



## SOIL Remedial Investigation Results

### Soil Contamination on the Boeing Auburn Property (Facility) Requires Additional Evaluation

#### Remedial Investigation Found Some Soil Contamination at the Boeing Facility

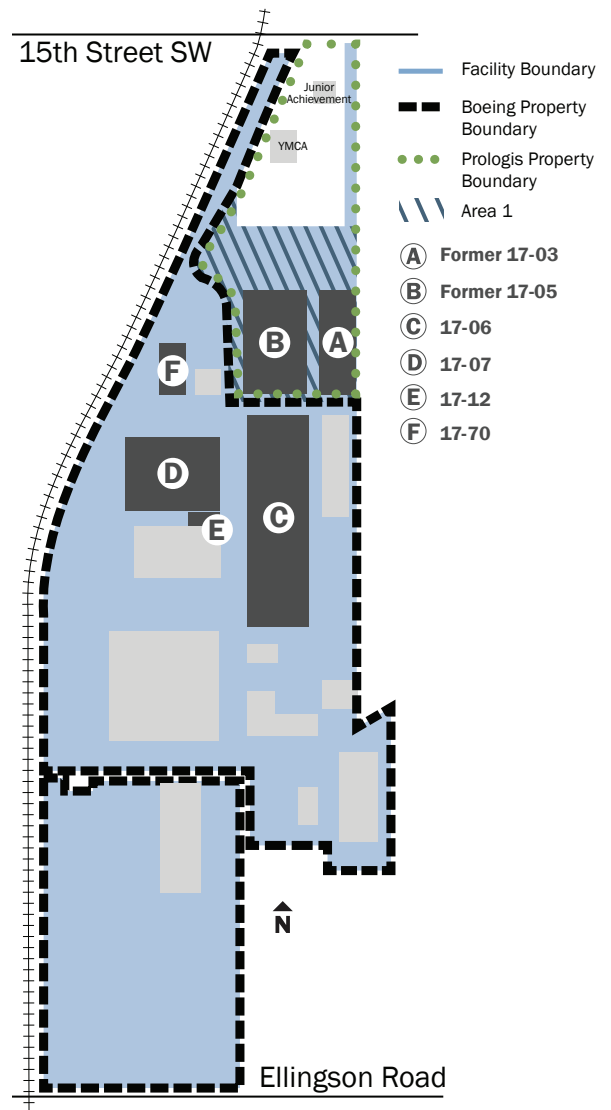
The Department of Ecology (Ecology) oversaw a comprehensive investigation of contamination, called a Remedial Investigation (RI), at the Boeing Facility (Facility). The investigation evaluated Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) during the Remedial Investigation. Of the 62 SWMUs and AOCs identified at the Facility as part of the RCRA Facility Assessment, Ecology required the Boeing Company (Boeing) to further investigate 31 SWMUs and AOCs.

Ecology determined that four of the 31 SWMUs and AOCs investigated will require further soil evaluation by Boeing in the Feasibility Study (FS), the next phase in the cleanup process. Of the 31 SWMUs and AOCs investigated, most had some traces of metals, petroleum hydrocarbons and volatile organic compounds (VOCs). Most detections were below conservative screening levels; however, Ecology will require additional soil evaluation in the FS.

#### Ecology Recommends Remediation for Two Solid Waste Management Units

Two SWMUs under Building 17-06 (SWMUs S-15a and S-16) at the Facility have evidence of one or more releases and are recommended for additional study. Each SWMU investigation included discussion of any investigation or activities that were carried out before the RI, soil and/or groundwater evaluations during the RI and recommendations for whether the SWMU needed additional evaluation in the FS.

Petroleum hydrocarbon, a contaminant from gasoline or oil, was found in soil along the east side of Building 17-06 at the Facility. The source of the petroleum hydrocarbon release may have been structures associated with milling aluminum parts. The two areas of soil contamination will be carried forward as a new AOC for evaluation in the FS to address petroleum hydrocarbon groundwater impacts.



## Ecology Recommends Remediation for Two Areas of Concern

The investigation into each AOC included any investigation or activities that were carried out before the RI, soil and/or groundwater evaluations during the RI and recommendations for whether the AOC needed additional evaluation in the FS. Two AOCs at the Facility (one below the ground between Buildings 17-06 and 17-07, and one under Building 17-07) have evidence of one or more releases and are recommended for additional work.

