



Aerojet General Superfund Site

U.S. Environmental Protection Agency • Region 9 • San Francisco, CA • June 2013

EPA Extends Public Comment Period for Aerojet Superfund Site Proposed Plan

The United States Environmental Protection Agency (EPA) is seeking public comments on the Proposed Plan for the Boundary Operable Unit (OU). The Boundary OU, also known as OU 6, is one of nine OUs of the Aerojet General Corporation (Aerojet) Superfund Site in Sacramento County, California (see Figure). This Plan proposes actions to address human and ecological health risks and risks to groundwater posed by contaminated soil and soil vapor within the Boundary OU. In addition, the Plan will protect workers and future site residents from risks from contaminated groundwater beneath the Boundary OU that is being investigated and cleaned up as part of other OUs.

A Proposed Plan was issued on May 8, 2013, which presented the proposed cleanup remedies for the Boundary OU, and a public meeting was held on Wednesday, May 15, 2013 to further describe the proposal. Comments on the Proposed Plan from community members requested additional time beyond the initial public comment period (May through June 7, 2013). In response, EPA will extend the comment period for this Proposed Plan **until September 20, 2013**. EPA will respond to all comments in writing in the responsiveness summary portion of the Record of Decision document. In addition, the State of California values for the protection of groundwater from contamination in surface soils were misstated in Table 2a, the preliminary Cleanup Level table included in the Proposed Plan. A revised cleanup level table has been included in this fact sheet to clarify these Cleanup Levels. EPA is also making additional information from the Feasibility Study for the Boundary OU available on the web at <http://www.epa.gov/region09/aerojet>. This information includes the rationale for determining whether individual areas were carried forward into the evaluation of remedial alternatives in the Feasibility Study.

How to Comment

Comments should be sent (mail, fax, or email) to Gary Riley at EPA, postmarked no later than **September 20, 2013**.

Contact Information

Mail Comments to:

United States Environmental Protection Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105
Attn: Gary Riley, SFD-7-2

Fax Comments to:

Gary Riley, SFD-7-2
Remedial Project Manager
(415) 947-3528 fax

Email Comments to:

riley.gary@epa.gov

Additional Contact Information:

Gary Riley, SFD-7-2
Remedial Project Manager
(415) 972-3003 direct
Toll free: (800) 231-3075 – leave a message
riley.gary@epa.gov
www.epa.gov/region09/aerojet

TABLE 2a: Cleanup Levels for Soil
Boundary OU Proposed Plan, Aerojet

COC	Residential Soil CL for the Protection of HH (mg/kg)	Industrial Soil CL for the Protection of HH (mg/kg)	Source	Soil CL for the Protection of GW (mg/kg)	Source	Soil CL for the Protection of Ecological Receptors (mg/kg)	Primary Source
1,1,2,2-PCA	0.56	2.80	RSL	--	--	--	--
4,4'-DDD	--	--	--	--	--	0.021	EcoSSL
4,4'-DDE	--	--	--	--	--	0.021	EcoSSL
4,4'-DDT	--	--	--	--	--	0.021	EcoSSL
Aluminum	--	--	--	43,000	Background Threshold Value (RCRB soils)	pH <5.5	EcoSSL
	--	--	--	54,000	Background Threshold Value (Xerorthent soils)	pH <5.5	EcoSSL
Antimony	30	380	CHHSL	60	DLM	0.27	EcoSSL
Aroclor-1248	--	--	--	0.034	DLM	0.0072	LANL
Aroclor-1254	0.089	0.30	CHHSL	0.034	DLM	0.041	LANL
Aroclor-1260	0.089	0.30	CHHSL	0.034	DLM	0.14	LANL
Barium	5,200	63,000	CHHSL	10,000	DLM	110	EcoSSL
Benzo(a)anthracene	0.15	2	RSL	0.03	DLM	1.1	EcoSSL/High MW
Benzo(a)pyrene	0.015	0.21	RSL	0.029	DLM	1.1	EcoSSL/High MW
Benzo(b)fluoranthene	0.15	2	RSL	0.029	DLM	1.1	EcoSSL/High MW
Benzo(k)fluoranthene	1.5	21	RSL	0.29	DLM	1.1	EcoSSL/High MW
Bis(2-ethylhexyl)phthalate	--	--	--	--	--	0.02	LANL
Boron	--	--	--	--	--	2	LANL
Cadmium	--	--	--	0.72	Background Threshold Value (RCRB soils)	0.36	EcoSSL
	--	--	--	1.2	Background Threshold Value (Xerorthent soils)	--	--
Chromium	--	--	--	500	DLM	26	EcoSSL
Chrysene	15	210	RSL	--	--	1.1	EcoSSL/High MW
Copper	--	--	--	--	--	28	EcoSSL
d-BHC	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	0.015	0.21	RSL	--	--	1.1	EcoSSL/High MW
Dieldrin	--	--	--	--	--	0.0049	EcoSSL
Dimethyl phthalate	--	--	--	--	--	10	LANL
Di-n-butylphthalate	--	--	--	--	--	0.011	LANL
Di-n-octyl phthalate	--	--	--	--	--	0.91	LANL
Endrin	--	--	--	--	--	0.0014	LANL
Endrin aldehyde	--	--	--	--	--	0.0014	LANL
Hexavalent chromium	0.29	5.6	RSL	0.2	Background Threshold Value	0.34	LANL
Ideno(1,2,3-c,d)pyrene	0.15	2.1	RSL	--	--	1.1	EcoSSL/High MW
Iron	55,000	720,000	RSL	--	--	pH<5.0	EcoSSL
Lead	80	320	CHHSL	42	Background Threshold Value (RCRB soils)	11	EcoSSL
	80	320	CHHSL	23	Background Threshold Value (Xerorthent soils)	11	EcoSSL
Manganese	--	--	--	1,100	Background Threshold Value (RCRB soils)	220	EcoSSL
	--	--	--	1,500	Background Threshold Value (Xerorthent soils)	220	EcoSSL
Mercury	10	43	RSL	--	--	0.013	LANL
Molybdenum	--	--	--	--	--	0.4	ORNL
Naphthalene	--	--	--	0.140	DLM	29	EcoSSL/Low MW
NDMA	--	--	--	0.00003	DLM	--	--

