What's New? en español

Watch a video update on the Boeing Auburn Contaminated Groundwater Investigation - December 2016

Ecology site manager, Neal Hines, presented to the Auburn City Council Study Session on October 24. You can see his 30 minute presentation by going to the Auburn City website and clicking on **Agenda Item IIIA. Boeing Auburn Facility Groundwater** in the navigation bar on the left side of the page.

The presentation includes an update on air quality, surface water, and groundwater results. At minute 11:27, you can see a map showing how the source areas for the Auburn City water wells do not overlap with contaminated groundwater.

Coming in early 2017 - Draft Remedial Investigation Report & Public Comment Period

Ecology will release Boeing's draft Remedial Investigation Report for public comment in early 2017. The report will contain the results of the investigation into soil, groundwater, air and surface water contamination from the Boeing property. During the comment period you will have the opportunity to comment on the report, provide input on the investigation to date and ask questions.

Check your mailbox or our website in early 2017 for updates.

Remedial Investigation

The Remedial Investigation (RI) identifies the boundaries of the plume and the potential impacts of the contamination by evaluating data from groundwater, surface water, and air samples. The RI must provide sufficient data in order to propose effective cleanup actions as part of the feasibility study.

What type of information is included in the RI?

- The boundaries of the contaminated groundwater plume.
- The locations, concentrations, and depths of chemicals and breakdown products in soil, groundwater, and air.
- An evaluation of the potential pathways for human exposure to the chemicals.
- Results of investigations at the Boeing property.
- A detailed description of the locations requiring cleanup.

What public feedback is useful for the draft RI?

- Information on locations with contamination from the site.
- Additional ways people might come into contact with site contamination.

After the RI is finalized, the Feasibility Study will be released for public comment.

Regularly Scheduled Well Sampling to Start - September, 2016

Groundwater

Boeing's consultant Landau Associates begins regular quarterly sampling of groundwater wells the first week of September. This round of sampling covers wells located in Algona and Auburn. Ecology wants to catch any small fluctuations in groundwater contamination potentially due to weather patterns. That is why we requiring additional quarterly sampling in some wells in September and March.

You may see technicians at various well locations for about two weeks after sampling begins.

Surface water

Dry season surface water sampling will begin in mid-September and targets key locations in the Chicago Avenue Ditch, Auburn ponds, and Mill Creek to monitor the plume size and chemical concentrations during the dry season.

Ecology will post the sampling results to this website as they become available.

How will the contamination be cleaned up?

Potential cleanup technologies will be evaluated as part of the Feasibility Study, and the Cleanup Action Plan will implement one or a combination of several cleanup technologies. There are a number of different technologies used for cleaning up contaminated groundwater. Find out more about some of the potential treatment technology options by clicking here. Scroll to the page titled, "How will the contamination be cleaned up?" There are general options that may or may not be feasible or beneficial at the Boeing Auburn site.

You can also find out more about the upcoming Remedial Investigation report and how you can comment. Scroll to the page titled, "Remedial Investigation."

Ecology staff talking with fair goers.

Ecology, Rat City Rollergirls and more! - July 2016

This year was the 3rd Annual Health Fair at Algona Days and Ecology was there to answer questions about the Boeing Auburn Contaminated groundwater Investigation and cleanup. Together with the Washington State Department of Health, Ecology talked with 25-30 people who stopped by the booth.

Algona Days is a yearly community celebration at Matchett Park in Algona, WA. The event includes food and craft vendors, entertainment and this year, the Rat City Rollergirls. The Algona Public Awareness Committee and the City of Algona hosted the Annual Health Fair as part of the Algona Days activities.

If we missed you, you can see informational displays at the City of Auburn Annex and take home printed information until the first week of August.

- Where: 1 East Main Street, 2nd Floor (located in the Annex Building just east of City Hall, across Division Street).
- When: Business hours: Monday - Friday, 7:30 AM - 5:30 PM.

The displays include information about the progress of the investigation, types of technologies that may be used to cleanup or remediate groundwater contamination and how you can give Ecology feedback on the draft report about the investigation (called the Remedial Investigation or RI.) The Draft RI report will be available for public comment in late 2016.

You can also find out more about the upcoming Remedial Investigation report and how you can comment. Scroll to the page titled, "Remedial Investigation."

Groundwater Monitoring Updates and Milestone - June 2016

Sample Collection

You may have noticed the groundwater sampling crew out and about in Algona. This is the regularly scheduled sample collections from monitoring wells by Boeing's contracted technicians, Landau Associates. They should be done by July. Ecology will post the results to this website.

