LANDAU ASSOCIATES

October 15, 2018

Washington State Department of Ecology
Northwest Regional Office
3190 160th Ave SE
Bellevue, WA 98008-5452

Attn: Robin Harrover

Transmitted via email to: *rhar461@ecy.wa.gov*

Re: Status Report No. 64, July through September 2018 Activity Period
Boeing Auburn Facility
WAD 041337130, RCRA Corrective Action Agreed Order No. 01HWTRNR-3345
Auburn, Washington
Project No. 0025164.160.501

Dear Ms. Harrover:

The Resource Conservation and Recovery Act (RCRA) Corrective Action Agreed Order (Auburn Agreed Order) became effective on August 14, 2002. As required under Section VI.13 of the Auburn Agreed Order, The Boeing Company (Boeing) is providing Status Report No. 64, which covers the 3-month activity period of July through September 2018.

References

1. July 3, 2018. Email: RE: Please review Boeing Auburn cleanup public participation plan by July 6. From Kamara Sams, Boeing, to Thea Levkovitz, Ecology. (Attachment: Boeing and LAI comments on the Boeing Auburn Public Participation Plan.)
2. July 16, 2018. Letter: Status Report No. 63, April Through June 2018 Activity Period, Boeing Auburn Facility, WAD 041337130, RCRA Corrective Action Agreed Order No. 01HWTRNR-3345, Auburn, Washington. From Jennifer Wynkoop, LAI, to Robin Harrover, Ecology.
3. July 16, 2018. Ecology Listserv. We want to hear from you! Boeing Auburn cleanup documents available for review and comment.
4. July 19, 2018. Ecology Listserv. Correction – Ecology news: Review and comment on permit for Boeing Auburn cleanup site.
5. July 20, 2018. Email: Boeing Auburn Site – Field Sampling Audit Results. From Robin Harrover, Ecology, to Jennifer Wynkoop, LAI. (Attachments: Field Sampling Audit Boeing Auburn, Boeing Sampling Expired Calibration pH Buffers 2, and Buffer Solutions.)
6. July 20, 2018. Email: Boeing Fabrication Auburn Site – Status Report 63, April – June Activity Period. From Robin Harrover, Ecology, to Representatives of City of Auburn, City of Algona, and City of Pacific.

7. July 26, 2018. Email: RE: Boeing Auburn Site – Field Sampling Audit Results. From Jennifer Wynkoop, LAI, to Robin Harrover, Ecology.
8. August 1, 2018. Ecology Listserv. See you at Algona Days! Stop by the Ecology table to get coloring sheets and crayons for the kids.
9. August 14, 2018. Email: Boeing Auburn Release from Cr Reduction Tank. From Jennifer Wynkoop, LAI, to Robin Harrover, Ecology. (Attachment: Chromium Reduction Tank Release Building 17-15, Wastewater Pre-treatment Plant, Boeing Auburn Facility).
10. August 16, 2018. Ecology Listserv. If we missed you at Algona Family Fun Days….
11. August 21, 2018. Email: FW: Ecology comment letter to Boeing RE: FS Work Plan and Cleanup Technology Tables. From Robin Harrover, Ecology, to Carl Bach and Jim Swortz, Boeing, and Jennifer Wynkoop, LAI. (Attachments: Ecology's letter, Attachment A, and three Enclosures to the letter).
12. August 22, 2018. Email: Boeing Auburn 2018 EIM Submittal. From Kristi Schultz, LAI, to Erica Fot, Ecology.
13. September 4, 2018. Ecology Listserv. Comment Period Closes September 7.
14. September 6, 2018. Letter: Groundwater Monitoring Results: Fourth Quarter 2017 and Second Quarter 2018, Auburn School District Warehouse Property Wells, Auburn, Washington. From Jennifer Wynkoop, LAI, to Cindi Blansfield, Assistant Superintendent of Business and Operations, Auburn School District.
15. September 6, 2018. Letter: Groundwater and Surface Water Monitoring Results: March and June 2018, City of Algona Wells, Algona, Washington. From Jennifer Wynkoop, LAI, to David Hill, Mayor, City of Algona.
16. September 6, 2018. Letter: Groundwater Monitoring Results: Fourth Quarter 2017 and Second Quarter 2018, City of Auburn Wells, Auburn, Washington. From Jennifer Wynkoop, LAI to Chris Thorn, Water Quality Program Coordinator, City of Auburn.
17. September 6, 2018. Letter: Groundwater Monitoring Results: December 2017 and June 2018, Sentry Wells, Auburn, Washington. From Jennifer Wynkoop, LAI, to Jim Morgan, Public Works Manager, City of Pacific.
18. September 6, 2018. Letter: Groundwater Monitoring Results: November 2017 and June 2018, Coastal Farm and Ranch Well, Auburn Washington. From Jennifer Wynkoop, LAI, to Byron Baule, Operations Manager, Coastal Farm and Ranch.
19. September 6, 2018. Letter: Groundwater Monitoring Results: December 2017 and June 2018, 840 Industry Drive North Well, Algona, Washington. From Jennifer Wynkoop, LAI, to Ben Brodsky, Senior Development and Construction Manager, DCT Industries (DCTI).
20. September 6, 2018. Letter: Groundwater Monitoring Results: December 2017 and June 2018, Boeing Wells on Fana Auburn 234 LLC Property, Auburn, Washington. From Jennifer Wynkoop, LAI, to John Powers, Fana Group of Companies.
21. September 6, 2018. Letter: Groundwater Monitoring Results: December 2017 and June 2018, Boeing Wells on Fana Auburn LLC Property, Auburn, Washington. From Jennifer Wynkoop, LAI, to John Powers, Fana Group of Companies.

