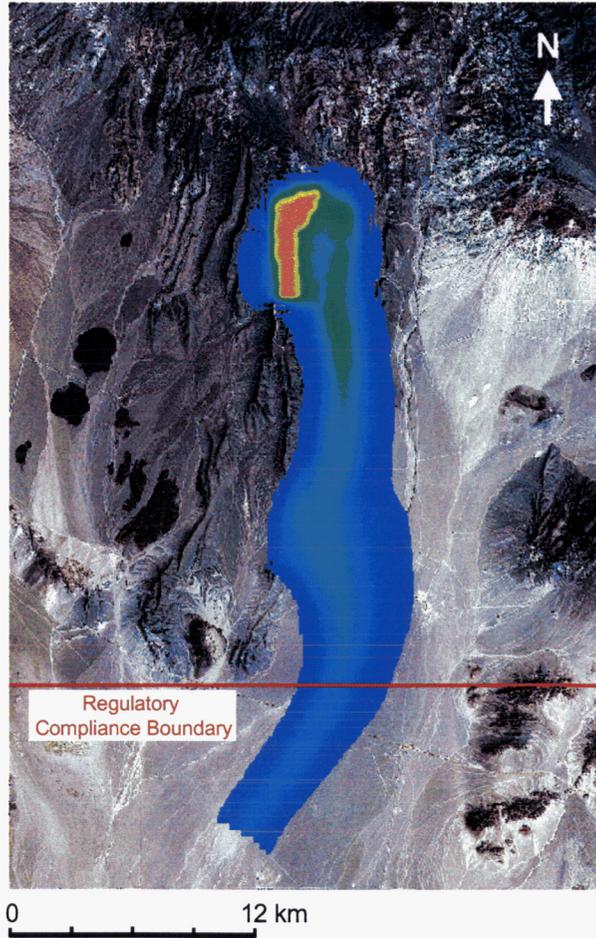


3-10
FINAL

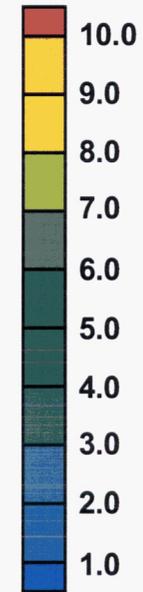


(a)



(b)

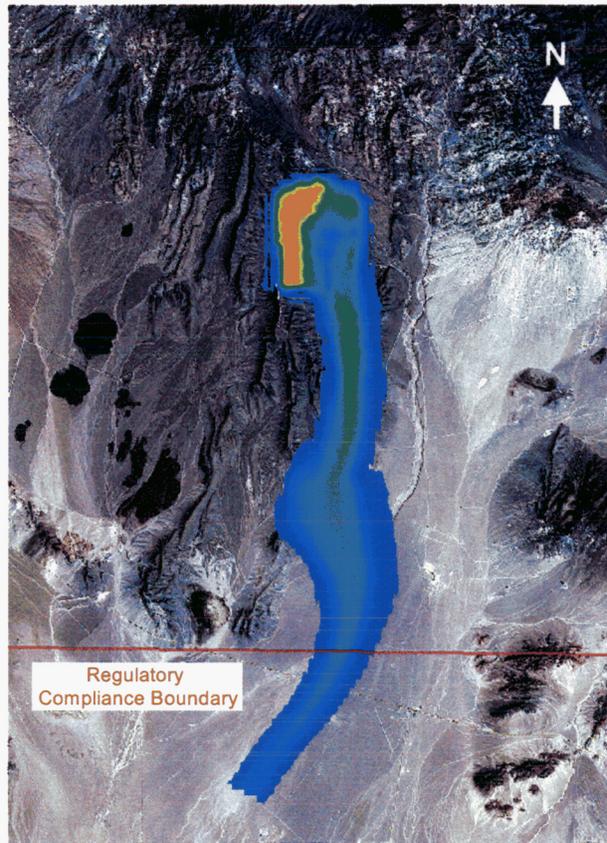
Concentration
(mg/l)



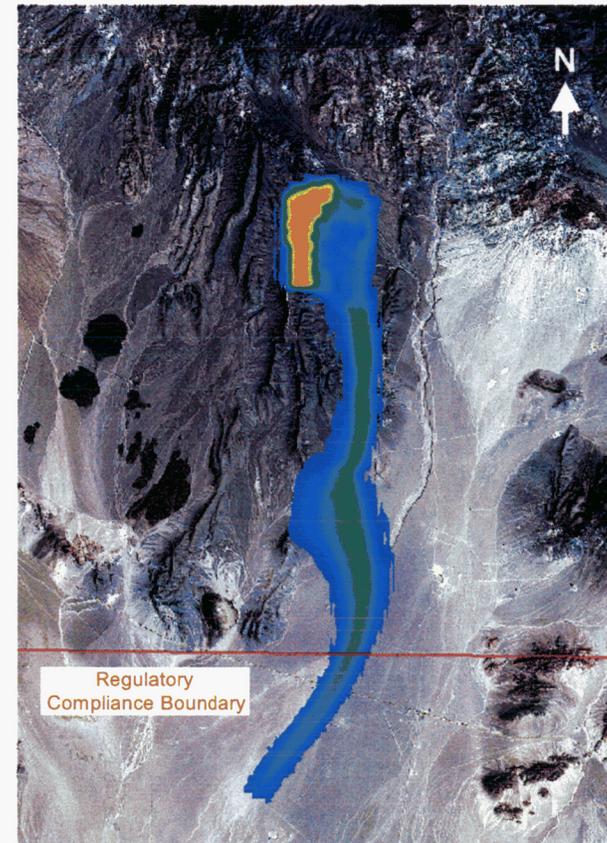
FINAL

Figure 3-1 a and b. Plan View of the Plumes Computed Assuming All Sources Within the Repository Footprint Are Active, All Hydrostratigraphic Units in the Model Have a Longitudinal Dispersivity of 300 m, and (a) Commonly Use Dispersivity Ratios [$(\alpha_L/\alpha_{TH}) = 10$ and $(\alpha_L/\alpha_{TV}) = 100$] and (b) DOE Dispersivity Ratios [$(\alpha_L/\alpha_{TH}) = 200$ and $(\alpha_L/\alpha_{TV}) = 20,000$]. The Elevation of the Horizontal Slice Through the Aquifer Is 725 m. [1 m = 3.28 ft; 1 km = 0.62 mi]

3-11
FINAL

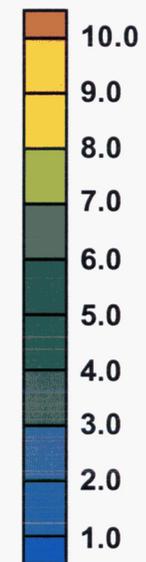


(c)



(d)

Concentration
(mg/l)



