

**From:** Lenox, Arthur J [REDACTED] >  
**Date:** Friday, Jun 23, 2017, 10:05 AM  
**To:** Jennings, Stephanie <[REDACTED]>, Jones, John [REDACTED]  
**Cc:** EXT-Zeller, Mark R [REDACTED], John Wondolleck [REDACTED]  
[REDACTED], Bower, Michael O [REDACTED], Hambrick, Dixie  
[REDACTED]  
**Subject:** FW: Update to Boeing's information for cumulative analysis

Hi Stephe –

Per your request, attached are the Boeing SSFL Project estimates for CEQA / EIS planning.

Thank you, Art

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**From:** Hambrick, Dixie [REDACTED]  
**Sent:** Thursday, June 22, 2017 2:00 PM  
**Subject:** RE: Update to Boeing's information for cumulative analysis  
**To:** Lenox, Arthur J [REDACTED]  
**Cc:** Jose Toledo [REDACTED]

Art – attached is the updated Boeing Project estimates for CEQA/EIS planning requested by DOE in the email below. Please let me know if you have any questions or would like to discuss.  
Dixie

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**From:** Lenox, Arthur J [REDACTED]  
**Sent:** Friday, June 16, 2017 8:17 AM  
**To:** Hambrick, Dixie [REDACTED]  
**Subject:** FW: Update to Boeing's information for cumulative analysis

**From:** Jennings, Stephanie [REDACTED]  
**Sent:** Friday, June 16, 2017 7:59 AM  
**To:** EXT-Zeller, Mark R [REDACTED]; Lenox, Arthur J [REDACTED];  
Bower, Michael O [REDACTED]; Jones, John [REDACTED] **Cc:**  
John Wondolleck [REDACTED]; Owens, Kirk W.  
[REDACTED]  
**Subject:** Update to Boeing's information for cumulative analysis

Mark:

As we go from Draft to Final EIS, we need to update the information that we have in the Draft for Boeing. I have attached to this email the table (Table 5-1) from our draft for your reference. I have also attached a blank table for you to fill out with Boeing's latest information. If you have any questions, don't hesitate to email or give me a call.

Thanks so much.

*Stephie Jennings*  
Deputy Director, DOE-ETEC  
NEPA Compliance Officer  
[REDACTED]

Boeing Remediation Project – prepared June 22, 2017

Data for Cumulative Impacts Analysis of Soil Remediation for *DOE SSFL Area IV EIS*

<i>Impacts Information</i>	<i>Responsible Party</i>
	<i>Boeing</i>
<b>Land disturbed (acres)</b>	
- Area Disturbed for Soil Removal	17
- Area Disturbed for Building Removal	3
Total	20
<b>Employment (persons)</b>	
- Onsite Employees	100
- Truck Drivers - Truck drivers for occasional deliveries or pickups are not included in long-term employment.	Assume 16 to 32 truck drivers when 96 truck trips are split between NASA, Boeing and DOE
Total	116 to 132
<b>Resources used</b>	
- Backfill for Soil Excavation (cubic yards)	50,000 (a)
- Backfill for Building Removal (cubic yards)	1,300
- Backfill for Bedrock Removal (cubic yards)	None expected
Total	51,300
<b>Resources used</b>	
- Water (gallons/day)	20,000 (c)
<b>Waste generated (cubic yards)</b>	
- Soil Excavation	150,000 (b)
- Building Removal	112,000 (d)
- Groundwater Remediation	2,000 (h)
Total	264,000
<b>Truck trips</b>	
- Soil Disposal	9,800 (e)
- Backfill	3,300 (f)
- Building Demolition Debris	1,000 (g)
- Groundwater Remediation Waste	300 (h)
- Other Deliveries (e.g., excavation equipment, supplies)	400
Total	14,800

Boeing = The Boeing Company;

- (a) Estimates assume that approximately 33% of excavated soil volume will be needed as backfill obtained from other sources to supplement surrounding soils used as backfill to restore the soil remediation area.
- (b) Estimated in situ soil excavation volume for cleanup to protect future recreational and ecological receptors for DOE EIS planning.
- (c) Water use estimated based on generalized data regarding water use for prior soil removal activities at SSFL and comparable information for other MWH/Stantec soil remediation projects.
- (d) Building debris cubic yard volume based on 1.5 cy per ton to maintain consistency with soil volume estimates. Actual debris volume will be dependent on type of material.
- (e) Estimates assume 1.5 cy per ton of soil, and 23 tons per truck average.
- (f) Trucking estimates for backfill delivery provided for conservative planning estimates. To minimize truck trips, Boeing plans to use the trucks that bring clean backfill to the site from offsite sources for subsequent off-haul of contaminated soil. Also, Boeing may use onsite sources of backfill. In both of these cases, the truck trips estimated here would be minimized or eliminated.
- (g) Trucking estimate for building debris removal based on an average truck volume of 17 cy based on prior Boeing demolition projects.
- (h) Groundwater waste and trucking estimates are based on remediation elements identified for implementation in the 2013 Draft Boeing Project Description; trucking estimates assume 1.5 cy per ton of soil and 23 tons per truck average.