- At AOC A-01, releases from an underground storage tank of gasoline between Building 17-06 and 17-07 contaminated the ground with petroleum hydrocarbon. This area of contaminated soil will be evaluated to address petroleum hydrocarbon groundwater impacts in the FS.
- At AOC A-09, releases of metals were associated with a leak from an acid scrubber on the south side of Building 17-07 at the Facility. A partial remediation of the area was conducted before the RI; however, soil samples collected after the remediation indicated that cadmium, copper, lead and cyanide were left in place above screening levels. The soil in this area will be evaluated to address metals and cyanide contamination in groundwater.

## Next Steps: Feasibility Study Will Propose Cleanup Alternatives

Cleanup of the two SWMUs and two AOCs will be included in the FS to address soil and related groundwater contamination. Ecology and Boeing will have more information on cleanup alternatives when the FS is released in late 2017.

Якщо ви хочете отримати інформацію про забруднення ґрунтових вод у Алгоні та Оберні українською мовою, будь ласка, зателефонуйте 425-649-7181, щоб поговорити зі співробітником Департаменту Екології та перекладачем.

ਅਲਗੋਨਾ (Algona) ਅਤੇ ਔਬਰਨ (Auburn) ਵੱਲੋਂ ਭੂਮੀਗਤ ਪਾਣੀ ਦੇ ਦੂਸ਼ਣ ਬਾਰੇ ਪੰਜਾਬੀ ਵੱਲੋਂ ਹੋਰ ਜਾਣਕਾਰੀ ਲਈ, ਕਰਿਪਾ ਕਰਕੇ ਚੈਗਰਿਦਾ ਵੰਗਿਆਨ (Ecology) ਦੇ ਸਟਾਫ ਮੈਂਬਰ ਅਤੇ ਇੱਕ ਦੁਭਾਸ਼ੀਏ ਨਾਲ ਗੱਲ ਕਰਨ ਲਈ 425-649-7181 ਤੇ ਫੋਨ ਕਰੋ।

Para sa higit pang impormasyon tungkol sa pagkakontamina ng groundwater sa Algona at Auburn na nasa wikang Tagalog, mangyaring tumawag sa 425-649-7181 upang makipag-usap sa isang miyembro ng kawani ng Ecology at sa isang interpreter.

To request ADA accommodation for disabilities, or printed materials in a format for the visually impaired, call Ecology at (425) 649-7000 or visit [www.ecy.wa.gov/accessibility.html](http://www.ecy.wa.gov/accessibility.html). Persons with impaired hearing may call Washington Relay Service at 711. Persons with speech disability may call TTY at (877) 833-6341.

**This fact sheet should be accompanied by the Remedial Investigation Folio and is one of four fact sheets relaying information about the investigation's findings.**

## Key Terms

### Areas of Concern (AOCs)

Places with actual or potential contamination that require investigation of remediation.

### Cleanup Level

The concentration of a hazardous substance in soil, water, air or sediment that is determined to be protective of human health and the environment under specified exposure conditions.

### Facility

The Boeing Auburn Fabrication Facility, also known as the Boeing property.

### Feasibility Study (FS)

A detailed study identifying and evaluating cleanup alternatives.

### Model Toxics Control Act (MTCA)

Washington's pollution cleanup law for contaminated sites.

### Plume

The area covered by the spread of contaminated groundwater.

### RCRA Facility Assessment

The initial phase of corrective action under the Resource Conservation and Recovery Act (RCRA).

### Remedial Investigation (RI)

An investigation of a site's contamination.

### Screening Level

Concentration levels of contaminants used early on in an investigation when knowledge about the contaminants and impacts is low (e.g. routes of exposure are unknown, number of contaminants are unknown). If screening levels are exceeded, then a more detailed and focused investigation is made.

### Site

The Boeing property, plume and all affected areas.

### Solid Waste Management Units (SWMUs)

Any piece of equipment at the Facility from which contaminants might have migrated.

### Trichloroethene (TCE)

A liquid degreaser used to clean grease and oil from metal objects; a volatile organic compound.

### Vinyl Chloride (VC)

A breakdown product of TCE; a volatile organic compound.

### Volatile Organic Compound (VOCs)

Compounds that easily evaporate from water into air at normal air temperatures. Examples of household products that contain these compounds include gasoline, dry cleaning fluid, solvents and paint thinners.

