



Responsiveness Summary
SVE Interim Action Work Plan, SEPA Checklist,
DNS and SVE Pilot Test Report
Airport Kwik Stop

CSID 4203
FSID 32584416

Public Comment Period July 31, 2012 through August 29, 2012

Prepared by
Washington State Department of Ecology
Eastern Regional Office
Toxics Cleanup Program
Spokane, WA

September 2012

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Airport Kwik Stop, Ione, WA
Interim Action
Responsiveness Summary

The Washington State Department of Ecology (Ecology) held a 30-day public comment period from July 31 through August 29, 2012 for the Interim Action: *Soil Vapor Extraction Specifications and Work Plan, Ione, Washington July 18, 2012*. The purpose of this Responsiveness Summary is to document Ecology's responses to comments submitted during the public comment period.

Ecology would like to thank all those who commented. Based on the comments received, no changes will be required to the Soil Vapor Extraction Specifications and Work Plan for the Airport Kwik Stop. The Interim Action Specifications and Work Plan are therefore final.

The proposed soil vapor extraction (SVE) remediation system is being installed and operated under the authority of the Model Toxics Control Act (MTCA) Cleanup Regulations (chapter 173-340 WAC). The proposed SVE interim action will reduce the petroleum contamination identified in the soils beneath the Airport Kwik Stop, thus reducing groundwater contamination and the threat to shallow domestic water wells in the immediate area of the groundwater contaminated plume. Contaminated vapor from operation of the system will be treated through destruction and carbon filtration before being released to the atmosphere.

The Responsiveness Summary is organized as follows:

- I. Index of comments received.
 - A. Comments received during the July 31, 2012 through August 29, 2012 comment period.
 - B. Comments received outside (before or after) July 31, 2012 through August 29, 2012 comment period. Note: Comments received before or after did not meet the comment period guidelines and are considered invalid.
- II. Comments (copies of original letters and electronic emails are included in this summary)
 - A. Comments received during the July 31, 2012 through August 29, 2012 comment period.
 - B. Comments received outside of (before or after) July 31, 2012 through August 29, 2012 comment period.
- III. Ecology's responses to comments received during the public comment period.

Index of Comments Received

I.A INDEX OF COMMENTS RECEIVED DURING THE PUBLIC COMMENT PERIOD.

1. Letter from Dale D Johnson Postmarked August 1, 2012 and received August 3, 2012.
2. Letter from Chris Regan DOT Postmarked August 11, 2012 and received August 13, 2012
3. Letter from Dan & Kari Dawson electronic email dated August 27, 2012 and received August 27, 2012
4. Letter from John Doyle & Jerry Knudson electronic email dated August 29, 2012 and received August 29, 2012.

II.A

**COMMENTS RECEIVED DURING THE PUBLIC COMMENT
PERIOD**

RECEIVED

AUG 03 2012

DEPARTMENT OF ECOLOGY
EASTERN REGIONAL OFFICE



Dale D Johnson
PO Box 205
Ione WA 99139-0205

1-509-442 3099

Dear Doug Ludwig:

- my comments and QUESTIONS ON AIRPORT KWIK STOP
- ① QUANTITY OF FUEL SPRAYED? HOW MUCH EVAPORATED?
 - ② WHICH SIDE OF PUMP? REPAIR WAS SIMPLE
 - ③ HOW WAS THIS REPORTED TO ECOLOGY?
 - ④ GAS LEAKS INTO SOIL EVERY DAY, YOU COULD GET SOME AIR TEST RESULTS FROM THOUSANDS OF LOCATIONS
 - ⑤ WHO SETS CONTAMINATE LIMITS AND WHAT ARE THE DANGERS?
 - ⑥ LOCAL FARMER COMPLAINED ABOUT GARBAGE DUMP CONTAMINATING HIS WELL, NO RESPONSE.
 - ⑦ ECOLOGY REFUSES TO TEST DUMP & AIRPORT WHY?
 - ⑧ AIRPLANE ACCIDENT IN LATE 90S STEWED GAS ON RUNWAY
 - ⑨ AUTO ACCIDENT STEWED GAS ON HWY
 - ⑩ HOW MUCH FUEL LEAKED FROM TANKS AT AIRPORT?
 - ⑪ NOTHING IN REPORT ABOUT TEST RESULTS FROM TEST WELLS OR DOMESTIC WELLS
 - ⑫ IT IS EVIDENT AIRPORT SERVICE WAS BLAMED FROM BEGINNING BECAUSE THEY SOLD FUEL. THE SAME THING HAPPENED IN GRANT COUNTY AND PUT A GAS STATION OUT OF BUSINESS AND LATER THEY DISCOVERED THEY WERE WRONG
 - ⑬ HOW MUCH IS THIS PROJECT GOING TO COST? WHO PAYS FOR IT?
 - ⑭ WILL THIS CLEAN UP CLEAR THE PROPERTY FOR USE AND CLEAN THE WATER FOR DOMESTIC USE? IF NOT WHY WASTE THE MONEY AND TIME. THE CABIN GRILL CONTINUES BUSINESS WITH FILTERS
 - ⑮ IF THIS DOES NOT CLEAN CONTAMINATE, WHAT IS NEXT?
 - ⑯ COMMON SENSE TELLS ME YOU ARE NOT DOING THIS CORRECTLY AND YOUR EVIDENCE IS NOT CORRECT + COMPLETE
 - ⑰ HOW MUCH MONEY IS GEO ENGINEER RECEIVING FOR THE ARTIST WORK?
 - ⑱ YOU MAY CAUSE MORE CONTAMINATION DOING THIS PROJECT THAN WHAT CONTAMINATION THERE IS IN THE SOIL NOW PLUS FUEL USED, AIR POLLUTION, DR LOST, EQUIPMENT WEAR, ETC. YOU WILL NOT ILLUMINATE THE CONTAMINATION, JUST RELOCATE IT.

Sincerely yours
Dale Johnson



**Washington State
Department of Transportation**
Paula J. Hammond, P.E.
Secretary of Transportation

Transportation Building
310 Maple Park Avenue SE
Olympia, WA 98504-7300
360-705-7000
TTY: 1-800-833-6388
www.wsdot.wa.gov

August 9, 2012

RECEIVED

AUG 13 2012

DEPARTMENT OF ECOLOGY
EASTERN REGIONAL OFFICE

WA Department of Ecology, Toxics Cleanup Program
Mr. Doug Ladwig
4601 N. Monroe Street
Spokane, WA 99205-1295

Re: SEPA correspondence with Washington State Department of Transportation

Dear Mr. Ladwig:

The Washington State Department of Transportation has a new procedure in place for SEPA review. Each region will now be reviewing the SEPA documents for the projects in their region. In the future, please send any correspondence concerning SEPA to:

Mr. Greg Figg
WSDOT, Eastern Region
2714 N MAYFAIR ST
SPOKANE, WA 99207

Or if you prefer to email your documents, please send them to: FiggG@wsdot.wa.gov. Thank you very much.

Sincerely,

Chris Regan
NEPA/SEPA Compliance Program Manager
Environmental Services Office

CR:sp

cc: Barbara De Ste. Croix, Transportation Supervising Engineer
Greg Figg, Eastern Region Local Agency & Development Services Manager
Tammie Williams, Northwest Region Environmental Manager

August 27, 2012

RECEIVED
AUG 27 2012

DEPARTMENT OF ECOLOGY
EASTERN REGIONAL OFFICE

Doug Ladwig, Site Manager
WA Department of Ecology
4601 N Monroe Street
Spokane, WA 99205-1295

Re: Airport Kwik Stop Site, ID #4203

We are writing this letter as property owners that have land SE of the contamination site, and also as concerned citizens keeping all adjacent landowners in mind.

Our property has been tested and shows contamination, but nothing will be done about it through this cleanup process. We would like to propose that the DOE sets aside a fund with money to help landowners who may, in the future, need to finance the filter system (SVE) that is used to reduce the petroleum contamination. The cost to an individual might possibly prevent them from being able to clean their property.

Thank you for your time.