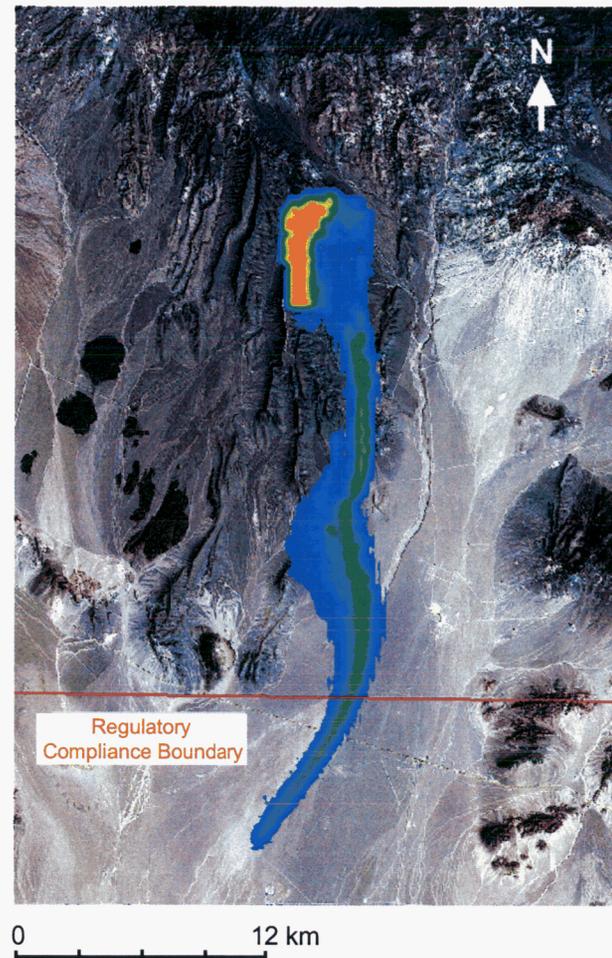
FINAL

Figure 3-1 c and d. Plan View of the Plumes Computed Assuming All Sources Within the Repository Footprint Are Active, All Hydrostratigraphic Units in the Model Have a Longitudinal Dispersivity of 100 m, and (c) Commonly Used Dispersivity Ratios [$(\alpha_L/\alpha_{TH}) = 10$ and $(\alpha_L/\alpha_{TV}) = 100$] and (d) DOE Dispersivity Ratios [$(\alpha_L/\alpha_{TH}) = 200$ and $(\alpha_L/\alpha_{TV}) = 20,000$]. The Elevation of the Horizontal Slice Through the Aquifer Is 725 m. [1m = 3.28 ft; 1 km = 0.62 mi]

3-12
FINAL

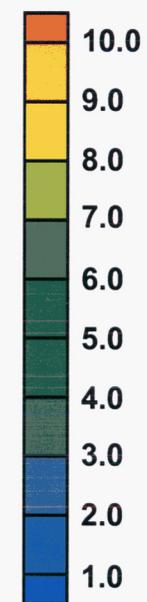


(e)



(f)

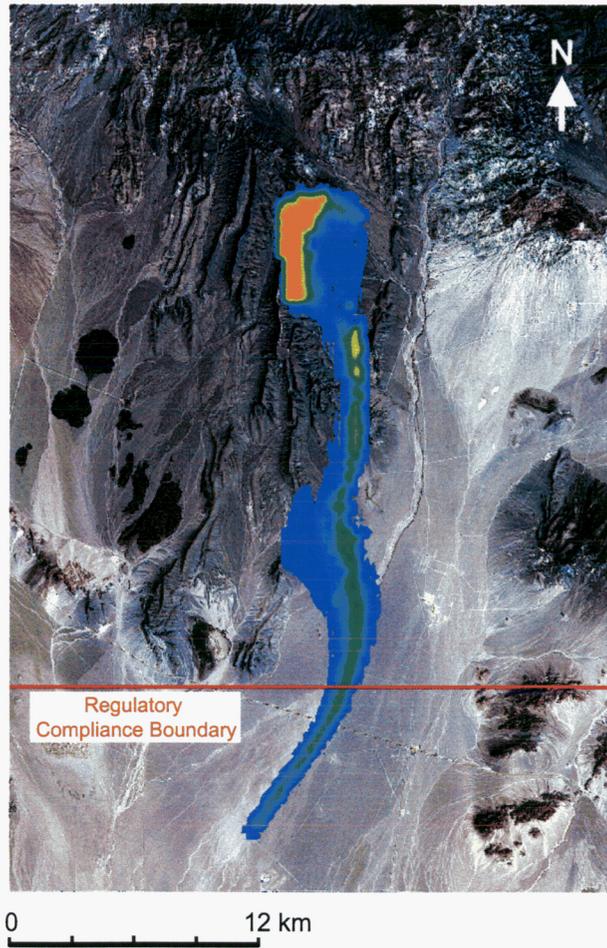
Concentration
(mg/l)



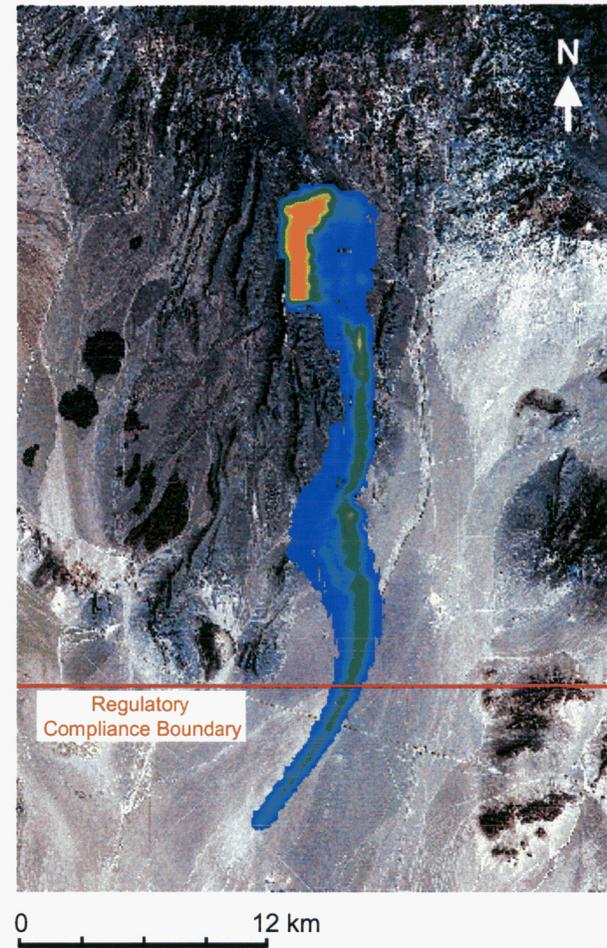
FINAL

Figure 3-1 e and f. Plan View of the Plumes Computed Assuming All Sources Within the Repository Footprint Are Active, All Hydrostratigraphic Units in the Model Have a Longitudinal Dispersivity of 10 m, and (e) Commonly Used Dispersivity Ratios [$(\alpha_L/\alpha_{TH}) = 10$ and $(\alpha_L/\alpha_{TV}) = 100$] and (f) DOE Dispersivity Ratios [$(\alpha_L/\alpha_{TH}) = 200$ and $(\alpha_L/\alpha_{TV}) = 20,000$]. The Elevation of the Horizontal Slice Through the Aquifer Is 725 m. [1 m = 3.28 ft; 1 km = 0.62 mi]

