or mishap, and are characterized as being toxic, corrosive, flammable, reactive, an irritant or strong sensitizer. The term “hazardous substances” encompasses chemicals regulated by both the US Department of Transportation’s (DOT) “hazardous materials” regulations and the Environmental Protection Agency’s (EPA) “hazardous waste” regulations, including emergency response. Hazardous wastes require special handling and disposal because of their potential to damage public health and the environment. A designation of “acutely” or “extremely” hazardous refers to specific listed chemicals and quantities.

Activities and operations that use or manage hazardous or potentially hazardous substances could create a hazardous situation if release of these substances occurred. Individual circumstances, including the type of substance, quantity used or managed, and the nature of the activities and operations, affect the probable frequency and severity of consequences from a hazardous situation. Federal, state and local laws regulate the use and management of

hazardous or potentially hazardous substances. Creation of human health hazards or exposure of people to existing sources of potential health hazards is considered in this section.

In general, hazards associated with the proposed project would be related to the presence of residual agricultural chemicals, hazardous materials used as part of routine maintenance activities, fuel or waste oil storage tanks, and oil and gas pipelines.

During public review of the NOP for this EIR, interested parties submitted no comments related to hazardous substances.

#### **7.11.1.2 Analytical Method**

The assessment of project impacts related to hazards and hazardous substances was conducted in accordance with standard professional practices. Factors considered in the analysis include the potential for exposure of humans to unidentified hazardous substances in soils during construction activities for percolation ponds in Kern Fan Element and in Plumas County as a result of watershed improvement projects.

#### **7.11.1.3 Standards of Significance**

The following standard of significance is based on Appendix G of CEQA guidelines. For the purposes of this EIR, impacts related to hazards and hazardous substances would be considered significant if the proposed project would:

- Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

### **7.11.2 ENVIRONMENTAL SETTING**

The setting for the proposed project with respect to hazards or hazardous materials is limited to areas that would have construction activities. In particular, those areas include the Kern Fan Element and the Plumas County watershed where activities would be limited to construction of percolation ponds for groundwater banking and improvements to natural drainage features in the Plumas County watershed, respectively.

#### **7.11.2.1 Physical Setting in 1995**

Prior to signing the Monterey Amendment, the California Department of Water Resources (Department) was preparing to use the Kern Fan Element for the creation of a groundwater bank for the future reliability of water supplies. Prior to the Department acquiring the Kern Fan Element, the land was historically used for agricultural production. Once the land was acquired by the Department, agricultural practices were eliminated over a five-year period and the land was fallowed. In 1995, KWBA constructed 3,034 acres of recharge southwest of the City of Bakersfield and near the Kern River.

The hazards and hazardous materials setting for the Kern Fan Element was described in the Supplemental EIR for the first stage of the Kern Water Bank project. The setting described was generally related to the hazardous materials present in the soils in the Kern Fan Element. The 1990 Supplemental EIR for the first stage of the Kern Water Bank described the results of soil sampling done throughout the Kern Fan Element to characterize potential contamination. Pesticides, herbicides, and other contaminants were found in soil samples near the pond sites,

with isolated pockets of petroleum compounds found near oil pipelines or facilities.<sup>1</sup> Soil samples were used to determine the safest location for the construction of the percolation ponds. In addition, the 1990 Supplemental EIR for the first stage of the Kern Water Bank identified mitigation measures in the form of further testing and monitoring of the soil and groundwater in the area of the percolation ponds to prevent future contamination of groundwater or potential for release of contaminants.<sup>2</sup>

### **7.11.2.2 Changes in Physical Setting between 1996 – 2003**

The physical setting for hazards and hazardous materials described under 1996 conditions would be the same as under 2003 conditions.

### **7.11.2.3 Regulatory Setting in 1995**

The following describes the federal and state regulatory setting for the period prior to 1995.

#### **Federal**

Many agencies regulate hazardous materials. These include federal agencies such as the EPA, the Occupational Safety and Health Administration (OSHA), the Nuclear Regulatory Commission (NRC), the DOT and the National Institutes of Health (NIH). The following represent federal laws and guidelines governing hazardous materials prior to 1995:

- Federal Water Pollution Control Act,
- Clean Air Act,
- Occupational Safety and Health Act,
- Federal Insecticide, Fungicide, and Rodenticide Act,
- Comprehensive Environmental Response Compensation and Liability Act,
- Guidelines for Carcinogens and Biohazards,
- Superfund Amendments and Reauthorization Act Title III,
- Resource Conservation and Recovery Act,
- Safe Drinking Water Act, and
- Toxic Substances Control Act.

