



## **Response to Comments**

**Proposed Consent Decree, Draft Cleanup Action Plan and  
State Environmental Policy Act Documents for the Smith  
Kem Ellensburg Inc Site**

**FSID No. 12832256**

**CSID No. 4257**

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**March 8 – April 7, 2023 Public Comment Period**

**A Proposal to Implement a Combined  
Remedy**

**Prepared by  
Washington State Department of Ecology  
Central Regional Office  
Toxics Cleanup Program  
Union Gap, Washington  
May 3, 2023**

The Washington State Department of Ecology (Ecology) held a 30-day public comment period from March 8 through April 7, 2023 for a Consent Decree that will implement the Cleanup Action Plan (CAP) at the Smith Kem Ellensburg Inc. Site (Site).

The Responsiveness Summary provides Ecology's responses to comments submitted during the public comment period.

Smith Kem Ellensburg, Inc., Ad Gro, LLC and Shell Oil Products US (SOPUS) on behalf of Shell Oil Company are the potentially liable persons (PLPs). Whereas, Smith Kem Ellensburg, Inc., Ad Gro, LLC, and Equilon Enterprises LLC DBA Shell Oil Products US (SOPUS) are the parties required to implement the CAP under the Consent Decree.

Ecology thanks all those who provided comments. Based on the comments received, a change to the frequency of the compliance groundwater monitoring will be required for the Consent Decree including its exhibits and other associated documentation.

## Responses to Comments

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Comments received during the public comment period were provided by Stacey Henderson, on behalf of the City of Ellensburg, by Kathy Boots, on behalf of the City of Ellensburg, by Terry Weiner on behalf of the City of Ellensburg, and by Jennifer Nelson, Area Habitat Biologist with the Washington State Department of Fish and Wildlife.

Thank you for your review of the documents associated with the Draft Cleanup Action Plan and for the comments you offered.

### **Comment Group 1 – Stacey Henderson, Community Development, City of Ellensburg:**

Stacey Henderson, City of Ellensburg, submitted written comments in an email dated March 8, 2023.

*Hello John,*

*I just saw the notice in the paper regarding the site clean up at 200 South Railroad Avenue in Ellensburg. I have been looking at the documents online and have a few questions.*

*It doesn't look like there is any site work that has been done yet aside from site investigation work? This property is within City Limits, and near a creek/ within the 100-year floodplain. The applicants will need to do a Critical Area Application for their proposed work.*

*I'm not too familiar with site clean ups- so I can't quite tell where this project is at? And when/if any site work may occur?*

*If you could help me understand this notice a little better, I would greatly appreciate it.*

*Thank you,*

### **Ecology Response to Comment Group 1:**

Thank you for your comment. The present site work has consisted of field investigations to determine the nature and extent of contamination. This information is documented in the Remedial Investigation/Feasibility Study (RI/FS) report. Currently, we are formalizing the cleanup standards which consist of the cleanup levels for the contaminants of concern (COCs) and the points of compliance for each impacted medium. The Pre-Design Investigation (PDI) work plan will describe additional field work which will occur this year to refine the lateral and vertical extent of contamination in the Areas of Concern (AOCs). This work will help refine the excavation estimates for the AOCs.

Regarding the Critical Area application, per the email coordination between your office and consultant, Floyd|Snider, the City has determined that a critical areas review is not needed since the project is exempt from the administrative requirements of certain state and local permits as explained in WAC 173-340-710(9). Floyd|Snider will work with Ecology in conjunction with the

City of Ellensburg to demonstrate that the project will comply with the substantive requirements of local permitting and approval requirements, including Critical Area requirements.

### **Comment Group 2 – Kathy Boots, Community Development, City of Ellensburg:**

Kathy Boots, City of Ellensburg, submitted a group of written comments from various city departments in a letter attached to an email dated April 6, 2023.