22. September 6, 2018. Letter: Groundwater Monitoring Results: November 2017 and June 2018, US General Service Administration Wells, Auburn, Washington. From Jennifer Wynkoop, LAI, to Dwayne Smith, US General Services Administration (GSA).
23. September 6, 2018. Letter: Groundwater Monitoring Results: September and November 2017 and March, May, and June 2018, Primus Wells, Algona, Washington. From Jennifer Wynkoop, LAI, to Peter Wazlawek, Primus International, Inc. (Primus).
24. September 6, 2018. Letter: Groundwater Monitoring Results: December 2017 and May and June 2018, Boeing Wells along the Interurban Trail, Auburn and Algona, Washington. From Jennifer Wynkoop, LAI, to Kurt Krebs, Puget Sound Energy (PSE).
25. September 6, 2018. Letter: Groundwater Monitoring Results: November 2017 and June 2018, WP Glimcher Wells, Auburn, Washington. From Jennifer Wynkoop, LAI, to Christian Faltenberger, General Manager, WP Glimcher.
26. September 6, 2018. Letter: Groundwater Monitoring Results: December 2017 and May 2018, Washington State Department of Transportation Well, Auburn, Washington. From Jennifer Wynkoop, LAI, to Amir Ahmadi, Regional Materials Engineer, Washington State Department of Transportation (WSDOT).
27. September 17, 2018. Ecology Listserv. Wetland Walk – Open to all!
28. September 19, 2018. Email: Ecology Conditional Approval Letter – Data Summary Report, AOC A-01 and former Building 17-03. From Robin Harrover, Ecology, to Carl Bach, Boeing.
29. September 20, 2018. Email: RE: The Boeing Auburn Technical Call has been canceled for today. From Jennifer Wynkoop, LAI, to Robin Harrover, Thea Levkovitz, and Raman Iyer, Ecology.

Work Conducted

General Site-wide Corrective Action Activities

On July 16, 2018, LAI submitted Status Report No. 63 regarding second quarter 2018 activities to Ecology and other stakeholders[1] for their records (Reference #2). Ecology project manager, Robin Harrover, continued to attend regularly scheduled monthly[2] conference calls with Boeing, LAI, and the City of Algona's environmental consultant, ICF International (ICF). The primary purpose of these calls is to discuss technical aspects of the project scope and schedule, data results, and public outreach. Boeing and Ecology communication personnel also attend these calls.