3-13
FINAL

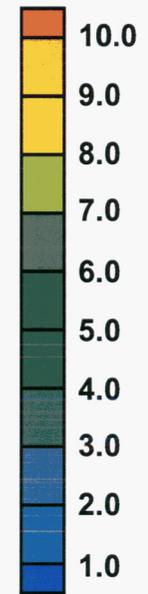


(g)



(h)

Concentration
(mg/l)



FINAL

Figure 3-1 g and h. Plan View of the Plumes Computed Assuming All Sources Within the Repository Footprint Are Active, All Hydrostratigraphic Units in the Model Have a Longitudinal Dispersivity of 1 m, and (g) Commonly Used Dispersivity Ratios [$(\alpha_L/\alpha_{TH}) = 10$ and $(\alpha_L/\alpha_{TV}) = 100$] and (h) DOE Dispersivity Ratios [$(\alpha_L/\alpha_{TH}) = 200$ and $(\alpha_L/\alpha_{TV}) = 20,000$]. The Elevation of the Horizontal Slice Through the Aquifer Is 725 m. [1 m = 3.28 ft; 1 km = 0.62 mi]

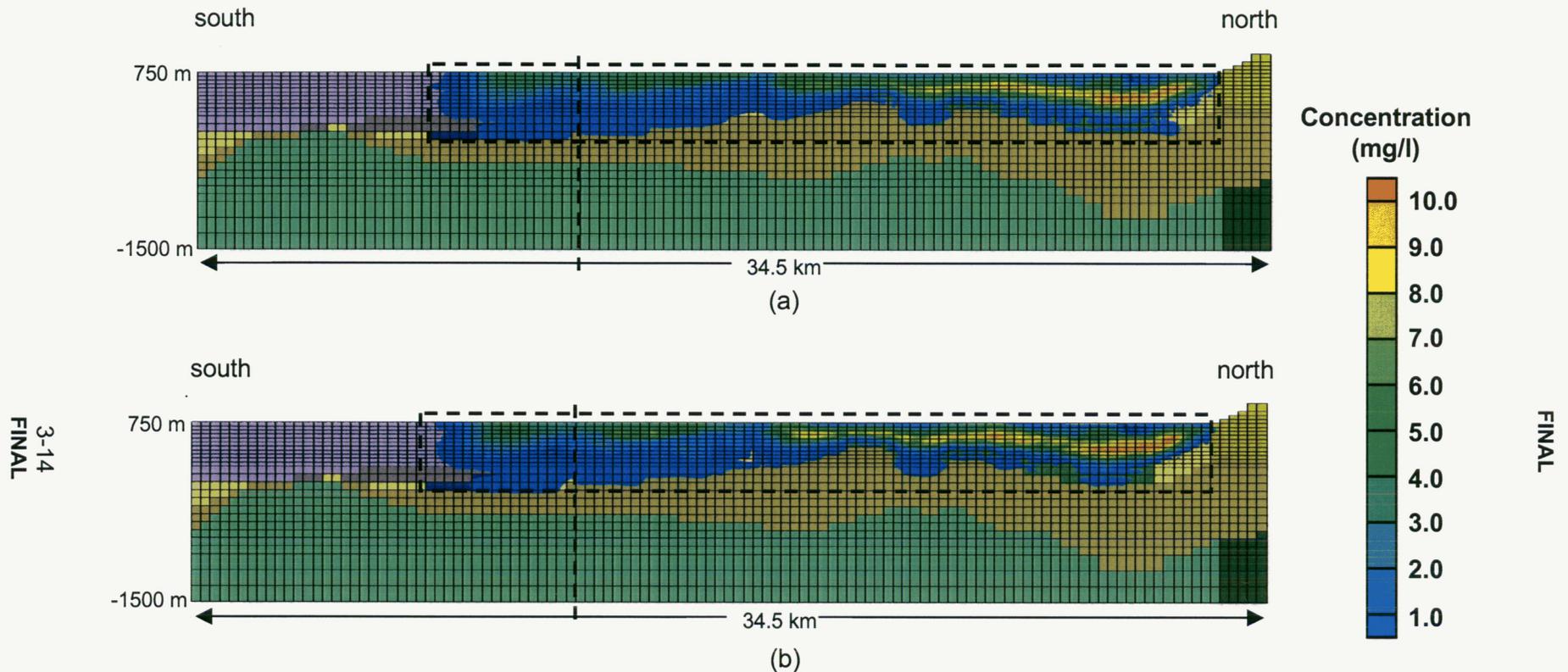


Figure 3-2 a and b. Longitudinal Profile Through the Plume Computed Assuming All Sources Within the Repository Footprint Are Active, All Hydrostratigraphic Units in the Model Have a Longitudinal Dispersivity of 10 m, and (a) Commonly Used Dispersivity Ratios $(\alpha_L/\alpha_{TH}) = 10$ and $(\alpha_L/\alpha_{TV}) = 100$ and (b) DOE Dispersivity Ratios $(\alpha_L/\alpha_{TH}) = 200$ and $(\alpha_L/\alpha_{TV}) = 20,000$. The Dash Outline Represents the Region Occupied by the Plume. The Vertical Dash Line Represents the Approximate Location of the Regulatory Compliance Boundary. [1 m = 3.28 ft; 1 km = 0.62 mi]