*Date: April 5, 2023*

*To: Erin Murray of Floyd Snyder*

*From: Jeremy Johnston, City of Ellensburg Planning Manager*

*Re: EX23-002: 200 S Railroad SEPA*

*Thank you for the opportunity to comment on the SEPA Environmental Checklist for performing a cleanup action for the Smith-Kem Site located at 200 S. Railroad Ave in Ellensburg, WA. The City of Ellensburg Planning Division offers the following comments on the potential project impacts.*

- 1) Applicant must adhere to all applicable conditions in Critical Area Application P23-024, which must be issued before ground disturbance takes place.*
- 2) Applicant must apply for a Site Development Permit with the City of Ellensburg Community Development Department, if site work includes moving more than 50 cy of fill.*

### **Ecology Response to Comment Group 2:**

Thank you for your comment. Regarding the Critical Area Application and the Site Development Permit, see the second paragraph of our response to Stacey Henderson above. Floyd|Snider will work with Ecology in conjunction with the City of Ellensburg to demonstrate that the project will comply with the substantive requirements of local permitting and approval requirements.

### **Comment Group 2 continued:**

*Date: March 14, 2023*

*To: Community Development*

*From: Craig Jones, Development Coordinator*

*Thru: Derek Mayo, City Engineer*

*Re: Smith Kem Soil Clean Up -EX23-002*

*The Public Works Department has no direct comments at this time on the Smith Kem Soil Clean Up at 200 S Rail Road Ave. There is a 6" Cast Iron water main and an 18" VC sewer main in Rail Road Ave along the frontage of this property. The site also has water and sewer services that will need to be located prior to any excavation. Any alterations to these services may require permits. The City has a sewer main project that is scheduled for construction this year in Rail Road Ave adjacent to the property. Applicant is cautioned that any development on the property may trigger improvements consistent with Public Works Development Standards. Public Works will comment on all future development of the property at time of development.*

### Ecology Response to Comment Group 2:

Thank you for your comment. Regarding the local permits, see the second paragraph in our response to Stacey Henderson above. The project is not anticipated to impact the utilities mentioned in your comment. During engineering design, Floyd|Snider will evaluate the single collection manhole relative to the Public Works Development standards and will comply with any relevant standards, if applicable.

### Comment Group 2 continued:

*Project: Smith-Kem Inc.-DOE Toxic Cleanup*

*Permit#: EX23-002*

*Occupancy Type:*

*Date: 03/13/2022*

*Comments:*

- 1) Fire Dept. access shall be maintained to the site during cleanup and any demolition.*
- 2) The removal of any underground tanks shall require a permit.*
- 3) When conducting building demolition a minimum of 5 lb. ABC fire extinguisher or equivalent fire suppression capability shall be maintained on site. In addition, any hot work shall require a fire watch after the work is completed.*

### Ecology Response to Comment Group 2:

Thank you for your comments. The Fire Department will have access to the Site, as needed during the cleanup.

Regarding the fire extinguisher, this comment refers to work that will occur during building demolition and there will be no building demolition associated with the cleanup work. Hot work will also not be performed. However, Floyd|Snider will verify with the McGregor Company that it will have fire extinguishers onsite before construction begins.

### Comment Group 2 continued:

*DATE: April 5, 2023*

*FROM: Chuck Doan, Building Official*

*FILE #: EX23-002*

*SUBJECT: SEPA Comments, Smith-Kem Ellensburg, Inc. and Equilon Enterprises LLC dba Shell Oil Products US, 200 S. Railroad Avenue, Ellensburg, WA 98926*

*The following items are in response to your proposed project meeting the building codes. The comments below do not constitute a full plan review for compliance with all applicable Building, Fire, Mechanical, Fuel Gas, Plumbing and Energy Codes. When a building permit application is submitted, a full plan review will be completed; if corrections are required, they will be addressed at that time.*

*Building Codes:*

- 1. Please provide a basic code compliance summary with site plan that meets the minimum*

*requirements of the Washington State Building Code Chapter 33 "Safeguards During Construction".*

- 2. If any building is being demolished a Demolition and Rodent Abatement permit is required. Go to City of Ellensburg Website for guidance documents BB-05 and BB-16.*

### **Ecology Response to Comment Group 2:**

Thank you for your comment. A building permit is not relevant to this work since only grading will occur. As stated in our response to Comment Group 1, this project is exempt from the requirement to obtain local permits per WAC 173-340-710(9). However, Floyd|Snider will work with Ecology in conjunction with the City of Ellensburg to demonstrate that all substantive requirements are met.

