

RESPONSIVENESS SUMMARY

USG Hwy 99

July 9 – August 11, 2015 Public Comment Period

Agreed Order

Remedial Investigation/Feasibility Study Report, Draft Cleanup Action Plan, and State Environmental Policy Act (SEPA) Checklist and Determination

Prepared by Washington State Department of Ecology Southwest Regional Office Toxics Cleanup Program Lacey, Washington

May 2016

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Site Information

Address: 7110 Pacific Highway East, Milton

Site Manager: Jason Landskron

Public Involvement Coordinator: Megan MacClellan

The Department of Ecology (Ecology) held a public comment period on a proposed Agreed Order, Remedial Investigation (RI) report, feasibility study (FS), draft Cleanup Action Plan (CAP) and State Environmental Policy Act (SEPA) checklist and determination for the USG Hwy 99 site from July 9 – August 11, 2015. Public comments and Ecology's responses for this comment period are summarized in this document.

Site Background

Before 1985, USG used the site to dispose of waste from their rock wool manufacturing plant in Tacoma. USG used slag, a waste from the Asarco copper smelter in Tacoma, as raw material for the rock wool. The slag contained arsenic—a toxic metal.

The waste USG buried at the site included 20,000 tons of "bag house dust" and "shot." Both types of waste contained arsenic.

USG removed waste from the site between 1984—1986 and disposed of it in a licensed landfill. However, not all the waste was removed.

Additional soil and groundwater studies showed arsenic in soil, groundwater, and sediment that exceeds the state cleanup standard. Ecology and USG are now proposing a draft cleanup plan.

Next Steps

Ecology will finalize the Agreed Order and Cleanup Action Plans. The potentially liable parties (PLPs) will do the cleanup work described in the plans. After cleanup, the property owner will record an environmental covenant (EC). An EC will prohibit activities that may result in the release of contaminants remaining on site after cleanup. The PLPs will monitor groundwater to ensure arsenic levels are naturally declining.

Comment # 1: Linda Taylor

From: Linda Taylor, Fife Heights
Sent: 7/13/15
To: Jason Landskron
Subject: comment & question re: 84531356 Milton, WA

Hello,

We got the flyer re: the cleanup on Pac. Hwy in Milton at approx 70th.

I'm not exactly sure that it is as a big deal as the EPA makes it out to be (but the world runs on hysteria now) however, I have a couple of questions.

If you are cleaning up the site, spending lots of tax dollars "making it safe for humans, wildlife and the creek",

1) Why do the property owners have to record an EC for the property?

It will be then mitigated. Yes?

2) If you are not going to do a thorough job when you clean it up, why spend tax dollars in the first place?

Do or Do Not.

I await your response.

Linda Taylor

Fife Heights

Ecology Response

The goal of the cleanup work is to protect human health and the environment, and more specifically to this project, to prevent arsenic from entering Hylebos Creek. Due to the depth of contamination, it is not cost effective to excavate the buried arsenic waste or extract contaminated groundwater, especially when a less expensive and equally effective treatment technology exists. We call this technology contaminant containment or immobilization.

Regarding your first question, the purpose of the Environmental Covenant is to protect current and future landowners from disturbing the treated arsenic on their properties after the cleanup is complete. Since the proposed remediation does not physically remove the arsenic contamination in either the soil or groundwater, but rather prevents it from moving, property owners will be required to file the covenant to ensure that the proposed remediation is not disturbed with any future activities like installing a drinking water well or drilling deep into the ground.

Regarding your second question, tax dollars are not being spent to fund this cleanup. The law that guides our cleanup work, called the Washington State Model Toxics Control Act (MTCA), dictates that those determined responsible for releasing toxic waste into the environment are responsible for cleaning it up. To date, USG Interiors, LLC (formally known as US Gypsum) has paid for all investigative work and intends to fund the cleanup work being proposed.

The cleanup work being proposed will be thorough. Until soil and groundwater have been demonstrated to no longer pose an unacceptable risk to human health or the environment, including Hylebos Creek, USG will not have fulfilled their requirements stated in the Agreed Order. The Agreed Order is legally binding and enforceable by the State of Washington.