At the federal level, the principal agency regulating the generation, transport and disposal of hazardous materials is the EPA, under the authority of the Resource Conservation and Recovery Act (RCRA). The EPA regulates hazardous waste sites under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). Applicable federal regulations are contained primarily in Titles 29, 40, and 49 of the Code of Federal Regulations (CFR).

#### **State**

The California Environmental Protection Agency (Cal-EPA) and the Office of Emergency Services (OES) of the State of California establish rules governing the use of hazardous

materials. Chemical suppliers are responsible for complying with all applicable packaging, labeling and shipping regulations.

Applicable state laws include the following:

- Public Safety/Fire Regulations/Building Codes,
- Hazardous Waste Control Law,
- Hazardous Substances Information and Training Act,
- Hazardous Materials Release Response Plans and Inventory Act ,
- Air Toxics Hot Spots and Emissions Inventory Law, and
- Underground Storage of Hazardous Substances Act.

Within Cal-EPA, the Department of Toxic Substance Control (DTSC), formerly the Department of Health Services, has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the state agency, for the generation, transport and disposal of hazardous materials under the authority of the Hazardous Waste Control Law (HWCL). In 1993, Senate Bill (SB) 10821 assigned to Cal-EPA the authority and responsibility to establish a unified hazardous waste and hazardous materials management regulatory program (known as the Unified Program) under Health and Safety Code (HSC) Chapter 6.11. The purpose of the Unified Program is to consolidate, coordinate, and make consistent, both locally and statewide, six different hazardous materials and hazardous waste regulatory programs. State regulations applicable to hazardous materials are indexed in Title 26 of the California Code of Regulations (CCR).

### **Local**

Prior to 1995, local agencies regulated hazards and hazardous materials exercising their police powers under existing State regulations for the monitoring and enforcement of those regulations. In Kern County, the Environmental Health Services Department (EHSD) monitors new land development for environmental quality, including hazards to human health and handling of hazardous materials through its Hazardous and Solid Waste Division. Likewise, in Plumas County the department responsible for monitoring and enforcement of hazardous materials is the Public Health Agency, Environmental Health Division (EHD).

#### **7.11.2.4 Changes in Regulatory Setting between 1996 – 2003**

### **Federal**

The regulatory setting for federal regulations is not substantially different from those that exist in the 1995 regulatory setting described previously. Changes applicable to the proposed project involved adjustments to the list and maximum contaminant levels for some of the hazardous materials regulated by the various federal agencies.

### **State**

The regulatory setting for state hazardous materials regulations is not substantially different than those in 1995, as described previously.

## Local

The regulatory setting for state hazardous materials regulations is not substantially different than those in 1995, as described previously, except for formation of local California Unified Program Agencies (CUPAs) to assist in the monitoring and emergency planning for hazardous materials release. The local CUPAs formed after 1995 are the Kern County EHSD and the Plumas County EHD.

### 7.11.3 IMPACTS AND MITIGATION MEASURES

#### 7.11-1 Construction activities could potentially expose workers or the public to previously unidentified hazards or hazardous materials.

##### 1996 — 2003

The proposed project resulted in construction activities in the southern San Joaquin Valley portion of Kern County between 1996 and 2003.

As mentioned previously, 3,034 acres of recharge ponds existed in the Kern Fan Element. Kern Water Bank Authority (KWBA) also constructed the Kern Water Bank Canal, and a six-mile long earthen canal extending from the Kern River to the California Aqueduct.<sup>3</sup> Between 1998 and 2003, an additional 4,080 acres were converted to shallow recharge basins, for a total of 4,699 acres in 2003 in the Kern Fan Element. Elsewhere in Kern County, outside of the Kern Fan Element, approximately 520 acres of percolation ponds were developed as part of other groundwater storage projects. The construction of percolation ponds resulted in ground-disturbing activities that could have exposed construction workers to residual chemicals associated with past and present agricultural practices involving the use of pesticides, fungicides, and similar agricultural products on crops and soils.