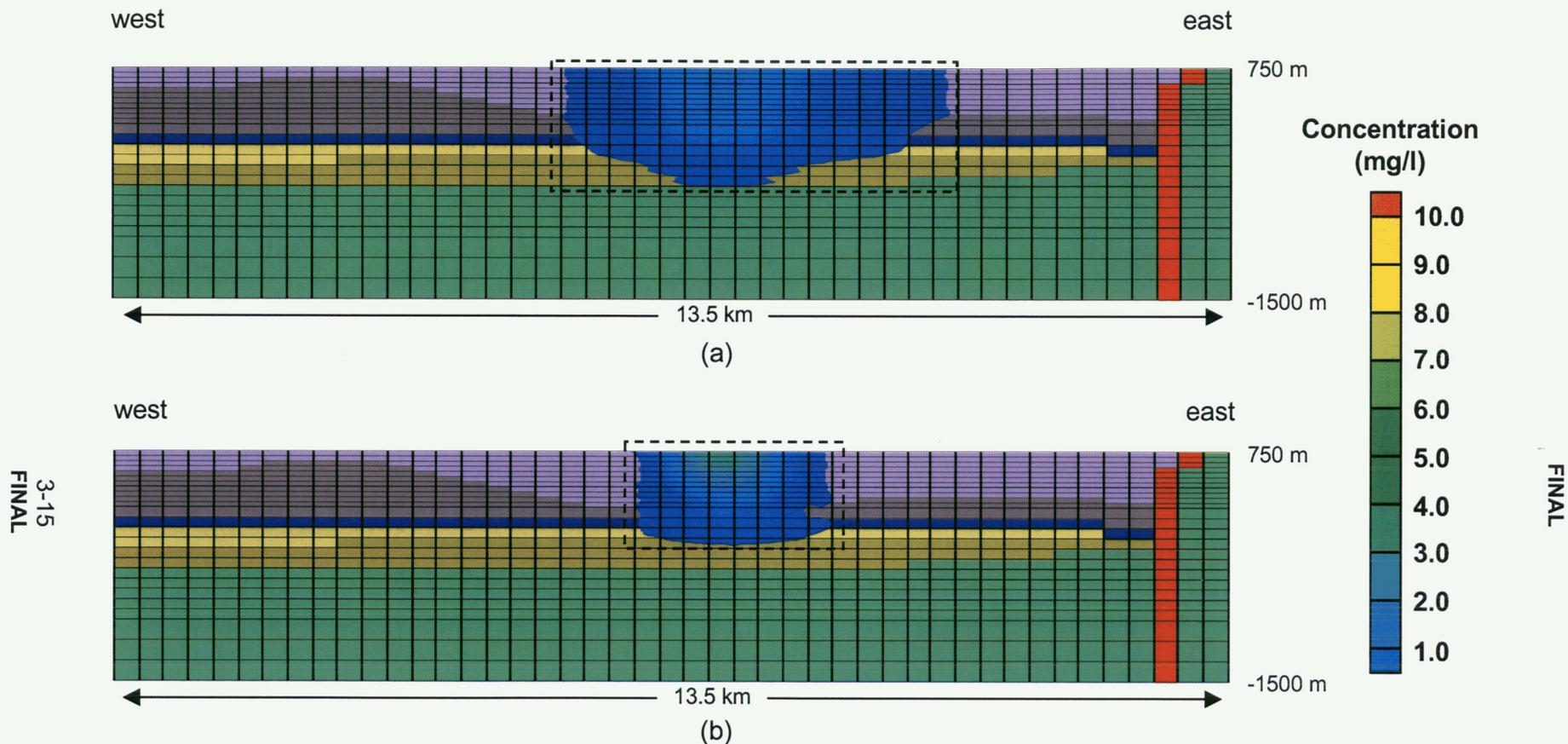


Figure 3-3 a and b. Vertical Cross Sections Along the Regulatory Compliance Boundary Showing the Cross-Sectional Dimensions of the Plumes Computed Assuming All Sources Within the Repository Footprint Are Active, All Hydrostratigraphic Units in the Model Have a Longitudinal Dispersivity of 300 m, and (a) Commonly Used Dispersivity Ratios $[(\alpha_L/\alpha_{TH}) = 10 \text{ and } (\alpha_L/\alpha_{TV}) = 100]$ and (b) DOE Dispersivity Ratios $[(\alpha_L/\alpha_{TH}) = 200 \text{ and } (\alpha_L/\alpha_{TV}) = 20,000]$. The Dash Outline Encloses the Region Occupied by the Plumes. [1 m = 3.28 ft; 1 km = 0.62 mi]