As part of various offsite monitoring well access agreement and right-of-way (ROW) permits, Boeing provides annual individualized letters with groundwater monitoring results. The following groundwater data letters were distributed during the third quarter 2018:

- Data for AGW237(D), AGW238(I), and AGW239(S) located on the Auburn School District warehouse property to the Auburn School District (Reference #14).

[1] A list of stakeholders that receive copies of the quarterly status reports are listed at the end of this document. Ecology also forwards quarterly status reports via email to representatives of the cities of Algona, Auburn, and Pacific (Reference #6).
[2] Conference calls occurred in July and August; there was not a conference call in September (Reference #29).

- Data for 35 wells located on City of Algona ROW to the City of Algona (Reference #15).
- Data for 32 wells located on City of Auburn ROW and City of Auburn property to the City of Auburn (Reference #16).
- Sentry well data to the City of Pacific (Reference #17).
- AGW236(S) data to Coastal Farm and Ranch (Reference #18).
- AGW276(M) data to DCTI (Reference #19).
- AGW179(I) and AGW180(D) data to Fana Auburn 234 LLC (Reference #20).
- AGW177(I) and AGW178(D) data to Fana Auburn LLC (Reference #21).
- Data for AGW256(I), AGW257(S), and AGW258(S) to GSA (Reference #22).
- Data for 12 wells to Primus (Reference #23).
- Data for 16 wells located on the Interurban Trail to PSE (Reference #24).
- Data for 17 wells located on The Outlet Collection property to WP Glimcher (Reference #25).
- Data for APP-057 to WSDOT (Reference #26).

Dangerous Waste Management Permit for Corrective Action

During the first quarter 2018, Ecology notified Boeing that the State of Washington's Dangerous Waste Management Permit for Corrective Action at the Boeing Auburn Facility expired on April 27, 2016. The US Environmental Protection Agency (EPA) requested that Ecology have a new permit in place by September 30, 2018. In order to comply with the EPA request, Ecology requested that Boeing submit a new RCRA permit application for corrective action. Boeing submitted the draft RCRA Permit Application in the first quarter 2018. Boeing received comments from Ecology on the draft application during the second quarter 2018, and resubmitted a final application for public comment. Ecology conducted a public comment period from July 19, 2018 to September 7, 2018. The final permit was issued on September 21, 2018. Ecology is also working with Boeing to update the Agreed Order, which is expected to be completed in the fourth quarter 2018.

Groundwater Sampling

Phase 8 quarterly groundwater sampling took place from September 4 through September 6, 2018. The quarterly groundwater sampling data are provided in Attachment 1. The current monitoring well network is shown on Figure 1-1. A sampling matrix for the September 2018 quarterly sampling event is presented in Table 1-1. A complete summary of analytical results for groundwater is presented in Table 1-2. Detected compounds for groundwater are summarized in Table 1-3. Ecology requested updated groundwater concentration contour figures, which are provided in Attachment 2.

As part of the Phase 8 groundwater sampling program, Boeing has been conducting sampling and analysis for total cyanide at seven on-site wells. In the second quarter 2018, Boeing also analyzed samples from select wells for free and available cyanide by methods ASTM D688-09 and ASTM D7237-10, respectively. Initial results indicated anomalies and possible matrix interference in the free cyanide

analysis. As a result, total, free, and available cyanide analysis was repeated at two wells (AGW050 and AGW278-1) during the September 2018 sampling event. Samples from AGW278-1 again showed evidence of matrix interference, particularly in the free cyanide analysis. Matrix interference with free cyanide is difficult to overcome because the analytical method does not recommend sample dilutions, which is the most effective way to overcome matrix interference issues. While there are no regulatory criteria for free and available cyanide in Washington, the data could be used to evaluate remedial options for Area of Concern (AOC) A-09.