### **Comment Group 2 continued:**

**Date:** *March 21, 2023*

**To:** *Stacey Henderson, Office of Community Development*

**From:** *Tyler Goeden, Project Engineer*

**Re:** *EX23-002 200 S Railroad SEPA*

*The following are the City of Ellensburg Electric Utility comments for the EX23-002 200 S Railroad SEPA permit, for the site located at and around 200 S Railroad Ave.*

#### **Electric:**

*The City of Ellensburg Electric Utility (City Light) has both overhead and underground existing low voltage (600v) power lines throughout the site. Applicant is advised to call in locates and work cautiously around City Light underground power lines and be mindful of existing overhead power lines when operating equipment on site. Please see attached map for reference to City Light existing utilities.*

### **Ecology Response to Comment Group 2:**

Thank you for your comment. The PDI work plan describes a thorough utility evaluation that will be conducted prior to the PDI investigation. This utility evaluation involves both a desktop review and a private utility locate which will be conducted throughout all areas of investigation. Another private locate will be completed for all excavation areas, prior to removal action construction activities.

### **Comment Group 3 – Terry Weiner, Office of the Assistant City Manager/City Attorney, City of Ellensburg:**

Terry Weiner, City of Ellensburg, submitted written comments in a letter dated April 7, 2023. The letter groups their comments into Sections I through IV, in italics below. Specific questions by the City were confined to Section III.

*On March 8, 2023, Ecology released a Draft Cleanup Action Plan ("dCAP"), Draft Consent Decree, and SEPA Environmental Checklist and Determination of Nonsignificance for the Smith-Kem Site, and is currently taking comments on these documents. I am the Assistant City Manager and City Attorney for the City of Ellensburg ("Ellensburg" or the "City"), where*

*the Smith-Kem Site is located. The City is grateful for this opportunity to comment on the proposed cleanup action, and these comments supplement those submitted by the City's Public Works Department on March 14, 2023.*

*The City wishes to provide further details regarding the public sewer that the City is installing along Anderson Road/Railroad Ave - directly and immediately to the west of the Smith-Kem property boundary. This sewer installation is necessary to serve the City's needs and will begin construction this summer. The City urges Ecology and the potentially liable parties ("PLPs") to consider the cleanup action's impact on the sewer installation. In particular, because dewatering by the City will influence the Site's Areas of Concern ("AOCs"), Ecology and the PLPs are urged to initiate and complete the cleanup action this summer as planned. The City also requests additional information regarding the cleanup action and asks to be provided with all future planning documents once they are finalized.*

***I. Finalization of the Smith-Kem Cleanup Must Consider the Particulars of the Ellensburg Sewer Installation Project.***

*The SEPA Environmental Checklist for the cleanup action provides a high-level project description of the sewer installation: "The City of Ellensburg is planning a road sewer extension along the western portion of the Smith Kem property, along Railroad Avenue, which could impact site soil and groundwater and compliance monitoring wells at the southeastern corner of the property" (at page 2). To help Ecology evaluate the adequacy of the proposed cleanup plans, and installation impacts which will extend beyond the Smith-Kem property's southeastern corner, Ellensburg provides additional details regarding the planned installation of the sewer project. The proposed 18-inch gravity sewer main will run along the Anderson Road tight-of-way, past the Smith-Kem Site. Due to other existing utilities on the western side of the right-of-way, the new sewer main will be constructed within the eastern shoulder of Anderson Road. The new sewer pipe will be laid approximately 10 feet west of the Smith-Kem property line. The pipe trench will be approximately 12 feet deep, and will require dewatering, because it is below the static ground water level in the area.*