Dan and Kari Dawson
PO Box 216
Ione, WA 99139
dawson.const@gmail.com

Department of Ecology
Site: Ione Airport Kwik Stop
Property of John Doyle and Jerry Knudson
2252 Highway 31, Ione WA

RECEIVED

AUG 24 2012

DEPARTMENT OF ECOLOGY
EASTERN REGIONAL OFFICE

To Whom It May Concern:

The following are questions we have regarding the petroleum cleanup at the above address.

- Will the Soil Vapor Extraction System also be used on the adjacent property in the test wells and existing domestic wells?
- Approximately how long will it take for the Extraction System to show results?
- Will we be compensated for the contaminated well cleanup, the pond, as well as any other springs and well sites that are contaminated on property 2252 and adjacent properties?
- Will we be compensated for any filtration systems needed on domestic water systems?
- Are there provisions for future monitoring of pollution to wells and springs, etc. in place to protect from future contamination?

III

ECOLOGY'S RESPONSES TO COMMENTS RECEIVED DURING THE PUBLIC COMMENT PERIOD

(Note: Quoted comments are provided exactly as submitted.)

Ecology received several written comments from the public concerning the proposed SVE interim cleanup action at the Airport Kwik Stop. The comments were varied in content and in some cases wanted to know why Ecology does not test other sites in the area. Ecology responses are presented in chronological order of the comments received for the proposed Interim Action.

Responses to comments and questions submitted by Dale Johnson, received August 3, 2012.

1. QUANTITY OF FUEL SPRAYED? HOW MUCH EVAPORATED?

Ecology Response: The total amount of fuel released from the dispenser at the Airport Kwik Stop has not been determined. Analytical testing results confirm soil contamination is present at the dispenser island from approximately 3 feet below the surface to 36 feet below the surface. There is no documentation available for the amount of natural evaporation that may have taken place.

2 WHICH SIDE OF THE PUMP? REPAIR WAS SIMPLE

Ecology Response: Ecology was not present at the time of the repairs. It is likely the flex fitting referenced is located between pump and piping coming from the tank. As you have indicated the repair was simple and the system passed a tightness test after the repair.

3. HOW WAS THIS REPORTED TO ECOLOGY?

Ecology Response: Ecology received the initial report on April 11, 2008 from the Cabin Grill Restaurant regarding gasoline contamination found in their domestic water well. Subsequent to the initial report, Ecology received a phone call from the service provider conducting repairs at the Airport Kwik Stop. The initial investigation noted the service provider reported the loose fitting and fuel in a dispenser sump beneath the dispenser. The initial investigation noted fuel was near the top of the dispenser containment and could have been leaking for a period of time.

4. GAS LEAKS INTO THE SOIL EVERY DAY, YOU COULD GET SAME AIR TEST RESULTS FROM THOUSANDS OF LOCATIONS.

Ecology Response: While small spills may occur at gas stations and by private citizens, spills of the magnitude to produce the amount of contamination found at this site are relatively rare and when detected, are addressed through cleanup actions.

5. WHO SETS CONTAMINATE LIMITS AND WHAT ARE THE DANGERS?

Ecology Response: The contaminant levels are established as part of a 1989 citizen mandated initiative called the Model Toxics Control Act (MTCA). MTCA is the regulation that guides cleanup levels in the State of Washington (Chapter 173-340 WAC). Cleanup levels determine at what level a particular hazardous substance poses a threat to human health or the environment. The dangers from the petroleum release at the Airport Kwik Stop are exposure/ingestion of contaminated soil, breathing untreated emissions from the release or ingestion of contaminated groundwater.

Benzene (a petroleum product) is the main contaminant at this site known to cause cancer in human beings. The level of benzene established for soils is 0.03 parts per million (ppm); the level established for groundwater is 5 parts per billion (ppb), which is the level established for drinking water at the State and Federal levels. Benzene is found at the site with levels as high as 17,000 parts per million (ppm) in soil and 4,000 parts per billion (ppb) in groundwater.

6. LOCAL FARMER COMPLAINED ABOUT GARBAGE DUMP CONTAMINATING HIS WELL, NO RESPONSE.

Ecology Response: Complaints made to Ecology are forwarded to the appropriate program within Ecology or another agency. I am not aware of the complaint you are referring too. If you have more information please provide it to Ecology and a follow-up response will be provided to you.