A Milestone

Ecology has been overseeing groundwater monitoring as part of the Remedial Investigation (RI). The data help us learn where the contamination is located, how deep it is and what changes may be occurring. The RI is now complete, with a report due for public review and comment later this year.

Ongoing Monitoring

Investigations move step-by-step, extending the locations of monitoring points (like new wells) until chemicals are not detected. We now know that in some areas being monitored there have been no consistent detections of any of the chemicals associated with the Boeing Auburn groundwater contamination.

Even though the RI is complete, we still need to monitor the contamination. But, we can decrease the number of times per year that sampling occurs – twice-yearly rather than the quarterly schedule during the initial investigation.

We'll still be able to determine if something changes. Boeing will now focus the sampling where we know the groundwater is actually flowing (see map) and could potentially carry the contaminants.

Pilot Study

We're also having Boeing follow up on the wells installed last year in the Algona business district for the bioremediation pilot study. That's where Boeing's consultant injected a non-toxic formula intended to spur the growth of natural bacteria in the groundwater that may speed the breakdown of TCE, the primary contaminant. Those results should be available sometime later this summer and we will post those to this website.

Come See Ecology at Algona Days

Look for Ecology staff at the 3rd Annual Health Fair, at Algona Days, July 16. See you there!

How will the contamination be cleaned up?

Potential cleanup technologies will be evaluated as part of the Feasibility Study, and the Cleanup Action Plan will implement one or a combination of several cleanup technologies. There are a number of different technologies used for cleaning up contaminated groundwater. Find out more about some of the potential treatment technology options by clicking here. Scroll to the page titled, "How will the contamination be cleaned up?" These are general options that may or may not be feasible or beneficial at the Boeing Auburn site.

You can also find out more about the upcoming Remedial Investigation report and how you can comment. Scroll to the page titled, "Remedial Investigation."

Learn More About Boeing Auburn Groundwater Cleanup

Informational Displays at Algona-Pacific Public Library, April 27, 2016

Starting on April 27th, you can visit the Algona-Pacific Public Library at 255 Ellingson Drive, Pacific WA 98047 for information about:

- How the investigation is progressing.
- Technologies used to clean up or remediate groundwater contamination.
- How you can give Ecology feedback on the draft report about the investigation (called the Remedial Investigation or RI).

There will be informational displays for viewing and printed materials for you to take home. The draft report will be available for public comment in late 2016.

Library hours:

- Monday - Thursday: 10am to 9pm
- Friday: 10am to 6pm
- Saturday: 10am to 5pm
- Sunday: 1pm to 5pm

You can also view some of the materials here. Of course you can always call us directly at 253-219-7645. Be sure to sign up on our listserv for periodic updates (see link on the right sidebar).

Learn More About Boeing Auburn Groundwater Cleanup
Informational Displays at Auburn Public Library, April 20, 2016
Starting on April 20th, you can visit the Auburn Public Library at 1102 Auburn Way South, Auburn WA 98002 for information about:

- How the investigation is progressing.
- Technologies used to clean up or remediate groundwater contamination.
- How you can give Ecology feedback on the draft report about the investigation (called the Remedial Investigation or RI).

There will be informational displays for viewing and printed materials for you to take home. The draft report will be available for public comment in late 2016.

Library hours:

- Monday - Thursday: 10am to 9pm
- Friday: 10am to 6pm
- Saturday: 10am to 5pm
- Sunday: 1pm to 5pm

You can also view some of the materials here. Of course you can always call us directly at 253-219-7645. Be sure to sign up on our listserv for periodic updates (see link on the right sidebar).

We missed you!
If you missed talking to Ecology at the Open House last month, you can still view the informational displays at the City of Algona beginning March 21, 2016.

The displays include information about the progress of the investigation, types of technologies that may be used to cleanup or remediate groundwater contamination and how you can give Ecology feedback on the

draft report about the investigation (called the Remedial Investigation or RI). The draft RI report will be available for public comment in late 2016.

You can also view some of the materials here. Of course you can always call us directly at 253-219-7645.

2016 Open House

Do you want to learn more about the groundwater investigation in Auburn and Algona? Please join us at a drop-in open house, where you can see informational displays about the study and speak with people from the Department of Ecology, state and federal health officials, and the Algona Public Awareness Coalition. Stop by any time to learn more and ask questions.