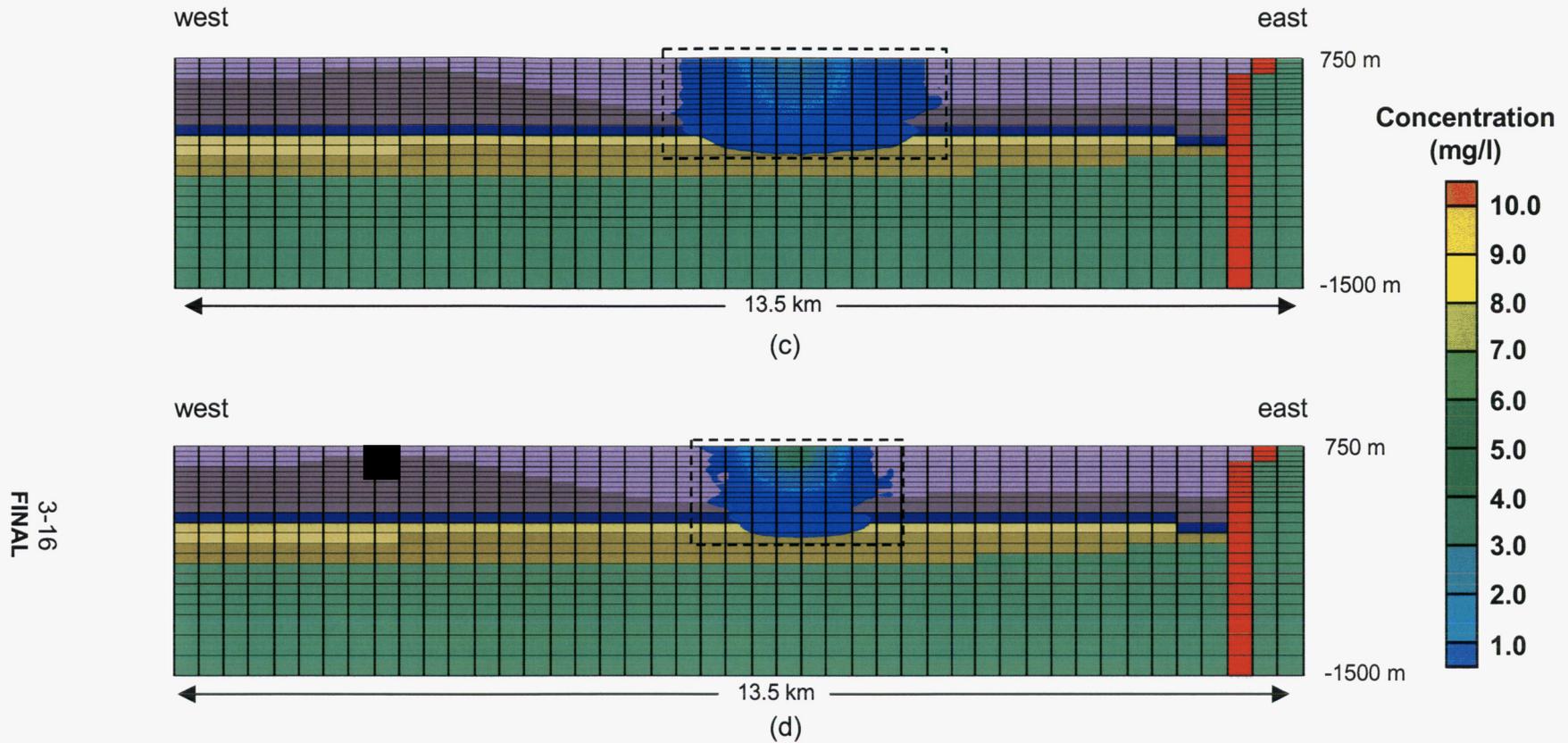


Figure 3-3 c and d. Vertical Cross Sections Along the Regulatory Compliance Boundary Showing the Cross-Sectional Dimensions of the Plumes Computed Assuming All Sources Within the Repository Footprint Are Active, All Hydrostratigraphic Units in the Model Have a Longitudinal Dispersivity of 100 m, and (c) Commonly Used Dispersivity Ratios $[(\alpha_L/\alpha_{TH}) = 10 \text{ and } (\alpha_L/\alpha_{TV}) = 100]$ and (d) DOE Dispersivity Ratios $[(\alpha_L/\alpha_{TH}) = 200 \text{ and } (\alpha_L/\alpha_{TV}) = 20,000]$. The Dash Outline Encloses the Region Occupied by the Plumes. [1 m = 3.28 ft; 1 km = 0.62 mi]

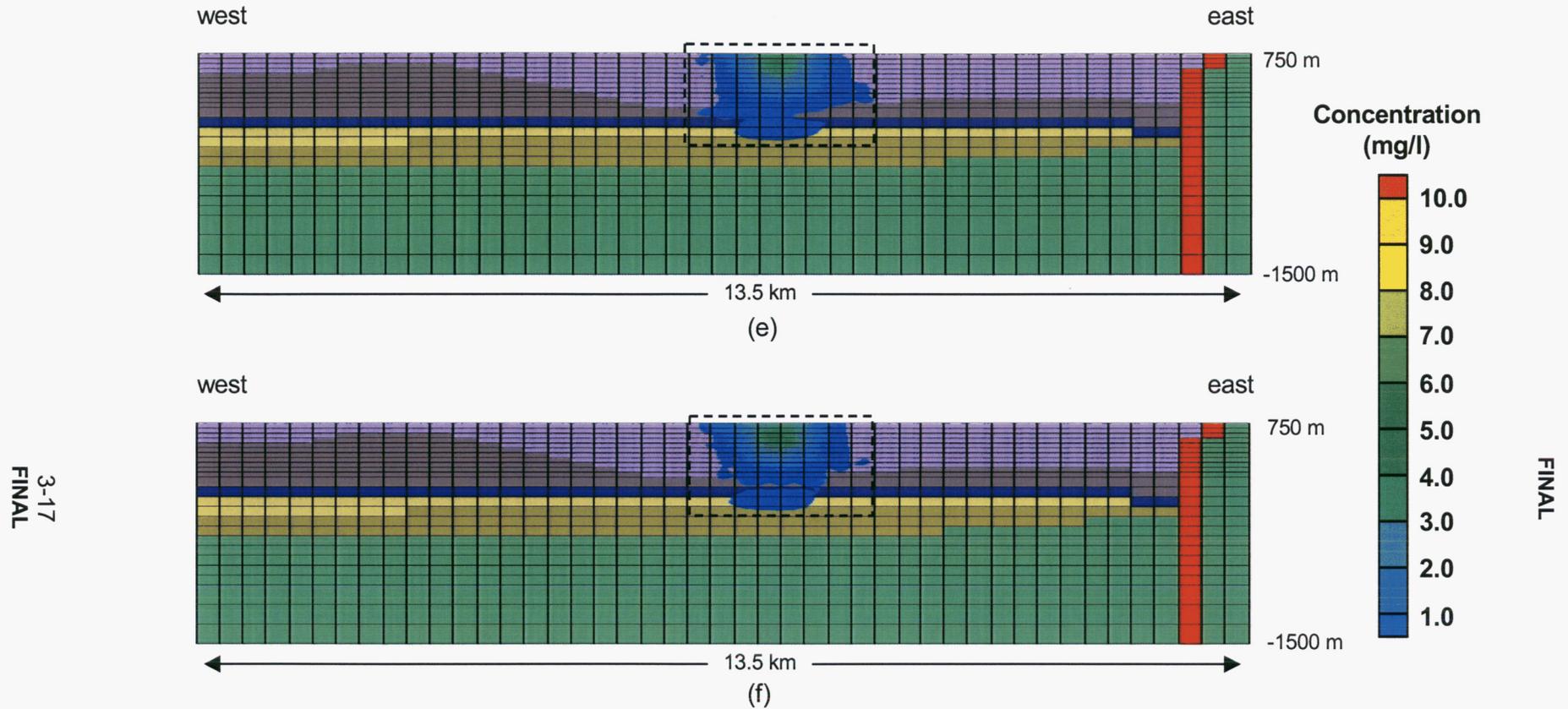


Figure 3-3 e and f. Vertical Cross Sections Along the Regulatory Compliance Boundary Showing the Cross-Sectional Dimensions of the Plumes Computed Assuming All Sources Within the Repository Footprint Are Active, All Hydrostratigraphic Units in the Model Have a Longitudinal Dispersivity of 10 m, and (e) Commonly Used Dispersivity Ratios $[(\alpha_L/\alpha_{TH}) = 10 \text{ and } (\alpha_L/\alpha_{TV}) = 100]$ and (f) DOE Dispersivity Ratios $[(\alpha_L/\alpha_{TH}) = 200 \text{ and } (\alpha_L/\alpha_{TV}) = 20,000]$. The Dash Outline Encloses the Region Occupied by the Plumes. [1 m = 3.28 ft; 1 km = 0.62 mi]