7. ECOLOGY REFUSES TO TEST THE DUMP & AIRPORT WHY?

Ecology Response: Ecology has conducted groundwater monitoring between the Cabin Grill and the Airport to assess if contamination is coming from the Airport. To date, there is no evidence petroleum contamination at the site is coming from anywhere other than the Airport Kwik Stop.

9. AUTO ACCIDENT SPEWED GAS ON HIGHWAY.

Ecology Response: Comment noted.

10. HOW MUCH FUEL LEAKED FROM TANKS AT THE AIRPORT?

Ecology Response: There are no known records for the fuel system inventory at the airport; therefore the volume of fuel lost is unknown.

11. NOTHING IN REPORT ABOUT TEST RESULTS FROM TEST WELLS OR DOMESTIC WELLS.

Ecology Response: Groundwater samples have been collected from a series of wells since 2010. As presented on page 1 of the SVE Specifications and Work Plan, concentrations of gasoline-range petroleum hydrocarbons in the monitoring wells range between non-detect and 17,200 mg/l. The individual groundwater monitoring reports are available for public review. You can contact our public disclosure representative, Kari Johnson (509/329-3415) to make an appointment to review the reports concerning the investigation. You can also email her at KAJO461@ecy.wa.gov to make a request to review the files.

12. IT IS EVIDENT AIRPORT SERVICE WAS BLAMED FROM THE BEGINNING BECAUSE THEY SOLD FUEL. THE SAME THING HAPPENED IN GRANT COUNTY AND PUT A GAS STATION OUT OF BUSINESS AND LATER THEY DISCOVERED THEY WERE WRONG

Ecology Response: When Ecology initially started the investigation, we did not know the source of the gasoline release. There were two potential sources: the Ione Airport tanks, which were removed in 2008, and a release from underneath the dispenser at the Airport Kwik Stop, also reported in 2008. Initial work conducted at the Ione Airport documented contamination present in the western tank excavation at the time of tank closure. During subsequent work conducted in 2010, a total of eleven soil borings were placed in the area where the tanks were located at the airport. Eight of those borings were located in the area of the western tank; however, no contamination was identified by field screening methods or laboratory analytical results.

The investigation was then moved to the north across Greenhouse Road to the Airport Kwik Stop. Soil borings and groundwater monitoring wells have shown that petroleum contamination originated at the Airport Kwik Stop. From the investigations conducted to date, no other documented sources for the petroleum contamination have been identified.

13. HOW MUCH IS THIS PROJECT GOING TO COST? WHO PAYS FOR IT?

Ecology Response: The request for proposals for construction of the soil vapor extraction system was released for public bid on August 22nd and bids are due September 14th. Ecology cannot provide a cost for the project/system until the successful bidder has been selected.

The money funding the investigation and cleanup of the Airport Kwik Stop is a portion of Toxics Control Account, which is collected on the sale of hazardous materials in the State of Washington. As part of the citizen-mandated initiative that created the Model Toxics Control Act (MTCA), a portion of the taxes are to be appropriated by the legislature for cleanup of property contaminated with hazardous materials where there is no potential liable party (PLP) or the PLP(s) has no resources to conduct the clean-up.

14. WILL THIS CLEAN UP CLEAR THE PROPERTY FOR USE AND CLEAN THE WATER FOR DOMESTIC USE? IF NOT WHY WASTE THE MONEY AND TIME. THE CABIN GRILL CONTINUES BUSINESS WITH FILTERS.

Ecology Response: The interim action will begin to clean up the soils and groundwater. Pilot testing as part of the remedial investigation/ feasibility study (RI/FS) demonstrated soil vapor extraction would be a better alternative than excavating the contaminated soils from the site. Excavation of contaminated soils is prohibitive due to the depth of contamination, road right-of-ways and on-site improvements. The interim action is being conducted to reduce concentrations of soil contamination in the unsaturated soils beneath the site, which is demonstrated to be the source of contamination in down gradient groundwater. The interim action will begin clean up of the Airport Kwik Stop and the groundwater while the RI/FS is being completed. The goal is to clean up the soil and groundwater in the area so the site no longer poses a risk to people and the environment.