In the first quarter 2018, Ecology requested a field audit of the June groundwater sampling event. LAI arranged for Ecology to meet LAI field staff at the Site to observe activities during the June sampling event. On June 6, 2018, Samuel Iwenofu from Ecology observed regularly scheduled annual groundwater sampling activities and completed a field sampling audit. Boeing received a copy of the completed field sampling audit checklist from Ecology on July 20, 2018 (Reference #5). Boeing addressed comments in the audit checklist on July 26, 2018 (Reference #7).

Surface Water and Pore Water Sampling

Surface water and pore water sampling activities included semiannual (dry season) sampling, as well as one-time monitored natural attenuation (MNA) sampling at selected pore water locations. Sampling occurred on September 19 and 27, 2018. Surface water and pore water analytical data will be provided to Ecology in a separate data submittal during the fourth quarter 2018.

Algona Enhanced Natural Attenuation Pilot Test

The enhanced natural attenuation pilot test injection began on August 18, 2015 and was completed on September 4, 2015. Approximately 80,000 gallons of electron donor solution was injected into the shallow water-bearing zone. Boeing is performing post-injection sampling to monitor the effectiveness of the pilot test injection. Post-injection sampling was conducted quarterly through December 2017. As part of the update in the Phase 8 Groundwater Management Plan, quarterly sampling for pilot test wells was discontinued with the exception of four locations that continue to be sampled quarterly for volatile organic compounds (VOCs) only. Ongoing pilot test monitoring at other locations is conducted on a semiannual basis and summaries are provided in the quarterly reports following the June and December sampling events.

Feasibility Study Investigation

The feasibility study (FS) for the Site is ongoing. The FS work plan was submitted to Ecology in the second quarter 2017. During the first quarter 2018, Boeing submitted an FS cleanup technologies screening table. Boeing received Ecology's conditional approval and comments on the FS work plan and cleanup technologies screening table on August 21, 2018 (Reference #11).

Boeing conducted additional field investigation activities at AOC A-01 and Former Building 17-03 in 2017 and submitted a data report to Ecology in the fourth quarter of 2017. Boeing received Ecology comments on the data submittal on September 17, 2018 (Reference #28).

During the fourth quarter 2017, pore water monitoring piezometers were installed at three locations in Mill Creek. Three deeper pore water monitoring piezometers were planned for installation adjacent to the initial piezometers, but could not be completed during the initial installation phase due to refusal and rising surface water as a result of winter rains. During the third quarter 2018, the three deeper pore water monitoring piezometers were installed in Mill Creek. All pore water monitoring piezometer locations were sampled on September 19, 2018. Pore water monitoring data was not received in time to be included in this Status Report, but will be submitted under separate cover in the fourth quarter 2018.

Chromium Reduction Tank Release

On July 19, 2018, there was a process water release from the chromium reduction tank (CRT) located at the Boeing Auburn wastewater pre-treatment plant. Although the CRT is located within the secondary containment of the WWPTP, the height of the CRT off the ground (20 to 30 ft off the ground) allowed some process water to splash off out of the secondary containment and onto an adjacent unpaved area consisting of gravel surface material and a planter strip. The tank is designed to acidify the process water and reduce small amounts of hexavalent chromium [Cr(VI)] to trivalent chromium [Cr(III)]. To evaluate potential impacts from the release, Boeing completed soil sampling of the unpaved area on July 26, 2018. A memo detailing the release, subsequent investigation, and results was submitted to Ecology on August 14, 2018 (Reference #9). Cr(VI) was not detected in any of the soil samples and concentrations of Cr(III) in all soil samples were below the cleanup level.

Data Management

Boeing and Ecology have agreed on annual submittals of data to Ecology's Environmental Information Management (EIM) database. On August 22, 2018, Boeing submitted required EIM data for the past year of data (July 2017 through June 2018) (Reference #12). The data is currently under review by the Ecology EIM coordinator and will be loaded to the EIM database when review is complete. Boeing expects to receive approval of the data submission from Ecology's EIM coordinator in the fourth quarter 2018.

Communications

Ecology and Boeing are working together to ensure that all stakeholders are aware of the progress of investigation and cleanup activities at the Boeing Auburn Site. The City of Algona continues to be notified of all fieldwork occurring in Algona. The City of Algona's consultant, ICF, continues to participate in project conference calls with Boeing and Ecology and continues to review Algona-related deliverables (e.g., work plans and reports). Boeing and Ecology also continue to update the City of Auburn on activities, as needed.