Displays in English and Spanish, with staff interpreters available. Childcare will be provided.
When: February 27, 2016, 10 a.m. - 2 p.m.
Where: Alpac Elementary School Gym, 310 Milwaukee Blvd N, Pacific, WA 98047

To request ADA accommodation for disabilities, call Luis Buen Abad at Ecology, 425-649-4485. Persons with impaired hearing may call Washington Relay Service at 711. Persons with speech disability may call TTY at 877-833-6341.

Looking back on 2015. Looking forward in 2016.

Before contaminated groundwater can be cleaned up, we need to know where it is located and at what concentrations. That first step in this process is called the Remedial Investigation (RI). In 2015, Ecology oversaw the near completion of this investigation.

You can see a summary of the outreach, investigation reports, and results completed in 2015 in the *2015 Year in Review* in your mailboxes soon.

The draft RI report will be available for public comment in late 2016. In the meantime, Ecology will be coming to your community to provide more information about the investigation and next steps. Visit us at an upcoming open house! See the details below.

Lots of Rain - December 2015

If you live in the low lying areas of Algona or Auburn, the heavy rains in the last couple of weeks may have formed pools of standing water in your yards. People sometimes ask if this water contains any of the contaminated groundwater from the Boeing Auburn site.

To test if groundwater contamination was getting into ponded yard water, in early 2014 Ecology directed Boeing to test water in yards that were over the impacted groundwater. Only one of the 12 samples tested found any detections for the contaminants from Boeing. Most importantly, the levels detected for TCE and

vinyl chloride in that one sample were both more than 100 times lower than the health-based screening level for contact from splashing.

Regularly Scheduled Well Sampling to Start after Thanksgiving

Boeing's consultant, Landau Associates begins fourth quarter sampling of groundwater wells **November 30, 2015 through Friday, December 14, 2015**. This round of sampling targets key wells to monitor the plume size and chemical concentrations during the wet season and covers wells located in Algona and Auburn. You may see technicians at various well locations for about two weeks after sampling begins. Other quarterly sampling events in September and March target wells that track groundwater results more frequently to catch any smaller fluctuations due to seasonal changes in weather patterns. Ecology will post the sampling results to this website as they become available.

No Contaminants Detected in Mill Creek Channel or Wetlands

With Mill Creek and its wetlands a short distance from the groundwater plume, Ecology directed Boeing to sample and analyze creek water and water from wetland sediments. Neither of the plume's key contaminants – TCE and vinyl chloride – were detected in either set of samples.

The plume in this area lies 40 to 60 feet below ground. To enhance this investigation into whether the plume affects surface water in this area, Ecology directed Boeing to take samples and test water from sediments. These also detected no chemicals of concern. Sampling location map.

Boeing Auburn Facility Groundwater Contamination Update Video

Neal Hines gives the City of Auburn Council an update on the status and finding of the Boeing Auburn facility remedial investigation for groundwater contamination. Go to the video and then select the appropriate agenda item (III.C.) below the video.

Cookies and Questions - Ask Ecology - October 27, 2015

If you missed Ecology staff at Algona Days or at the last City Council meeting, you have another chance to ask questions about the groundwater contamination, the pilot study, and the next steps for remediation and cleanup.

Join site manager, Neal Hines for cookies and questions 6:30-7p.m., prior to the City Council meeting on October 27, at Algona City Hall.

This is also the last opportunity this month to see the informational display in the Council Chambers. Stop by City offices during business hours and ask to be let into the Council Chambers.

Of course if you miss us on Tuesday, you can always call Neal (425-649-7181), Robin Harrover (425-649-7232) or Thea Levkovitz (425-649-7286) any time if you have more questions.

Cookies and Questions - Ask Ecology - October 13 AND 27, 2015

If you missed Ecology staff at Algona Days, you have another chance to ask questions about the groundwater contamination, the pilot study, and the next steps for remediation and cleanup.

Join one of the site managers, (Neal Hines or Robin Harrover) for cookies and questions 6:30-7p.m., prior to the City Council meeting on October 13 and/or 27, at Algona City Hall.

If you miss us there, the City of Algona will host an informational display in the Council Chambers during the month of October. Stop by City offices during business hours and ask to be let in to the Council Chambers.