TABLE 2a: Cleanup Levels for Soil (cont'd)

Boundary OU Proposed Plan, Aerojet

COC	Residential Soil CL for the Protection of HH (mg/kg)	Industrial Soil CL for the Protection of HH (mg/kg)	Source	Soil CL for the Protection of GW (mg/kg)	Source	Soil CL for the Protection of Ecological Receptors (mg/kg)	Primary Source
Nickel	1,500	16,000	RSL/CH HSL	120	DLM	38	EcoSSL
	1,500	16,000	RSL/CH HSL	140	Background Threshold Value (Xerorthent soils)	38	EcoSSL
PCE	--	--	--	--	--	0.18	LANL
Perchlorate	--	--	--	0.06	DLM	0.61 (surface soil) 1.17 (subsurface soil)	back-calculated
Phenanthrene	--	--	--	--	--	29	EcoSSL/Low MW
Phenol	--	--	--	--	--	0.03	ORNL
Prowl	2,400	25,000	RSL	--	--	1.285	back-calculated
Selenium	--	--	--	--	--	0.52	EcoSSL
Silver	--	--	--	--	--	4.2	EcoSSL
TCE	--	--	--	--	--	42	LANL
Thallium	--	--	--	2.5	Background Threshold Value (RCRB soils)	1	ORNL
	--	--	--	3.3	Background Threshold Value (Xerorthent soils)	1	ORNL
Toluene	--	--	--	--	--	23	LANL
TPH-D	--	--	--	100	DLM	--	--
TPH-Mo	--	--	--	500	DLM	--	--
Zinc	--	--	--	--	--	46	EcoSSL

The boxes highlighted in blue contain the updated and corrected Cleanup Levels.

Background Soil Notes:

Xerorthent soils = These soil types are found in areas of dredge tailings near the American River. The soils formed in material that has a high content of gravels and cobbles derived from mixed rock sources. The material was deposited as tailings during mining activities with slopes ranging from 0 to 50 percent.

RCRB soils = Redding-Corning-Red Bluff soils. Moderately well drained soils that are moderately deep over a cemented hard pan. This unit is found on intermediate and high terraces, terrace remnants, and the side slopes of terraces in the eastern part of Sacramento County. The soils form in alluvium that is derived from mixed rock sources. For more details on Xerorthent or RCRB soil types, see the Boundary OU RI/FS report (Aerojet, 2012).

Notes:

* endrin used as a surrogate for endrin aldehyde

-- A cleanup level was not required because the contaminant did not pose a risk to this particular receptor.