3-17
FINAL

FINAL

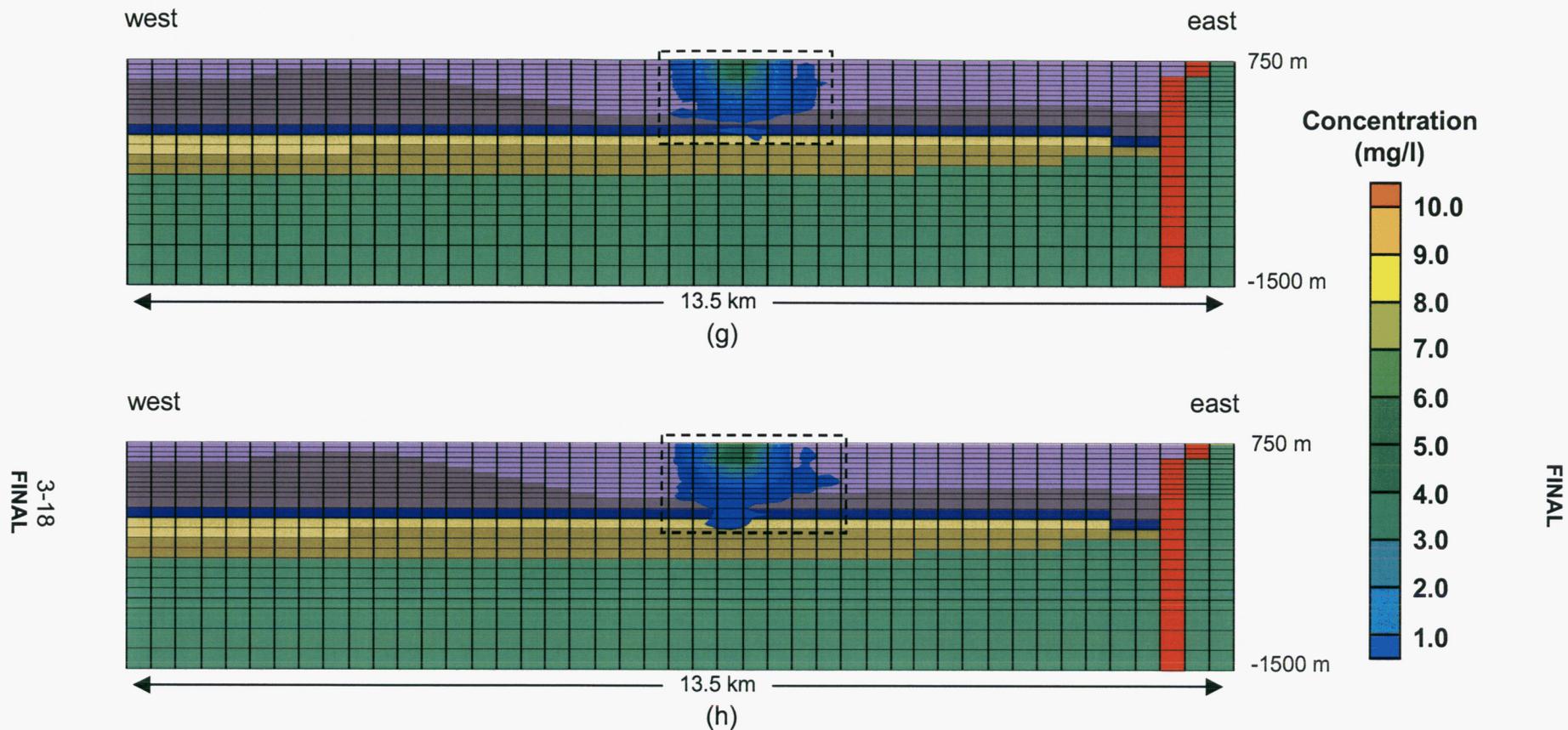
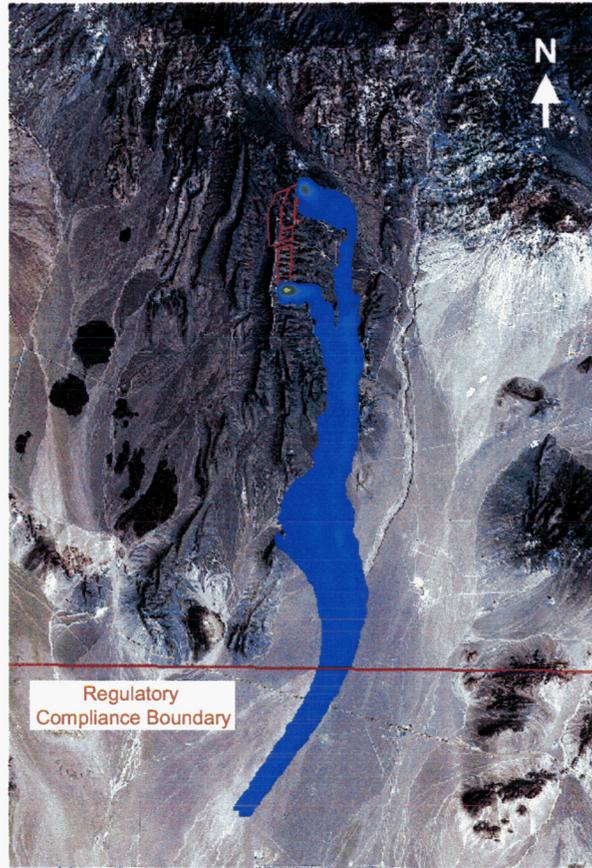


Figure 3-3 g and h. Vertical Cross Sections Along the Regulatory Compliance Boundary Showing the Cross-Sectional Dimensions of the Plumes Computed Assuming All Sources Within the Repository Footprint Are Active, All Hydrostratigraphic Units in the Model Have a Longitudinal Dispersivity of 1 m, and (g) Commonly Used Dispersivity Ratios $[(\alpha_L/\alpha_{TH}) = 10 \text{ and } (\alpha_L/\alpha_{TV}) = 100]$ and (h) DOE Dispersivity Ratios $[(\alpha_L/\alpha_{TH}) = 200 \text{ and } (\alpha_L/\alpha_{TV}) = 20,000]$. The Dash Outline Encloses the Region Occupied by the Plume. [1 m = 3.28 ft; 1 km = 0.62 mi]

3-18
FINAL

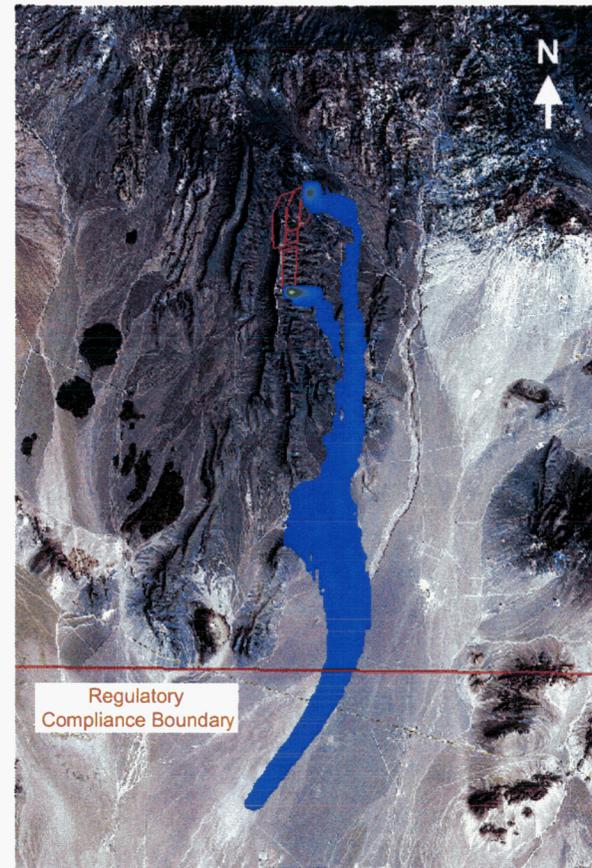
FINAL

3-19
FINAL



0 12 km

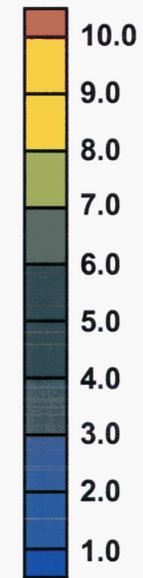
(i)