In the third quarter 2018, Ecology updated the Public Participation Plan for the Boeing Auburn project. A draft plan was submitted to Boeing in June 2018. Boeing provided comments on the draft plan in July 2018 (Reference #1). Ecology held a public comment period on the Public Participation Plan from July 19, 2018 to September 7, 2018 in conjunction with the comment period for the RCRA permit. Ecology posted notifications to their Listserv regarding the public comment period (References #3, #4, #10, and #13).

Ecology staff also posted notifications to the Listserv regarding information booths at Algona Days (Reference #8) and a wetland walk planned in October 2018 (Reference #27).

On September 6, 2018 LAI sent data letters

Building 17-06 Ongoing Monitoring

Boeing is monitoring for petroleum hydrocarbons in wells AGW128, AGW277, and AGW281 located in Building 17-06. During the third quarter, free-phase product was detected in well AGW128 in July, August, and September. Free-phase product has not been detected in any of the other wells in Building 17-06.

Occurrence of Problems

None to report.

Projected Work for Next Reporting Period October through December 2018

Activities projected for the next reporting period pertain to the FS reporting, other reporting, and ongoing monitoring of groundwater. Tasks during fourth quarter 2018 are expected to include:

- Finalizing the FS work plan.
- Providing Ecology with a final data submittal summarizing additional FS investigation results at Building 17-06.
- Submitting the Algona Pilot Test TM (2nd year of monitoring update).
- Beginning the preparation of the FS report.
- Providing Ecology with a data submittal summarizing 2018 dry season surface water and pore water monitoring results.
- Conducting the semiannual groundwater sampling event in December 2018.

Other Significant Findings, Changes, and Contacts

The DCT Industrial facility located at 840 Industry Drive was purchased by Prologis. Boeing's access agreement to sample well AGW276 is still valid and Boeing plans to sample this well during the regularly scheduled monitoring event in December 2018.

If you have any questions regarding this status report, or need any other information, please do not hesitate to contact Boeing or LAI.

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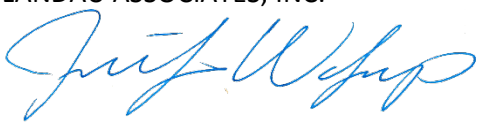