In other news:

Pilot Study - The initial stage of the bioremediation pilot study was completed in August. Bioremediation is a proven cleanup method, but usually where TCE (trichloroethene, the groundwater contaminant) and its breakdown products are at very high levels; easy pickings for the microbes. The plume of groundwater contamination in Algona and Auburn outside of Boeing's property contains very low levels of the chemicals involved. This pilot study will help Ecology evaluate whether bioremediation can work with contaminants at such low concentrations. Ecology will post results when they are available on our website.

Monitoring wells in Algona - A new monitoring well is being installed on Industry Drive It will be completed the week of October 5, 2015.

Surface water sampling - Regularly scheduled surface water sampling, including Chicago Avenue ditch was completed September 23. Results will be posted on our website when available.

Will bioremediation help clean up groundwater in Algona and Auburn? - July 30, 2015

If you are a night owl, you might have seen some new wells being installed in commercial Algona within the last week at 851 Milwaukee Ave N, Algona. The new wells will help Ecology study a cleanup method known as bioremediation (what the Environmental Protection Agency says about bioremediation). To limit inconveniencing local businesses, the wells were installed after business hours.

This Pilot Study will provide data for Ecology to evaluate whether increasing the food source for native microbes, such as bacteria, found in the groundwater will effectively clean up the contaminants (TCE and breakdown products) in NE Algona and Auburn. The microbes are known to eat these contaminants. When they do so, they break the chemicals into simpler, less toxic compounds. Bioremediation is not a new technology. In fact, Boeing used the same method to clean up a contaminated area on its own facility in 2004-2005. Through this pilot study, Ecology wants to find out if bioremediation is an effective clean up method for the low levels of contamination found in the groundwater in Algona and Auburn.

Starting in late July and continuing through early August, 14 new groundwater wells were installed in the pilot study area. Staging of materials at the site will begin in mid-August, and the wells will be injected with

a food-grade solution for the microbes starting the week of August 17, 2015. The initial pilot study will continue for four to six weeks. Results will be posted on the Ecology website when they are available.

If you live in Algona or NW Auburn, please watch for a mailer in August with more information about the pilot study.

Ecology to be at Second Annual Health Fair - Algona Days, July 18, 2015

Residents can look for Neal Hines and Robin Harrover again this year at the 2nd Annual Health Fair, Algona Days. They will be at the Ecology booth to answer your questions about the status of the investigation and the next steps for the cleanup. There will be coloring pages and other items for the kids, so stop by and meet the Ecology staff.

In other news, the annual sampling of the groundwater monitoring wells was completed in June. Every year, a network of nearly 200 groundwater monitoring wells in Algona and Auburn are tested to determine where groundwater contamination is and if it is changing over time. Ecology is reviewing the data and will post the results on Ecology's website when it is available.

Regularly Scheduled Well Sampling to Start - June 1, 2015

Boeing's consultant Landau Associates begins annual sampling of groundwater wells on June 1. This round of sampling is the most extensive of the monitoring well network sampling and covers wells located in Algona and Auburn. You may see technicians at various well locations for about two weeks after sampling begins.

Another sampling event occurs in December and targets key wells to monitor the plume size and chemical concentrations during the wet season. Quarterly sampling events in September and March target wells that track groundwater results more frequently to catch any smaller fluctuations due to seasonal changes in weather patterns.

Ecology will post the sampling results to this website as they become available, likely in late July or early August.

Other activity in and around Auburn and Algona—April 3, 2015

Technicians will conduct the regular first quarter sampling in the existing groundwater wells. You will see them first week of March. Ecology needs this sampling information to determine where groundwater is contaminated and if this "footprint" is changing over time.

The last week of March and early April, Boeing's contractors will also be installing new groundwater wells at 8 different locations in Algona and Auburn. They will collect samples from those wells in early April.

All sampling results will be reported to Ecology. For more information, call the project hotline at 253-219-7645.

Soil-Air (Vapor) and Groundwater Sampling in Auburn and Algona Commercial Areas—March 6, 2015

Under Ecology's direction, the Boeing Company's contractor, Landau Associates, will conduct drilling and sampling work from March 16 -20. Landau will collect soil-air and groundwater samples to determine if chemicals in groundwater vaporize and enter air pockets in the soil. Such vapors may migrate through soil to indoor air inside commercial buildings.

These activities will be completed in commercial areas: northeast Algona on Milwaukee Avenue North, and south of the Outlet Collection parking lot along O Street Southwest and 15th Street Southwest in Auburn. Most of the 20 sample locations are along public rights-of-way. Drilling may affect traffic patterns for up to one week. Flaggers and traffic control signs will be present at locations that require temporary lane closures.