0 12 km

(ii)

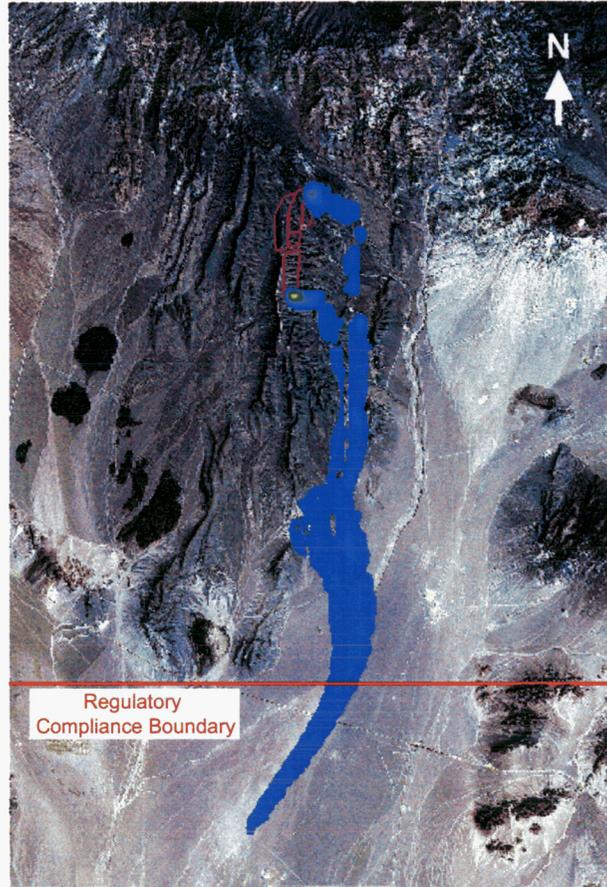
Concentration
(mg/l)



FINAL

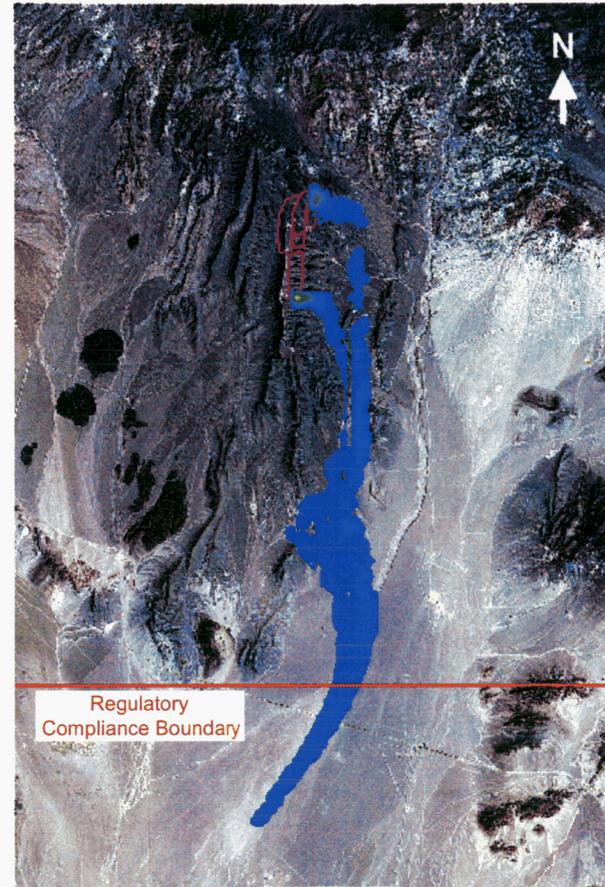
Figure 3-4 a. Plan View of Northern and Southern Plume Sources and Associated Plumes Computed Using a Longitudinal Dispersivity of 10 m (i) and Commonly Used Dispersivity Ratios [$(\alpha_L/\alpha_{TH}) = 10$ and $(\alpha_L/\alpha_{TV}) = 100$] and (ii) DOE Dispersivity Ratios [$(\alpha_L/\alpha_{TH}) = 200$ and $(\alpha_L/\alpha_{TV}) = 20,000$]. The Elevation of the Horizontal Slice Through the Aquifer Is 725 m. [1 m = 3.28 ft; 1 km = 0.62 mi]

3-20
FINAL



0 12 km

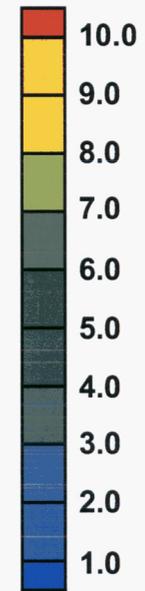
(i)



0 12 km

(ii)

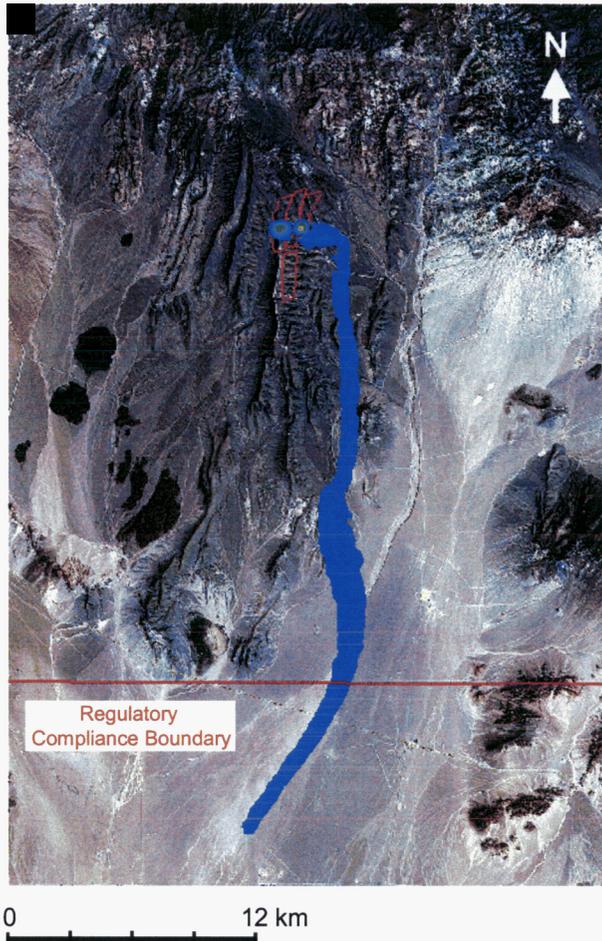
Concentration
(mg/l)