Comment #2: East Fork Corporation

The East Fork Corporation made two comments. The first questioned the accuracy of naming East Fork and Linda Plein/Batrob as "the current Owner/Operator of the site." The second comment raised concerns about consulting with USG to prepare the Restrictive (Environmental) Covenant for the site, given that negotiations with specific property owners were not specified in the description of how the covenant will be developed. See the attached letter to read these comments in their entirety.

Ecology Response

Comment 1

Ecology has determined that the East Fork Corporation is a potentially liable party (PLP) for the Site. The Model Toxics Control Act (MTCA) states that all PLPs share liability, both jointly and severally, for all cleanup costs. A Site, also known as a Facility in MTCA, is defined as any area where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise came to be located. While the East Fork Corporation may only own a portion of property within the greater Site boundary, MTCA does not differentiate. Each PLP is equally an Owner/Operator of the Site unless liability is otherwise divided among PLPs by a court of law.

Comment 2

Ecology agrees with your assessment that Ecology and USG do not have the ability to bind property owners to future use restrictions without consultation and agreement with the current property owner. Also, it is the property owner, not USG, who must ultimately record any restrictive covenants. Ecology will still prepare each restrictive covenant and consult with USG and the current property owner. In response to this comment, Section VIII, Part P of the Agreed Order has been modified to state:

"In consultation with USG and the relevant current Owner/Operator for the site, Ecology will prepare the Environmental (Restrictive) Covenant consistent with WAC 173-340-440 and RCW 64.70. After approval by Ecology, the current Owner/Operator shall record the Environmental (Restrictive) Covenant with the office of the Pierce County Auditor within ten (10) days of completion of field activities identified in this CAP. The Environmental (Restrictive) Covenants shall restrict future activities and uses of the Site as agreed to by Ecology and USG. The current Owner/Operator shall provide Ecology with the original recorded Environmental (Restrictive) Covenant within thirty (30) days of the recording date."

Comment # 3: City of Milton

The City of Milton provided a letter listing several comments. Each comment or question is summarized below, followed by Ecology's response. The letter can be read in its entirety in Attachment B.

Comment A

Are there plans associated with the cleanup project that will increase habitat quality of Hylebos Creek?

Ecology Response

The Hylebos, after it crosses I-5, flows adjacent to the cleanup site, and is tightly bound by I-5 to the East and the properties along Highway 99 to the West within a constructed channel that is hardly ideal habitat for aquatic life. Unfortunately, given the minimal space available between these boundaries, opportunities to improve this section of the creek will be limited. However, Ecology and USG will consult with other state and federal agencies (WA Department of Fish and Wildlife, US Corps of Engineers, etc.) during the permitting phase of the project to ensure the planned cleanup of the affected section of the creek improves sediment and water quality.

Potential construction plans posed by the Washington State Department of Transportation (WSDOT) may also impact habitat improvement for Hylebos Creek. Please see Ecology's response to comment B for more detail.

Comment B

Does the construction associated with the proposed connection from Highway 167 to Interstate 5 have implications on this cleanup project? Will the cleanup work be monitored after the initial remediation is complete?

Ecology Response

The Washington State Department of Transportation (WSDOT) submitted a letter to Ecology on October 8, 2015, after the official comment period for this project had concluded. In that letter, WSDOT described their proposed plans to extend State Route 167 from Puyallup, across I-5, and to connect to State Route 509. Ecology and WSDOT then met to discuss how the proposed construction could impact the cleanup of this site. It is important to note that the construction plans are in a very early stage of design and are far from final. However, preliminary design drawings do show a new off-ramp from southbound I-5 to SR167 that would cover a significant

portion of the cleanup site.

WSDOT also expressed intent to acquire most, if not all of, the land parcels that make up the site in order to accommodate the new off-ramp construction. Further, construction of the new offramp would require that the channelized section of Hylebos Creek between the site and I-5 be relocated east of I-5. Numerous habitat improvement opportunities for Hylebos Creek would be available in this scenario but would need to be carried out by WSDOT during construction.

This new information at this stage of the cleanup process caused much discussion both within Ecology and with USG about how to proceed with the proposed cleanup. Based on the proposed construction timeframe of the SR167 project of 2019-2029, Ecology ultimately determined that further delay in the cleanup was unacceptable and that the cleanup work as stated in the Correction Action Plan and new Agreed Order will proceed as planned.