*The City has evaluated whether grout stabilization could be used to prevent dewatering activities from drawing water from the Smith-Kem Site. This option is not economically viable. Ellensburg's technical consultants estimate that using grout stabilization will cost almost \$900,000 more than dewatering without grout stabilization. Preliminary estimates indicate that the cone of depression from dewatering could extend up to 300 feet from the trench, and could thereby impact and draw contaminated groundwater from the Smith-Kem Site's AOCs. Accordingly, a final evaluation of cleanup options and costs should consider that Ellensburg's necessary construction activities will pull water across the Smith-Kem Site's footprint.*

*Ellensburg will pursue all potential legal avenues for recovering the additional cost of treating and managing contaminated groundwater or soil incurred during the sewer*

installation. To potentially reduce such costs, Ecology and the PLPs should prioritize soil and groundwater treatment along with installing impermeable barriers to contain on-site contamination.

## **II. Execution of the Cleanup Action Must Occur as Soon as Possible.**

*The materials released for public comment provide inconclusive information regarding the timeline for conducting the cleanup response action at the Smith-Kem Site. The SEPA Environmental Checklist estimates the cleanup action will begin in mid-2023 with a total construction duration of up to 4 months (at page 1). However, the SEPA Environmental Checklist also notes that the pre-design investigation ("PDI") work plan and engineering design report ("EDR") have yet to be prepared (at page 2). Exhibit C of the dCAP lays out a schedule of these steps, both of which must occur before construction begins (at page 5-9). The schedule in the dCAP allows the completion of those two steps to take over 9 months. However, for the cleanup action to occur on schedule during the 2023 summer months, construction must begin by June 2023 at the latest. Such a schedule leaves only April and May for the PLPs to complete the PDI and EDR. This uncertainty regarding when the cleanup response action will be completed is a major cause of concern for the City because Ellensburg must begin the sewer installation this summer for two primary reasons. First, the City has a capital bond to fund several water and sewer projects. The bond has a requirement that the City spend at least 85% of the funds by March 2024, and the Anderson Road sewer project was one of the projects included in this bond. Without movement to construction on this project, the City could be at risk of not meeting the bond requirements. Second, there is also a large private development, a major warehouse distribution facility, that is in the final permitting stages and will be constructed along Anderson Road. Construction is planned to begin in summer 2023 and finish in summer 2024. The sewer extension on Anderson Road is necessary to support this development, which will be a major source of new jobs. Additionally, the delays in the sewer installation, originally scheduled to occur in 2022, continue to drive up costs; all delay increases the project's costs to the City.*

*Ellensburg would prefer to install the sewer after cleanup action at the Smith-Kem Site has been initiated. To avoid conflict between the projects, the City is open to beginning the sewer installation along Umptanum Road, at the project end farthest from the Smith-Kem Site, so that northern installation activities near Smith-Kem occur as late as possible. Because Ellensburg will seek to recover the additional costs incurred to address contamination while installing the sewer line, the PLPs will also benefit if addressing the contamination promptly reduces the cost of the sewer installation. Additionally, if Ellensburg must install the sewer before cleanup action is initiated at the Smith-Kem Site, the PLPs may need to revise the cleanup action plan to address the expected migration of contamination across the Site resulting from the dewatering. It is in all parties' best interest that the Smith-Kem cleanup occur as soon as possible.*

### **Ecology Response on comment group 3:**

Thank you for your comment. The issues raised in Section I and II can generally be categorized



into two broad topics: timing of cleanup action and sharing of information. Regarding a change to the proposed combined remedy, we did not formally assess the installation of impermeable barriers as a remedy component. Modifying the existing components with respect to site coverage also was not assessed. The proposed work was scoped in the Feasibility Study as it is currently described. See our answers to your specific questions for further information about modifying the proposed combined remedy.

### **Timing of cleanup action**

The cleanup action selected in the Feasibility Study consists of multiple cleanup components that form a combined remedy. These components will be completed in phases. The Pre-Design investigation that will be implemented as part of engineering design for implementation of the Cleanup Action Plan which will occur in 2023. This will help inform the soil excavation and in-situ groundwater treatment design for portions of the combined remedy. The cleanup actions and associated construction for the components will occur in 2024.

### **Sharing of Information**

The City can have access to the decision documents during the applicable public comment periods.