FINAL

Figure 3-4 b. Plan View of Northern and Southern Plume Sources and Associated Plumes Computed Using a Longitudinal Dispersivity of 1 m (i) and Commonly Used Dispersivity Ratios $[(\alpha_L/\alpha_{TH}) = 10$ and $(\alpha_L/\alpha_{TV}) = 100]$ and (ii) DOE Dispersivity Ratios $[(\alpha_L/\alpha_{TH}) = 200$ and $(\alpha_L/\alpha_{TV}) = 20,000]$. The Elevation of the Horizontal Slice Through the Aquifer Is 725 m. [1 m = 3.28 ft; 1 km = 0.62 mi]

3-21
FINAL

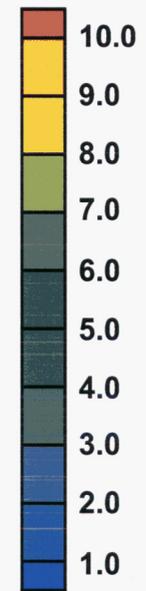


(i)



(ii)

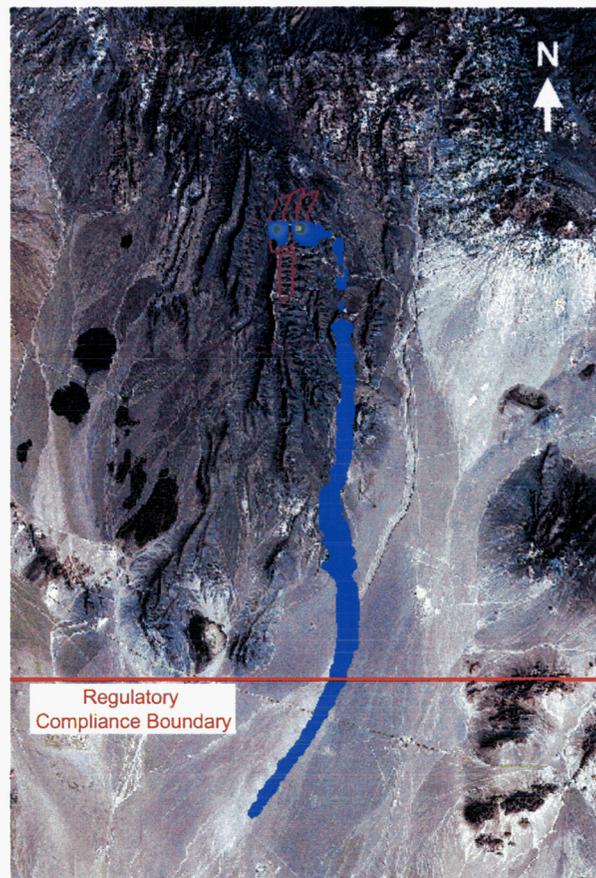
Concentration
(mg/l)



FINAL

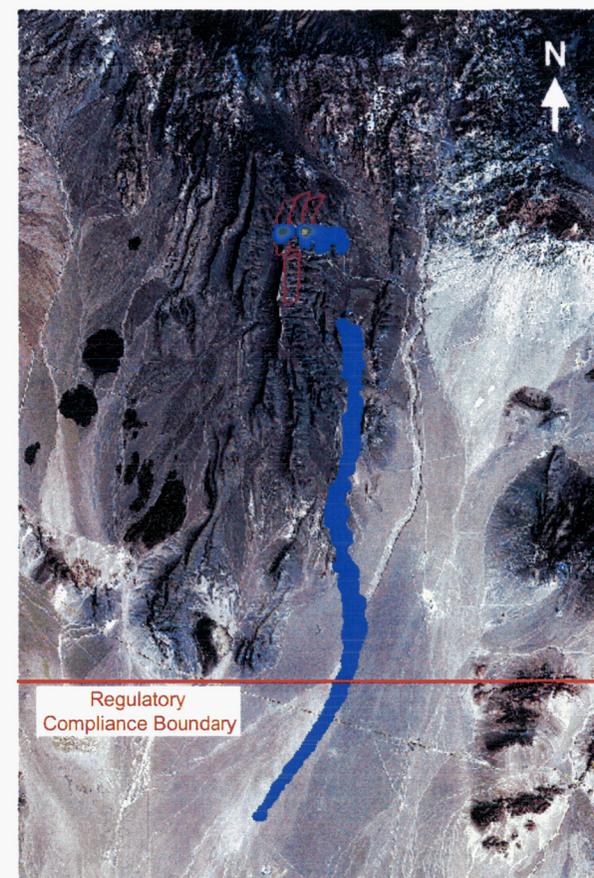
Figure 3-5 a. Plan View of Eastern and Western Plume Sources and Associated Plumes Computed Using a Longitudinal Dispersivity of 10 m (i) and Commonly Used Dispersivity Ratios [$(\alpha_L/\alpha_{TH}) = 10$ and $(\alpha_L/\alpha_{TV}) = 100$] and (ii) DOE Dispersivity Ratios [$(\alpha_L/\alpha_{TH}) = 200$ and $(\alpha_L/\alpha_{TV}) = 20,000$]. The Elevation of the Horizontal Slice Through the Aquifer Is 725 m. [1 m = 3.28 ft; 1 km = 0.62 mi]

3-22
FINAL



0 12 km

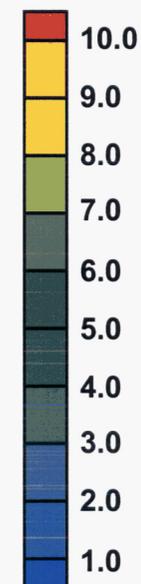
(i)



0 12 km

(ii)

Concentration
(mg/l)



FINAL

Figure 3-5 b. Plan View of Eastern and Western Plume Sources and Associated Plumes Computed Using a Longitudinal Dispersivity of 1 m (i) and Commonly Used Dispersivity Ratios [$(\alpha_L/\alpha_{TH}) = 10$ and $(\alpha_L/\alpha_{TV}) = 100$] and (ii) DOE Dispersivity Ratios [$(\alpha_L/\alpha_{TH}) = 200$ and $(\alpha_L/\alpha_{TV}) = 20,000$]. The Elevation of the Horizontal Slice Through the Aquifer Is 725 m. [1 m = 3.28 ft; 1 km = 0.62 mi]