CHHSL = California Human Health Screening Levels (Cal-EPA, 2005; 2010)

CL = cleanup level

COC = contaminant of concern

DLM = designated level methodology (*Designated Level Methodology for Waste Classification and Cleanup Level Determination [RWQCB, 1989]*)

EcoSSL = ecological soil screening levels (White Paper – Ecological Risk Assessment [Aerojet, 2012])

GW = groundwater

HH = human health

LANL = Los Alamos National Laboratory

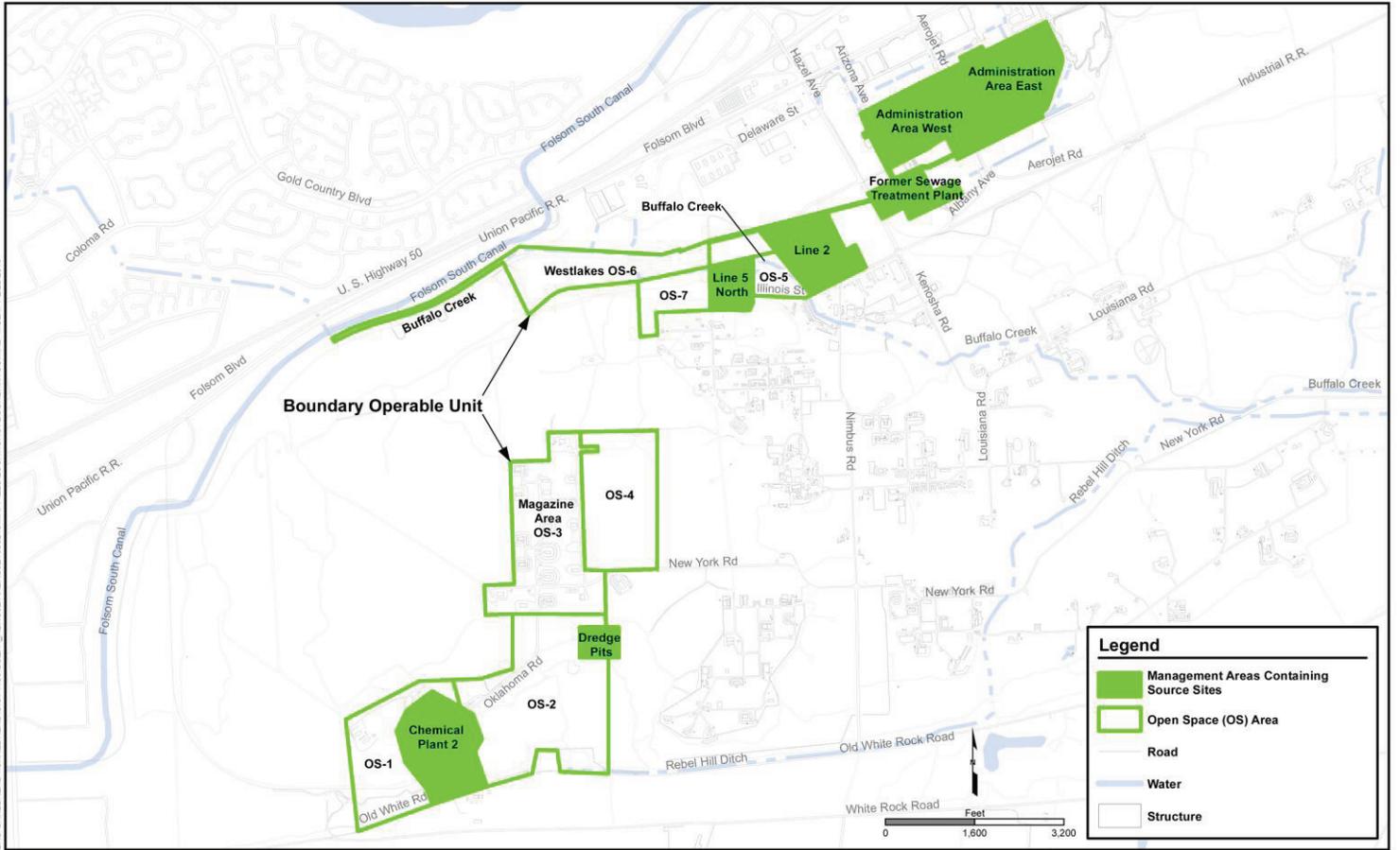
mg/kg = milligrams per kilogram

MW = molecular weight

ORNL = Oakridge National Laboratory

RCRB = Redding-Corning-Red Bluff

RSL = Regional Screening Level (EPA, 2012)



Location of Boundary Operable Unit on Aerojet Property

United States Environmental Protection Agency
 Region 9
 75 Hawthorne Street (SFD-6-3)
 San Francisco, CA 94105
 Attn: Jackie Lane

Affix
 Stamp
 Here