Decision documents will be provided for public comment per the Model Toxics Control Act. The city is part of the public since it is not a direct signatory to the Agreed Order. Documents will be made available to access online, by appointment in our Records Office for hard copy review, or available at the repository listed in the AO (hard copy).

Ecology can inform the City when analytical results become available online. Information online will have been fully validated through established data quality procedures.

### **Comment Group 3 continued:**

#### ***III. The City Requests Additional Details Regarding the Proposed Cleanup of the Smith-Kem Site.***

*The City has additional questions regarding the cleanup actions at the Smith-Kem Site. The City would appreciate a prompt response to inform the bidding and planning process for the sewer installation.*

- The proposed cleanup action proposes in situ groundwater treatment. Once the liquid activated carbon has been injected into the subsurface, how long will it take before the treatment reduces groundwater contamination below cleanup levels? Could the proposed in situ groundwater treatment be used in other areas of the Site to prevent contaminants from migrating beyond the property boundary?*
- The cleanup planning documents indicate that soil containing contaminants of concern below AOCs 4 and 5 will be addressed by caps, such as gravel surfaces and existing structures, overlying these areas. What impacts, if any, does Ecology*

*anticipate that the City's dewatering activities will have on this element of the cleanup action plan?*

- *Are there any areas of the Site where contaminants of concern will remain above remediation and cleanup levels? If so, where are the areas that will remain contaminated after completion of the cleanup action, and how contaminated will that on-site media remain?*

### **Ecology Response on Comment Group 3:**

Thank you for your comment. Ecology has extracted and numbered the questions in Section III (in italics):

- 1) *Once the liquid activated carbon has been injected into the subsurface, how long will it take before the treatment reduces groundwater contamination below cleanup levels?*

The restoration time frame is discussed in the RI/FS report, dated October 2021. The combined remedy that was selected as the cleanup alternative has an estimated groundwater restoration time frame of 10 years, however, the restoration time frame for the specific area to be addressed by the remedial injection component will differ and could likely be shorter in that area. Additional factors such as soil permeability, groundwater flow rate, and substrate heterogeneity will affect the distribution and possible effectiveness of the remedial reagent. The overall restoration estimate is based on the consultant's best professional judgment and experience with similar sites, technologies, and contaminants of concern. Groundwater monitoring at the points of compliance downgradient of the treatment area will provide information needed to evaluate effectiveness of this component within the restoration time frame.

- 2) *Could the proposed in situ groundwater treatment be used in other areas of the Site to prevent contaminants from migrating beyond the property boundary?*

The cleanup alternatives were evaluated in the RI/FS report. All the alternatives rely on a combination of remedial actions otherwise known as a combined remedy. The selection of the preferred cleanup alternative is based on the criteria listed in WAC 173-340-360, which includes a Disproportionate Cost Analysis (DCA). The current phase of this project will establish the cleanup standards which include the cleanup levels and the points of compliance and briefly describes the selected remedy.

At this time, we do not know how rapid the effect of treatment will be for the current limited area of the Site but more importantly, we do not know the long-term effectiveness of this cleanup component over the given restoration time frame, if expanded to the entire Site. Three important design factors are subsurface geology, contaminant mass distribution, and contaminant mass flux. These design factors will be assessed through additional data collection during the PDI field work phase to verify the design parameters for the in-situ groundwater treatment barrier. The in-situ treatment barrier was incorporated into the cleanup action to treat groundwater from beneath the office and

storage building where a more active remedy (i.e., excavation) was not feasible.

The proposal currently calls for semiannual groundwater monitoring for the first two years after remedial activities have been completed. Thereafter, groundwater monitoring will be conducted on an annual basis for up to eight years. This proposal will be revised to state that the semiannual groundwater monitoring will be performed for up to ten years to evaluate the performance of the combined remedy.

Final confirmation groundwater sampling will be performed on a quarterly basis for a period of one year or four quarters to confirm that applicable groundwater compliance levels for the contaminants of concern have been met. The trigger to initiate quarterly compliance sampling will begin when the trends in groundwater contaminant concentrations are stable or decreasing and the contaminant concentrations reach the applicable cleanup levels for the COCs at the points of compliance.