Jennifer Wynkoop
Principal Scientist

KMG/JWW/tam
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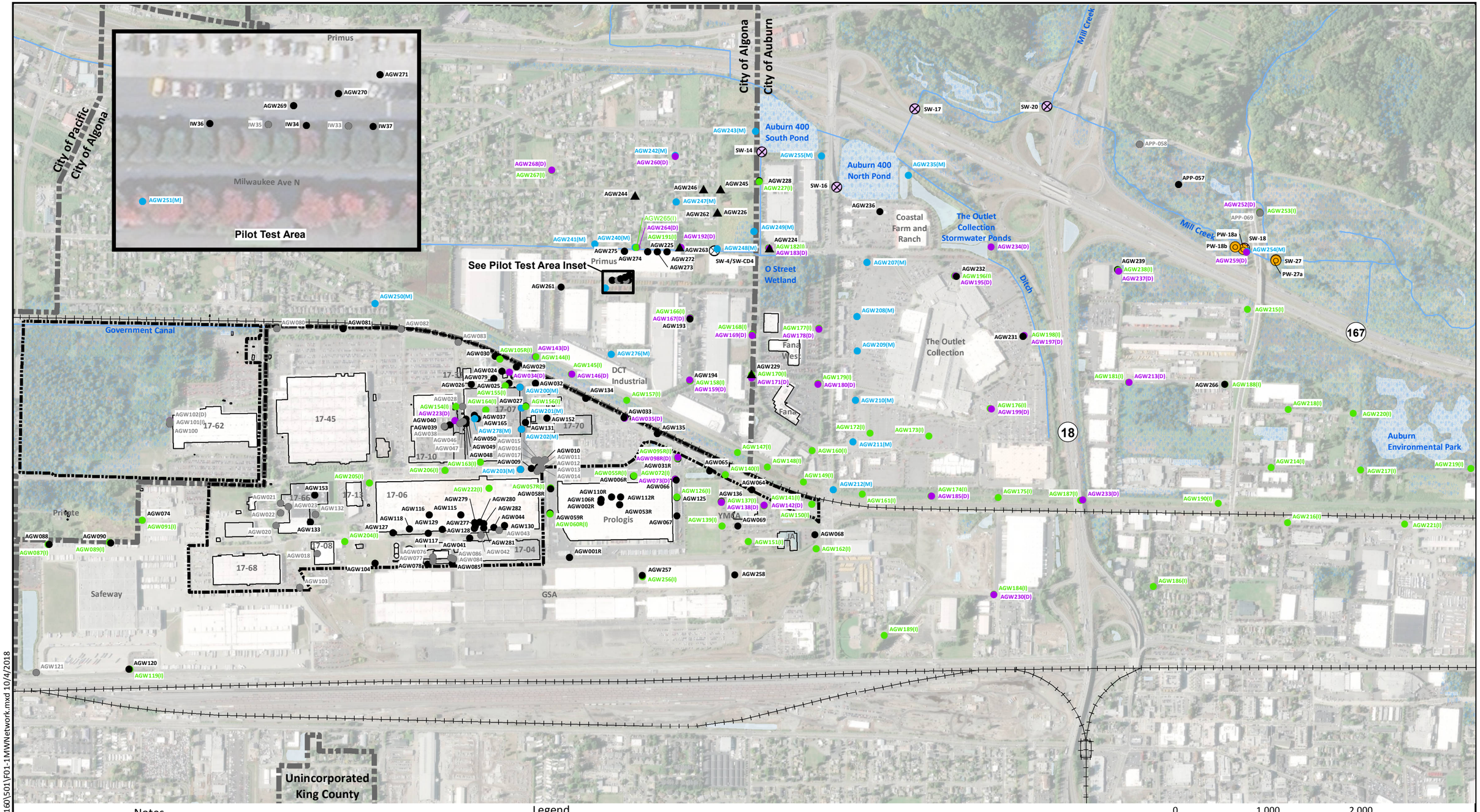
cc: Carl Bach, Boeing (email only)
Thomas MacMannis, Boeing (email only)
Kamara Sams, Boeing (email only)
James Swortz, Boeing (email only)
Kathryn Moxley, Boeing (email only)
Patrick McCabe, Boeing Realty (email only)
Janet Frentzel, Prologis (email only)
Kim Lemon, Prologis (email only)
Steve Campbell, Prologis (email only)
Jason Berry, YMCA Auburn (email only)

Attachments: Attachment 1: Groundwater Sampling Results
Laboratory Data Packages (only included in final hard copy on DVD)

Attachment 1

Groundwater Sampling Results



Notes

1. Groundwater wells are identified by the AGW prefix. The designations behind the identifications indicate the zone. If there is no designation, the well is screened in the shallow zone. (I) = intermediate zone, (D) = deep zone, (M) = multi-level well; screens in multiple groundwater zones.
2. Well designations beginning with APP are installed and owned by WSDOT.
3. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- Offsite Water Table Well
- Shallow Monitoring Well (2 to 30 ft bgs)
- (I) Intermediate Monitoring Well (40 to 60 ft bgs)
- (D) Deep Monitoring Well (80 to 100 ft bgs)
- (M) Multi-Level Well
- Wells Not Currently Sampled
- Annual Surface Water Sample Location
- Semiannual Surface Water Sampling Location
- Annual Pore Water Sample Location
- Wetland Areas
- Water Bodies
- Waterways

N

0 1,000 2,000

Scale in Feet

Base Map Source: Geometrix 2003; Parcel Data Source: King County 2015; Aerial Photo Source: Esri World Imagery.