Soil samples were used to determine the safest location for the construction of the percolation ponds. In addition, the 1990 Supplemental EIR for the first stage of the Kern Water Bank identified mitigation measures in the form of further testing and monitoring of the soil and groundwater in the area of the percolation ponds to prevent future contamination of groundwater or potential for release of contaminants.<sup>4</sup>

Residues of agricultural chemical products in farmed soils as a result of routine agricultural operations are not typically managed as hazardous waste when used in accordance with adopted laws and regulations. Nonetheless, individuals performing excavation and grading activities would be at a greater risk of exposure to agricultural chemical residues in soil through inhalation of dust from soil movement. Construction of the ponds would also involve the use of heavy equipment that would contain fuels and lubricants. These products contain hazardous compounds, and an accidental release of these materials could injure construction workers, contaminate soil or water, or present a fire/explosion hazard.

Construction contracts included specific language requiring contractors to comply with applicable hazardous materials management laws and regulations adopted at the State level in Titles 19 and 22 of the CCR, which address proper storage and disposal of substances such as fuels. Title 8 of the CCR also addresses the use of hazardous products in the work environment, which would apply to construction contractors. The potential for inadvertent spills of materials, which could affect nearby surface water bodies or groundwater, was managed

through construction site Best Management Practices (BMPs). Therefore, impacts would be ***less than significant***.

#### Mitigation Measures

*None required.*

#### **Future Impacts**

The proposed project would result in construction activities at several locations including the southern San Joaquin Valley portion of Kern County and Plumas County. As described in Chapter 4, the proposed project includes changes in the way water is allocated among contractors, water transfers, transfer of the Kern Fan Element, water supply management practices, establishment of the Plumas Watershed Forum, and administrative, procedural and financial restructuring of contract administration. The implementation of watershed improvement projects in Plumas County would also involve the use of heavy equipment, resulting in a similar potential for the release of hazardous materials as described for construction of the percolation ponds.

Under the proposed project, it is expected that the KWBA would construct an additional 1,200 acres of percolation ponds in the Kern Fan Element. It is also anticipated that an additional 500 acres of ponds would be developed as part of other groundwater storage facilities in Kern County. The construction of percolation ponds would result in ground-disturbing activities that could expose construction workers to residual chemicals associated with past and present agricultural practices involving the use of pesticides, fungicides, and similar agricultural products on crops and soils. Residues of agricultural chemical products in farmed soils as a result of routine agricultural operations are not typically managed as hazardous waste when used in accordance with adopted laws and regulations. Nonetheless, individuals performing excavation and grading activities would be at a greater risk of exposure to agricultural chemical residues in soil through inhalation of dust from soil movement. Construction of the ponds would also involve the use of heavy equipment that would contain fuels and lubricants. These products contain hazardous compounds, and an accidental release of these materials could injure construction workers, contaminate soil or water, or present a fire/explosion hazard. The implementation of watershed improvement projects in Plumas County would also involve the use of heavy equipment, resulting in a similar potential for the release of hazardous materials as described for construction of the percolation ponds.

All future percolation pond projects would require additional environmental analysis pursuant to current CEQA Guidelines. Further, construction contracts would include specific language requiring contractors to comply with applicable hazardous materials management laws and regulations adopted at the State level in Titles 19 and 22 of the CCR, which address proper storage and disposal of substances such as fuels. Title 8 of the CCR also addresses the use of hazardous products in the work environment, which would apply to construction contractors. The potential for inadvertent spills of materials, which could affect nearby surface water bodies or groundwater, would be managed through construction site BMPs. Therefore, impacts would be ***less than significant***.

#### Mitigation Measures

*None required.*

## ENDNOTES

1. California Department of Water Resources, *Kern Water Bank, First Stage Kern Fan Element, Draft Supplemental Environmental Impact Report*, December 1990, pages 44 through 69.
2. California Department of Water Resources, *Kern Water Bank, First Stage Kern Fan Element, Draft Supplemental Environmental Impact Report*, December 1990, pages 61 through 69 and pages 87 through 94.
3. Jonathon Parker, Kern Water Bank Authority, personal communication with John Davis, EIP team, October 2003.
4. California Department of Water Resources, *Kern Water Bank, First Stage Kern Fan Element, Draft Supplemental Environmental Impact Report*, December 1990, pages 61 through 69 and pages 87 through 94.