- 3) *The cleanup planning documents indicate that soil containing contaminants of concern below AOCs 4 and 5 will be addressed by caps, such as gravel surfaces and existing structures, overlying these areas. What impacts, if any, does Ecology anticipate that the City's dewatering activities will have on this element of the cleanup action plan?*

In general, the portion of the combined remedy that relies on capping is not affected by the proposed dewatering. Capping is meant to prevent exposure through the direct contact pathway as well as mitigate surface infiltration through the unsaturated zone of the soil profile. However, the effect of lowering the groundwater table by dewatering may result in an increase in the dissolved phase contaminants leaching out from the upper part of the saturated zone into the groundwater. Dewatering was not formally assessed as part of the combined remedy, so no mitigating measures were proposed as part of the combined remedy.

However, we did intend to impose an institutional control enforced by an environmental covenant to govern the impact of potential removal of groundwater at the site. This component forms part of the combined remedy. There will be a prohibition on the installation of a water supply well of any type at the property. The rationale is that pumping from a well may cause a cone of depression to develop with potential subsequent migration of groundwater contamination. In this case, it is necessary to impose this institutional control to protect potential human receptors.

Any temporary dewatering conducted by the City could cause a cone of depression, which could lead to the migration of groundwater contaminants and expand the known extent of site contamination, depending on how the water is managed. However, the difference in this situation is that there will be no drinking water receptor.

Note that the groundwater cleanup level for many of the contaminants is based on protection for drinking water ingestion rather than the less stringent direct contact exposure pathway.

- 4) *Are there any areas of the Site where contaminants of concern will remain above remediation and cleanup levels?*

Yes, there will be portions of the soil AOCs that will remain above the applicable cleanup levels for some of the contaminants of concern. The combined remedy will have a component that deals with mitigating any remaining potential exposure pathway. All the components of the combined remedy must be implemented to yield a permanent remedy to the maximum extent practicable.

- 5) *If so, where are the areas that will remain contaminated after completion of the cleanup action, and*

The soil excavation component in each AOC will extend vertically to a certain depth as explained in the RI/FS report. The lateral extent may be revised after we implement the PDI work plan this year to refine the estimated excavation quantities. Institutional controls and other measures will be implemented to mitigate exposure pathways. This, in part, involves the installation of a geosynthetic clay liner over a portion of the Site.

- 6) *How contaminated will that on-site media remain?*

Contamination is evaluated in comparison to the established compliance levels which consist of remediation levels and cleanup levels. Refer to the FS and the draft Cleanup Action Plan.

Under the FS, the selection of the remedial alternative relied heavily on the DCA, and our evaluation of other criteria listed in WAC 173-340-360. The result is that different remedial components were proposed for different areas of the Site. The effectiveness of applying one component over a larger area of the Site has not been evaluated, rather the remedy relies on implementation of various components.

### **Comment Group 3 continued:**

#### ***IV. The City Requests Regular Updates from Ecology and the PLPs Regarding Execution of the Cleanup Action.***

*Coordination of the sewer installation and the execution of the cleanup action is necessary to reduce costs incurred by all parties and to prevent avoidable complications. To facilitate such coordination, the City requests that Ecology and the PLPs share the PDI Work Plan, PDI Results Report, and the EDR with Ellensburg when these materials are finalized. In particular, the City expects Ecology and the PLPs to share any test results that confirm whether the Site contamination extends beyond the Smith-Kem property's western boundary line, as is presently expected.*

*The City welcomes further opportunities to coordinate the completion of these adjoining*

projects.

### **Ecology Response on Comment Group 3:**

Thank you for your comment. The issues raised can generally be categorized into two broad topics: timing of cleanup action and sharing of information. Regarding timing, the cleanup action selected in the Feasibility Study consists of multiple cleanup components that form a combined remedy. These components will be completed in phases. The Pre-Design investigation will occur in 2023. This will help inform the soil excavation and in-situ groundwater treatment portions of the combined remedy. The cleanup action and associated construction for the components will occur in 2024.