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Boeing Auburn Auburn, Washington	**Current Monitoring Well Network**	Figure 1-1

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Table 1-1
3Q2018 Groundwater Sampling Matrix
Boeing Auburn Facility
Auburn, Washington

Sample Location	Field Sample ID	Sample Date	Sample Type	Laboratory SDG	Laboratory Sample Identification	Select VOCs by SW-846 8260C/ 8260C-SIM (a)	TPH-D by NWTPH-Dx	Total Cyanide by ASTM D7511 (b)	Available Cyanide by ASTM D6888-09 (b)	Free Cyanide by ASTM D7237-10 (b)
AGW050	AGW050-NaOH-20180905 AGW050-Unpres-20180905	9/5/2018	N	A8I0102	A8I0102-01			X	X	X
AGW247-1	AGW247-1-6-20180904	9/4/2018	N	580-80060-1	580-80060-6	X				
AGW251-3	AGW251-3-40-20180904	9/4/2018	N	580-80060-1	580-80060-5	X				
AGW273	AGW273-20180904	9/4/2018	N	580-80060-1	580-80060-2	X				
AGW277	AGW277-20180904	9/4/2018	N	580-80060-1	580-80060-8		X			
AGW277	AGW900-20180904	9/4/2018	FD	580-80060-1	580-80060-9		X			
AGW278-1	AGW278-1-17-20180905 AGW278-1-17-NaOH-20180905 AGW278-1-17-Unpres-20180905	9/5/2018	N	580-80111-1 A8I0102	580-80111-5 A8I0102-03	X		X	X	X
AGW278-1	AGW901-20180905 AGW901-NaOH-20180905 AGW901-Unpres-20180905	9/5/2018	FD	580-80111-1 A8I0102	580-80111-6 A8I0102-05	X		X	X	X
AGW278-2	AGW278-2-25-20180905	9/5/2018	N	580-80111-1	580-80111-7	X				
AGW278-4	AGW278-4-45-20180906	9/6/2018	N	580-80142-1	580-80142-2	X				
AGW278-6	AGW278-6-80-20180906	9/6/2018	N	580-80142-1	580-80142-3	X				
AGW279	AGW279-20180904	9/4/2018	N	580-80060-1	580-80060-7		X			
AGW280	AGW280-20180905	9/5/2018	N	580-80111-1	580-80111-2		X			
AGW281	AGW281-20180905	9/5/2018	N	580-80111-1	580-80111-4		X			
AGW282	AGW282-20180905	9/5/2018	N	580-80111-1	580-80111-3		X			
IW36	IW36-20180904	9/4/2018	N	580-80060-1	580-80060-3	X				
IW37	IW37-20180904	9/4/2018	N	580-80060-1	580-80060-4	X				

Notes:

(a) Select VOCs consist of 1,1-dichloroethene, cis-1,2-dichloroethene, tetrachloroethene, trans-1,2-dichloroethene, trichloroethene, and vinyl chloride.

(b) Samples were analyzed for cyanide by Apex Laboratories; all other analytical methods were performed by TestAmerica.

Abbreviations/Acronyms:

ASTM = American Society for Testing and Materials
EPA = US Environmental Protection Agency
FD = field duplicate
ID = identification
N = primary sample
SDG = sample delivery group
SIM = Select Ion Monitoring
NWTPH = Northwest Total Petroleum Hydrocarbon
VOC = volatile organic compound

Table 1-2
3Q2018 Groundwater Analytical Results
Boeing Auburn Facility
Auburn, Washington