As you stated, the Cabin Grill is currently in operation because of the filters on their system. The system is expensive to install and maintain. Other property owners have also had to install filters on their water systems as this groundwater plume moves toward the Pend Oreille River.

15. IF THIS DOES NOT CLEAN CONTAMINATE, WHAT IS NEXT?

Ecology Response: As noted in the response to question 14, this is a beginning. The next step will depend on results of the interim action and the RI/FS currently underway. The RI will determine the overall extent of the petroleum contamination. The FS is a study of different proven clean-up alternatives used in similar situations. The study will evaluate clean-up alternatives to determine the most cost efficient alternatives that will clean up the site. Based on the results of the interim action, current groundwater monitoring data, and results of the RI/FS, a determination will be made if additional work is necessary. The public will be asked to comment on the RI/FS. This process is required by MTCA, which became law in 1989 through Washington State's citizen initiative process.

16. COMMON SENSE TELLS ME YOU ARE NOT DOING THIS CORRECTLY AND YOUR EVIDENCE IS NOT CORRECT AND COMPLETE.

Ecology Response: Comment noted. We are always available to meet with the public and convey additional rationale for our decisions. Please contact me if this is an option you would like to pursue.

17. HOW MUCH MONEY IS GEOENGINEERS RECEIVING FOR THE ARTIST WORK?

Ecology Response: GeoEngineers is one of several prime contractors working for Ecology throughout Washington State. They were assigned the task to develop engineering specifications and a work plan for this interim action. The estimate cost for this task is \$14,000.

18. YOU MAY CAUSE MORE CONTAMINATION DOING THIS PROJECT THAN WHAT CONTAMINATION THERE IS IN THE SOIL NOW PLUS FUEL USE, AIR POLLUTION, OR LOST, EQUIPMENT WEAR, ETC. YOU WILL NOT ILLIMINATE THE CONTAMINATION, JUST RELOCATE IT.

Ecology Response: Ecology believes, based on extensive experience at other similar contaminated sites, removal of the source of contamination at this site will reduce risk to the public and the environment. This process is not designed to relocate contamination, but rather to destroy it through thermal oxidation (burning).

Responses to a comment submitted by Chris Regan, WA DOT, received August 13, 2012.

THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION HAS A NEW PROCEDURE IN PLACE FOR SEPA REVIEW. EACH REGION WILL NOW BE REVIEWING THE SEPA DOCUMENTS FOR THE PROJECTS IN THEIR REGION. IN THE FUTURE, PLEASE SEND ANY CORRESPONDENCE CONCERNING SEPA TO:

*MR. GREG FIGG
WSDOT, EASTERN REGION
2714 N MAYFAIR ST
SPOKANE, WA 99207*

Ecology Response: Your information was forwarded onto the SEPA manager for mailing lists at Ecology HQ. Thank you for the information concerning mailing contacts for SEPA documents.

Responses to comments and questions submitted by Dan and Kari Dawson, received August 27, 2012.

WE ARE WRITING THIS LETTER AS PROPERTY OWNERS THAT HAVE LAND SE OF THE CONTAMINATION SITE, AND ALSO AS CONCERNED CITIZENS KEEPING ALL ADJACENT LANDOWNERS IN MIND.

OUR PROPERTY HAS BEEN TESTED AND SHOWS CONTAMINATION, BUT NOTHING WILL BE DONE ABOUT IT THROUGH THIS CLEANUP PROCESS. WE WOULD LIKE TO PROPOSE THAT THE DOE SETS ASIDE A FUND WITH MONEY TO HELP LANDOWNERS WHO MAY, IN THE FUTURE, NEED TO FINANCE THE FILTER SYSTEM (SVE) THAT IS USED TO REDUCE THE PETROLEUM CONTAMINATION. THE COST TO AN INDIVIDUAL MIGHT POSSIBLY PREVENT THEM FROM BEING ABLE TO CLEAN THEIR PROPERTY.