Regarding sharing of information, decision documents will be provided for public comment per the Model Toxics Control Act. The city is part of the public since it is not a direct signatory to the implementing agreement for the final Cleanup Action Plan. Documents will be made available to access online and by appointment in our Records Office in Ecology's Central Region Office in Union Gap, Washington for hard copy review.

Additionally, Ecology wishes to facilitate a meeting between the City of Ellensburg staff and the PLPs to discuss the city's construction schedule in more detail, potential measures to mitigate contaminant migration, and groundwater sampling (pre-construction, during construction, and possibly post-construction).

### **Comment Group 4 – Jennifer Nelson, Area Habitat Biologist, Washington State Department of Fish and Wildlife:**

Jennifer Nelson, Area Habitat Biologist with the Washington State Department of Fish and Wildlife, submitted comments in a letter submitted by email dated April 7, 2023.

*The Washington Department of Fish and Wildlife (WDFW) has reviewed the application materials associated with the proposed cleanup action plan for the contaminated soil and groundwater at 200 W. Railroad Avenue in Ellensburg. WDFW appreciates your attention and work to complete this project.*

*Wilson Creek and Mercer Creek are fish bearing streams near the project area and the streams are home to spawning and rearing salmon, steelhead, lamprey, freshwater mussels and several other native fish. Protecting and improving water quality in Wilson Creek and Mercer Creek is a priority for WDFW to protect the aquatic resources associated with them. Wildlife, such as deer and beaver, are common along the riparian corridor through the project area as well.*

*We offer our support for this cleanup effort as the groundwater likely interacts with surface water in nearby streams and could negatively impact fish and wildlife resources. Streamflow and groundwater elevations in this area vary seasonally with natural runoff as well as irrigation practices upgradient from the work area. We recommend monitoring groundwater throughout the year so these interactions can be appropriately mitigated to protect surface water quality and the associated fisheries resources.*

*Please let us know if we can be of assistance. Please feel free to contact me at (509) 961-6639 or Jennifer.nelson@dfw.wa.gov if you have any questions about these comments.*

#### **Ecology Response to Comment 4:**

Thank you for your comment. Pressure transducer data collected at the Site shows that the local groundwater table is not significantly affected by irrigation but does confirm seasonal fluctuations related to snow melt and precipitation. Additional data collected over multiple years from the monitoring well network shows that the hydraulic gradient slopes to the southwest. Mercer Creek and Wilson Creek are generally cross-gradient where these two surface water bodies are closest to the Site. The most recent groundwater sampling indicates that the contaminants of concern are not present at action levels in the groundwater downgradient and cross gradient of the Site boundary.

Regarding wildlife, a Terrestrial Ecological Evaluation (TEE) was performed as documented in the RI/FS report. As described in Section 6.2.1.1 of that report, terrestrial ecological receptors were considered during the selection of the cleanup standards which include the applicable cleanup levels for the contaminants of concern at their points of compliance.

As part of the cleanup action, Smith Kem will perform long-term groundwater monitoring at the conditional points of compliance which includes a series of downgradient and cross gradient wells. The proposal currently calls for semiannual groundwater monitoring for the first two years after remedial activities have been completed. Thereafter, groundwater monitoring will be conducted on an annual basis for up to eight years. Based on your comment, this proposal will be revised to state that the semiannual groundwater monitoring will be performed for up to ten years to evaluate the performance of the combined remedy. This modification will help capture seasonal variation in groundwater conditions.

Final confirmation groundwater sampling will be performed on a quarterly basis for a period of one year or four quarters to confirm that applicable groundwater compliance levels for the contaminants of concern have been met. The trigger to initiate quarterly compliance sampling will begin when the trends in groundwater contaminant concentrations are stable or decreasing and the contaminant concentrations reach the applicable cleanup levels for the COCs at the points of compliance.

Details of the groundwater compliance monitoring will be specified later in the Groundwater Monitoring Plan (GMP) that will be part of the Long-Term Compliance Monitoring Plan (LTCMP). The LTCMP will be prepared during development of the Engineering Design Report (EDR) which will be drafted this year.