Algona Public Awareness Coalition's (APAC) Groundwater 101 community—January 13, 2015

Thank you to those who attended the Algona Public Awareness Coalition's (APAC) Groundwater 101 community forum on January 13. Peter deFur, President of Environmental Stewardship Concepts, gave a presentation about groundwater in the Kent Valley and how it moves. Ecology site manager Neal Hines also provided an update on the progress of the investigation to date. We were happy to have the opportunity to communicate with you in person about the progress at the site. For those of you who were unable to attend, Ecology will post more information about the meeting when it becomes available. Please check back on our website in a few weeks.

For more information about the community forum, visit the APAC website at http://wa-apac.org.

Routine seasonal sampling in Algona and Auburn monitoring wells—December 11, 2014

It's that time of year again. Qualified technicians will sample water from the network of groundwater monitoring wells in Algona and Auburn in early December. Monitoring the water from these wells helps Ecology understand the boundaries of the contaminated groundwater (plume) and determine whether the contamination is changing over time.

Over the past summer, 12 new wells were installed in northeast Algona and the junction Triangle area of Algona. Last month, three more wells were installed in Auburn, just east of Highway 167 near Mill Creek wetlands and at the western end of 15th St. SW.

Samples from this semi-annual sampling event will be analyzed at local laboratories. Ecology anticipates receiving the data report in late January or early February of 2015 and will post the report on this website.

If you have questions about the drilling or the cleanup investigation, call the Ecology Hotline: (253) 219-7645.

Expanding the well network with three more wells — Update, November 12, 2014

Have you noticed a drill rig west of Highway 167 near the Mill Creek wetlands? Or at the western end of 15th St SW, just east of Highway 167? Under Ecology's direction, Boeing's consultants, Landau Associates are drilling new monitoring wells. The wells are part of a network of wells that will help Ecology understand the boundaries of the contaminated groundwater (plume).

Landau will install wells at three separate locations, along the established City of Auburn public right-of-way between November 10th and 19th. Skilled technicians will sample the wells in late November or early December.

What did Ecology find out from the Summer drilling in Algona? — Update, October 10, 2014

Results are in from the latest round of sampling from the new wells installed in June and July, 2014. Data continues to indicate that groundwater concentrations of contaminants do not indicate a health risk to residents from touching the groundwater or through breathing chemicals that could evaporate from the groundwater.

Algona and Auburn residents may remember that at the end of June, Boeing's contractors finished installing new groundwater monitoring wells in northeast Algona and the Junction Triangle area of Algona. Ecology requested Boeing to install 12 additional monitoring wells and 14 direct push borings (temporary wells). Ecology needs this network of wells, including the summer additions, to provide confirmation about where the contamination exists from the Boeing Auburn Fabrication Site.

The new wells are doing just what Ecology intended – they are clarifying the boundaries of the contaminated groundwater and determining if concentrations of the contaminants increase or decrease over time. For now, the concentrations of contaminants are either not-detected or, if detected, the exposure to people (touching, or breathing any chemicals in the air) has been found to be at safe levels.

The map of the shallow, intermediate, and deep zones of the plume can be viewed at Ecology's project website under "**Communities and Maps"**
at: http://www.ecy.wa.gov/programs/hwtr/CleanupSites/boeing-fabn/resources.html

If you have questions about the sampling, please call the hotline number and your call will be returned promptly.

Washington State Department of Health Evaluation of Exposures to Surface Water, 2013 Seasonal Sampling — Update, September 10, 2014

The Washington State Department of Health completed an assessment of the 2013 Seasonal Surface Water Sampling Results. This was done as a follow up to the March 2013 assessment, Exposures to Surface Water

in Chicago Avenue Ditch and Government Canal in Algona. Additional surface water sampling was conducted in the Chicago Avenue ditch as part of the ongoing groundwater remedial investigation by The Boeing Company. The investigation is due to past releases of chlorinated solvents, resulting in two plumes of contaminated groundwater. The contamination consists mainly of trichloroethylene (TCE, also called trichloroethene) and relatively low levels of its breakdown products. The March 2013 evaluation, which was based on surface water sampling from June 2012, found the level of chemicals in the ditch and canal at that time did not pose a health concern to children or city workers.