Sample Location	Zone	Laboratory SDG	Sample Date	Sample Type	Select VOCs by SW-846 8260C/8260C-SIM (µg/L)						Petroleum Hydrocarbons by NWTPH-Dx (mg/L)		Cyanide by ASTM D6888-09, D7237-10, D7511-12 (mg/L) (a)		
					1,1-Dichloroethene	cis-1,2-Dichloroethene	Tetrachloroethene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride	Oil Range Organics (C24-C40)	Diesel Range Organics (C12-C24)	Cyanide, Available (b)	Cyanide, Free (b)	Cyanide, Total (b)
AGW050	Shallow	A8I0102	9/5/2018	N	--	--	--	--	--	--	--	--	**0.0025**	0.00500 U	**0.166**
AGW247-1	Shallow-WT	580-80060-1	9/4/2018	N	0.20 U	0.20 U	0.20 UJ (b)	**0.44**	0.20 U	**3.4 J (b)**	--	--	--	--	--
AGW251-3	Intermediate	580-80060-1	9/4/2018	N	0.20 U	**0.21**	0.20 UJ (b)	0.20 U	0.20 U	**4.5 J (b)**	--	--	--	--	--
AGW273	Shallow	580-80060-1	9/4/2018	N	0.20 U	**1.1**	0.20 UJ (b)	**0.32**	0.20 U	**3.3 J (b)**	--	--	--	--	--
AGW277	Shallow-WT	580-80060-1	9/4/2018	N	--	--	--	--	--	--	0.35 U	**0.20**	--	--	--
AGW277	Shallow-WT	580-80060-1	9/4/2018	FD	--	--	--	--	--	--	0.35 U	**0.14**	--	--	--
AGW278-1	Shallow-WT	580-80111-1 A8I0102	9/5/2018	N	0.20 U	**1.6**	0.20 U	0.20 U	**0.61**	**0.83**	--	--	0.00200 UJ	**0.262 EJ (c)**	**0.0487 J**
AGW278-1	Shallow-WT	580-80111-1 A8I0102	9/5/2018	FD	0.20 U	**1.6**	0.20 U	0.20 U	**0.65**	**0.77**	--	--	**0.0205 J**	**0.262 EJ (c)**	**0.0593 J**
AGW278-2	Shallow	580-80111-1	9/5/2018	N	0.20 U	**1.5**	0.20 U	0.20 U	**0.96**	**0.22**	--	--	--	--	--
AGW278-4	Intermediate	580-80142-1	9/6/2018	N	0.20 U	**1.2**	0.20 U	0.20 U	0.20 U	**3.1**	--	--	--	--	--
AGW278-6	Deep	580-80142-1	9/6/2018	N	0.20 U	**0.22**	0.20 U	0.20 U	0.20 U	0.020 U	--	--	--	--	--
AGW279	Shallow-WT	580-80060-1	9/4/2018	N	--	--	--	--	--	--	0.35 U	0.11 U	--	--	--
AGW280	Shallow-WT	580-80111-1	9/5/2018	N	--	--	--	--	--	--	0.35 U	0.11 U	--	--	--
AGW281	Shallow-WT	580-80111-1	9/5/2018	N	--	--	--	--	--	--	**0.70**	**0.19**	--	--	--
AGW282	Shallow-WT	580-80111-1	9/5/2018	N	--	--	--	--	--	--	0.35 U	0.11 U	--	--	--
IW36	Shallow	580-80060-1	9/4/2018	N	0.20 U	0.20 U	0.20 UJ (b)	0.20 U	0.20 U	**2.0 J (b)**	--	--	--	--	--
IW37	Shallow	580-80060-1	9/4/2018	N	0.20 U	0.20 U	0.20 UJ (b)	0.20 U	0.20 U	**0.42 J (b)**	--	--	--	--	--

Notes:

(a) Samples analyzed for cyanide were collected, filtered with a 0.1-µm filter and preserved with sodium hydroxide (NaOH).
(b) Select samples were analyzed via SW-846 8260C-SIM for tetrachloroethene and vinyl chloride to achieve project-specific reporting limits.
(c) Results indicate matrix interference and the analytical method does not recommend dilutions to overcome matrix interference issues.
Bold text indicates detected analyte.
EJ = The result is an estimated quantity. The reported result exceeded the calibration range of the laboratory instrument.
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Abbreviations/Acronyms:

ASTM = ASTM International
FD = field duplicate
µg/L = micrograms per liter
mg/L = milligrams per liter
µm = micrometer (micron)
N = primary sample
SDG = sample delivery group
SIM = Select Ion Monitoring
VOC = Volatile Organic Compound
WT = water table