Ecology Response: Ecology has not conducted soil or groundwater sampling on your property. There is a possibility for groundwater contamination under your property. A monitoring well located on the Cabin Grill property adjacent to your northern property line has contamination, another well located on the adjacent landowner bordering the east side of your property is also contaminated. If you have groundwater or soil sampling results documenting the presence of contamination on your property, please provide a copy of the results to Ecology. In addition, if you have a domestic water well on the subject property we would like to collect a water sample for laboratory analysis.

Funding is currently in place for landowners with domestic water wells contaminated with petroleum as a result of the release from the Airport Kwik Stop. The funding helps the property owner to install or have installed a water purification system for the removal of petroleum contamination.

The soil vapor extraction (SVE) system to be installed at the Airport Kwik Stop will reduce petroleum contamination in the unsaturated soils beneath the site. By reducing petroleum concentrations in the source zone, groundwater contamination will begin to cleanup and eventually return to the uncontaminated state prior to the release. The Remedial Investigation/Feasibility Study will help us determine if additional cleanup actions should be taken to further reduce contamination in soil and groundwater throughout the site.

Responses to comments and questions submitted by John Doyle and Jerry Knudson, received August 29, 2012.

• *WILL THE SOIL VAPOR EXTRACTION SYSTEM ALSO BE USED ON THE ADJACENT PROPERTY IN THE TEST WELLS AND EXISTING DOMESTIC WELLS?*

Ecology Response: The soil vapor extraction (SVE) system will be used at the Airport Kwik Stop to reduce petroleum contamination in the unsaturated soils beneath the site. By reducing petroleum concentrations in the source zone, groundwater contamination will begin to cleanup and eventually return to the uncontaminated state prior to the release throughout the site. SVE systems are designed to function in unsaturated soils. A different technology, as determined by the final Remedial Investigation/Feasibility Study, may be utilized in the saturated zone at the site.

• *APPROXIMATELY HOW LONG WILL IT TAKE FOR THE EXTRACTION SYSTEM TO SHOW RESULTS?*

Ecology Response: Petroleum in the soil above the groundwater at the Kwik Stop appears to be the current source of contamination. The SVE system is designed to remove this source of contamination and stop migration of petroleum from soil to groundwater. When the SVE system is switched on, the petroleum contaminant mass will be reduced in the soil. Groundwater near the Kwik Stop will likely show lower concentrations of contaminants relatively quickly; however, it will take time for the results to be realized in down-gradient areas where petroleum is affecting the shallow groundwater table. This is because groundwater moves relatively slowly. Pilot test results indicate we will start removing petroleum product from the soils under the Kwik Stop as soon as the system starts operation.

• *WILL WE BE COMPENSATED FOR THE CONTAMINATED WELL CLEANUP, THE POND, AS WELL AS ANY OTHER SPRINGS AND WELL SITES THAT ARE CONTAMINATED ON PROPERTY 2252 AND ADJACENT PROPERTIES?*

Ecology Response: Ecology is not responsible for this contamination nor are we compensating land owners for any losses due to contamination. Ecology is cleaning up petroleum contamination from the Airport Kwik Stop.

Groundwater sampling at your well did not indicate contamination had reached your property. If you have additional information, please contact Ecology.

• *WILL WE BE COMPENSATED FOR ANY FILTRATION SYSTEMS NEEDED ON DOMESTIC WATER SYSTEMS?*

Ecology Response: Funding is currently in place for landowners with domestic water wells contaminated with petroleum as a result of the release from the Airport Kwik Stop. The funding helps the property owner to install or have installed a water purification system for the removal of petroleum contamination identified in their domestic water wells.

• *ARE THERE PROVISIONS FOR FUTURE MONITORING OF POLLUTION TO WELLS AND SPRINGS, ETC. IN PLACE TO PROTECT FROM FUTURE CONTAMINATION?*

Ecology Response: Once the cleanup at the Airport Kwik Stop is completed and groundwater beneath the site is restored to natural conditions, Ecology will not be monitoring the shallow groundwater conditions in the area. In accordance with MTCRA, at least four (4) quarters

of groundwater monitoring results must be below cleanup levels before we determine the site is clean. Any future pollution would be looked at on a case by case basis when issues are reported to Ecology or Northeast Tri-County Health District.