To determine if there is a change in the chemical concentrations between the dry and wet seasons, a seasonal approach to sampling was developed by the Department of Ecology. Residential ditches in northeast Algona and the Chicago Avenue ditch were sampled during the wet season between November and December 2013. The Department of Health evaluated these new data and, similar to the original dry season sample results from June2012, concluded the chemical levels found are not expected to result in harmful health effects to children or city personnel. Because contaminant levels may change over time, Department of Health recommends:

- Parents keep children out of the ditches.
- Workers wear protective clothing when performing duties in the ditches.
- Continue monitoring the ditches to make sure harmful exposures don't occur.

The full health consultation report is available online.

Follow-up home air testing does not detect chlorinated solvents in most Algona homes tested — Update, August 25, 2014

The Washington Department of Ecology directed Boeing to conduct a Phase II (Winter –Spring, 2014, Algona, WA) vapor intrusion air quality study. Phase I was completed Fall, 2013. The Phase II study evaluated whether different seasonal conditions and groundwater levels might increase or decrease the possibility of vapor intrusion (chemicals passing from groundwater into indoor air).

Overall, Phase I and Phase II tested fifteen homes located over the contaminated groundwater in northeast Algona. No chemicals were detected in the air of 8 homes. Low levels of chemicals were occasionally detected in the air of the remaining seven homes. However, the concentrations of those detections were below those expected to cause harmful health effects. The results of both studies indicate vapor intrusion is not the source of the limited detections of TCE at homes in the study area and that no action is needed at this time to reduce the potential for exposure in any home tested.

You can refer to the summary reports, Phase II Vapor Intrusion Summary (Winter- Spring, 2014) – Algona, WA (976KB) and, "Phase I Vapor Intrusion Summary (Summer – Fall, 2013) - City of Algona, WA" (949 KB) with findings from both phases of indoor air sampling for details. If you have any questions, please contact

Neal Hines (Ecology) at 425-649-7181 or Jennifer Wynkoop (Landau Associates) at 253-284-4883. Copies can also be found at the City of Algona offices.

Strolling along Chicago Avenue Ditch — Update, August 13, 2014

Algona and Pacific residents joined Ecology's Robin Harrover for an evening walking tour to learn more about the contamination from the Boeing Fabrication Plant in Auburn. Starting at Chicago Avenue and 9th Avenue, participants walked along the Chicago Avenue ditch and learned about the investigation.

At 10th Avenue, participants peered inside a groundwater well opened by Boeing's Steve Tochko, installed to monitor where contamination is found in the groundwater, at what depth, and the if the concentrations change over time. Other stops included an artesian well and a surface water data logger. Watching the water bubble up into the Chicago Avenue ditch, they found out how the groundwater might interact with the water flowing in the ditch.

Mayor Dave Hill stopped by before heading to another meeting. Ecology staff was able to answer many questions and hear concerns. In spite of the mosquitoes, it was an educational evening.

A second tour is planned for Friday, August 15, 2014, 6:30- 7:30 PM, meet at the corner of 9th and Chicago Avenue.

Algona Day Crowds Keep Ecology Staff Busy — Update, July 24, 2014

If you were one of the many people that celebrated Algona Days on July 19, you might have seen the Ecology staff chasing fact sheets down the street during the windy but busy street fair. In between wind gusts, Ecology site managers, Robin Harrover and Neal Hines, talked to more than 40 people answering questions about the Boeing Auburn site cleanup.

Ecology was one of 11 organizations that joined together for the first ever Algona Days Health Fair. Anyone who visited five or more of the booths could get their passbook stamped and return to the Algona Public Awareness Coalition booth for free watermelon and lemonade. That was popular with kids of all ages.

New monitoring well installation completed in Algona — Update, July 11, 2014

At the end of June, Boeing's contractors completed installation of the groundwater monitoring wells in northeast Algona and the Junction Triangle area of Algona. The installation began in June. Ecology requested that Boeing install 12 additional monitoring wells. Fourteen (14) direct push borings (temporary wells) will be done by mid-July. Samples taken from the wells will clarify the boundaries of the contaminated groundwater over time, and determine if concentrations of contaminants increase or decrease. The entire

system of wells, including the recent additions, provides Ecology with critical information about contamination from the Boeing Auburn Fabrication Site.

To date, the samples from some of the long-term monitoring wells, installed previously in northeastern Algona and Auburn, did have concentrations of TCE and its breakdown products. The concentrations were mostly below state cleanup standards for drinking water, and subsequent investigations do not indicate a health risk to residents from touching, breathing, or ingesting the groundwater under typical exposure conditions.

Actual sampling of the new wells will take place toward the end of July. Samples will be analyzed in August and Ecology will post the results on this website, and use them to help plan the cleanup of the groundwater contamination.

Drilling begins in Northern Algona — Update, June 11, 2014

If you live in Algona, you might have already seen the drilling rigs in your neighborhood. Early this week, Department of Ecology staff was on site to oversee the installation of the first wells near the corner of 9th and Chicago. During the next approximately seven weeks, the Boeing Company's contractor, Landau Associates (Landau), will install wells in the residential area of northeast Algona and north of the Junction Boulevard triangle, along the Interurban Trail.

Large drill rigs will install 12 wells on public rights of way. Crews will place ten wells on 9th, 10th, and 11th Avenues North, between State Route 167 and the Chicago Avenue drainage ditch. One will be located in the Junction neighborhood, and the other in the commercial district along Milwaukee Avenue.

Also in June, Landau will use smaller probes to collect one-time underground water samples to determine whether the contaminated area extends under eastern Algona. Workers will use truck-mounted machinery to make 14 borings - nine along the Interurban Trail and five along Milwaukee Avenue.

Additional Wells to be Installed in Northern Algona — Update, June 5, 2014

Under Ecology's direction, The Boeing Company's contractor, Landau and Associates (Landau), will conduct drilling work in the residential area of northeast Algona and north of the Junction Bvld. triangle, along the Interurban Trail.

What will be done and why?

The purpose of the drilling work is to install additional wells to allow more groundwater sampling. Samples taken from the wells will help define the edges of the contaminated groundwater more clearly and find out if concentrations of contaminants increase or decrease over time. The long-term monitoring wells will become part of the network of existing wells that are part of the ongoing investigation at the Boeing Auburn Fabrication Site.

Results of the studies will be used to help plan the cleanup of the groundwater contamination. Ecology will post results on the website.

Where will the wells be located?

Large drill rigs will install wells and borings on public rights of way on 9th, 10th, and 11th Avenues North, between State Route 167 and the Chicago Avenue drainage ditch. They will be installed on roadways and road shoulders and will likely impact traffic patterns in some places. Flaggers and traffic control signs will be present at locations that require temporary lane closures. Residents and businesses will be able to access their driveways while work is occurring.

Drill Rig Safety Information

The drill rig is heavy and has many moving parts. Barricades and traffic cones will be placed around the work zone. We ask that everyone, especially children and pets, stay at least 25 feet outside of the work zone.

City of Auburn – Surface Water Sampling Done — Update, April 4, 2014

The dry weather was a big help this week. Boeing's technical consultants were able to finish sampling surface water in Auburn. We can tell if groundwater contaminants are making their way into the surface water by sampling standing water in Auburn's ponds and wetlands near 15th Street SW, east of Highway 167. We sampled these areas before in the summers of 2012 and 2013. When combined with the previous results, the latest round of sampling will tell us if the contamination is increasing or decreasing over time.

We will post results in the late fall of 2014, after the dry season sampling this summer is done.

Why wasn't the water in your yard sampled during the recent heavy rain storm? — Update, February 21, 2014

The best time to find out if chemicals in groundwater are entering yard water is after a rain storm, not during it. Samples taken during rainfall are mostly rain water. After the rain settles into groundwater, it raises the groundwater closer to the surface. At this point, it is the most likely time chemicals from groundwater could enter surface water in ditches and yards.

Ecology wants to make sure that chemicals are not entering the standing water in the residential yards of north Algona, where we know that chemicals are present in the groundwater. That is why we are not collecting samples in the rain.

As of February 19, 2014, Landau Associates, Boeing's contractor, has sampled the water in the yards of four homes. So far, no chemicals have been detected in the standing water that has been sampled on parcels in north Algona.

No solvent vapor detected in most Algona homes tested — Update, January 21, 2014

Results of recent indoor air tests in northern Algona show no cause for health concerns.

The Washington Department of Ecology directed Boeing to perform an indoor air study because of the solvent released from the Boeing Auburn facility. 24 homes were identified for indoor air testing by the Washington State Departments of Ecology and Health and 14 homes agreed to participate in the study. In this first phase of indoor air testing, samples were collected throughout the summer and early fall of 2013. Of the 14 homes tested, nine were clear of the chemicals of concern. Five homes had one or more low-level detections. However, those detections did not appear to be related to vapor intrusion. Ecology asked The Washington State Department of Health to assess the data. Their assessment found that breathing the air in the homes tested would not be expected to cause harmful health effects.

A second phase of indoor air testing of the same group of selected homes is scheduled to begin in January 2014, when the groundwater is higher. Elevation in groundwater might affect how much vapor passes from contaminated soil into homes above.

Ecology will continue to update the community on the progress of this investigation. You can refer to the summary report, "Phase I Vapor Intrusion Summary (Summer – Fall, 2013) - City of Algona, WA" (PDF file) with findings from the first phase of indoor air sampling for details. If you have any questions, please contact Neal Hines (Ecology) at 425-649-7181 or Jennifer Wynkoop (Landau Associates) at 253-284-4883.

Phase II (Winter) Indoor Air Quality Sampling scheduled for January, 2014 — Update Dec. 27, 2013

The results from recent indoor air tests in northern Algona homes show no cause for health concerns. The testing is part of a Vapor Intrusion Study and the report will be available on this website in early 2014. A second phase of the study begins soon in the same area. More information about vapor intrusion testing in the Algona area is available.
If you have already participated in the first phase of sampling, Boeing's consultant, Landau Associates, Inc. will contact you by phone to schedule sampling, with your permission. If you have received a letter, please consider following the instructions on the letter to schedule sampling in your home.

Algona has a high water table, especially during the winter. As a precaution, Ecology directed Boeing to test indoor air in homes over a small section of town where trichloroethene (TCE) has been detected in the groundwater. Boeing's consultant, Landau Associates, Inc., is contacting residents in the area to schedule the second phase of sampling in their homes, beginning in January, 2014. The more homeowners and residents in the study area that agree to participate, the better we will understand the impacts.

Indoor Air Quality Testing at Auburn YMCA — Update Dec. 20, 2013

In early December, at Ecology's direction, Boeing's contractor, Landau Associates, Inc. took samples of the air inside and underneath the floor (sub slab) at the Auburn YMCA. The sampling is part of the investigation that Ecology oversees into a release of the solvent trichloroethene (TCE) into the groundwater from Boeing's property in Auburn.

If TCE is at the water table or in the upper few feet of groundwater, it can release TCE and other volatile organic compounds (VOCs), that can move through tiny air spaces between grains of soil. This vapor can enter a building, that is located over or near such groundwater under the right conditions. This is called vapor intrusion. In order to find out if TCE or its other breakdown products are present under the building, a sub-slab sample is taken. For more information, a fact sheet on vapor intrusion in Algona is available.

Water Samples Sent for Testing — Update Nov. 27, 2013

The Boeing Company's environmental consulting firm, Landau Associates, Inc., delivered water samples taken November 25 and 26 from roadside ditches in northern Algona (from Boundary Boulevard to just south of 8th Avenue North, and from Highway 167 east to Chicago Avenue) to an accredited laboratory for testing. The sampling locations are within and extend several blocks beyond the known area of groundwater contamination in northern Algona.

The results will help answer questions about if, where, and how much the trichloroethene (TCE) (and related chemicals that form when TCE breaks down in groundwater) may move from groundwater into surface water.

Some residents and property owners located above the known area of groundwater contamination will receive letters asking if the technicians may visit their yards to collect more water samples for the study.

Ecology will post the results from the ditch water sampling on this website.

If you have any questions, contact Robin Harrover 425-649-7232, or email at Robin.Harrover@ecy.wa.gov or Thea Levkovitz, 425-649-7286, or email at Thea Levkovitz

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Indoor Air Testing Results — Update Nov. 14, 2013

Results from the first round of indoor air testing show no cause for health concerns related to vapor intrusion from groundwater contamination. This first phase of vapor intrusion sampling occurred in the summer and early fall of 2013. The Department of Ecology will post a summary of all indoor air results on this website in December 2013.

The indoor air quality testing involves homes in Algona selected by Ecology and the Department of Health based on recent groundwater sampling. These homes are located near the Chicago Avenue ditch and a little more than one block west of the ditch, between 11th Avenue North and just south of 9th Avenue North.

Scheduling for a second round of indoor air testing at the same group of selected homes is scheduled to begin in January 2014, when the groundwater is higher. We will regularly update the community on the progress of this investigation. In the meantime, if you have any questions, please contact Jennifer Wynkoop (Landau Associates) at 253-284-4883.

Results are available from the April 2013 groundwater testing in Algona.