Obviously, as the construction window for the SR167 project approaches and Ecology obtains more detailed plans, our own cleanup plans may be modified to be compatible with the WSDOT construction. The selected cleanup remedy of using in-situ chemical oxidation (ISCO) of the contaminated soil and groundwater remains the most effective remediation solution. Long-term monitoring of the cleanup will still be implemented and WSDOT has been made aware of the requirements.

Comment C

Please clarify what the phrase "land use controls" means in the cleanup plan for this site.

Ecology Response

Land use controls, as referred to in the Cleanup Action Plan and Agreed Order, will consist of environmental covenants (also known as restrictive covenants) to ensure that current and future landowners are protected from any contaminated materials which may be onsite after the cleanup is completed. These environmental covenants are a requirement of the selected cleanup remedy.

In-situ chemical oxidization does not physically remove metals from the soil or groundwater, but rather chemically converts the metals into a less toxic form while immobilizing them. Hence, the covenants are not only required to protect landowners from being exposed to residual contaminants in the ground, but are required to ensure landowners to not disturb the remediation.

For this site, the covenants may prohibit landowners from digging deep into the ground or installing a groundwater extraction well without Ecology permission. WSDOT will also be required to abide by the covenants, assuming the SR167 extension project proceeds.

Comment # 4: WA Department of Ecology, Shorelands and Environmental Assistance Program

Are there any plans on re-vegetating the Hylebos after the sand is placed? Will geofabric be used to stabilize? We would recommend revegtating the area after cleanup.

Alex Callender Wetland/Shoreland Specialist for Lewis, Thurston, and Pierce Counties Shorelands and Environmental Assistance Program WA Department of Ecology

Ecology Response

The design details for the cleanup of the Hylebos Creek work will be presented in the Engineering Design Report (EDR). The EDR will be completed after the bench scale phase of testing, but prior to the active cleanup phase of work. The EDR will include all design details and technical specifications of the Hylebos cleanup work and reconstruction.

As you likely know, substantial permitting is required when working in and around any water body. A Joint Aquatic Resource Permit Application (JARPA) may be required prior to the Hylebos work. These permits require consultation with numerous state and federal agencies, who will likely place requirements on the design and reconstruction of the creek. Revegetation of the creek after construction will likely be a requirement of any permit.

Comment # 5: Sheri Davis

From: Sheri Davis Sent: 8/11/15 To: Jason Landskron Subject: Untitled

Attention: Jason Landskron

We spoke on the phone about the impacts of USG Highway 99.

My house in Milton is: [Redacted]

I have an artesian well on my property and the Hylebos runs through my property.

I want to be assured my well and property is not affected by contamination.

I am requesting a response in writing. This is what you told me to do to assure me my property is safe.

Thank you for your attention in this matter.

Sincerely,

Sheri Davis

Ecology Response

Your artesian well is located in a different aquifer and not connected to the contaminated groundwater underneath the cleanup site. Based on the address you provided me, your property is located approximately 1,800 feet (0.34 miles) northwest of the cleanup site, and upstream along Hylebos Creek. Due to your location and proximity to the cleanup site, your property and associated artesian well have not been previously impacted by the contamination at this site and will not be impacted by the cleanup activities being proposed.

A lot of data on the nature, extent, and magnitude of contamination at the site has been collected and reported in the Remedial Investigation report which is available for you to review on Ecology's website*. Based on the studies described in the Remedial Investigation report, the contamination has remained on the impacted properties west of I-5 (businesses including Kanopy Kingdom, General Trailer Parts, and Freeway Trailer Sales) with a small quantity leaching into Hylebos Creek through the groundwater.

* https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=3618

Comment # 6: Citizens for a Healthy Bay

Director Melissa Malott of Citizens for a Healthy Bay provided a letter listing several comments. Each comment or question is summarized below, followed by Ecology's response. The letter can be read in its entirety in Attachment C.

Comment A

The Remedial Investigation fails to meet the requirements of the 2009 Agreed Order. Limiting the investigation to arsenic neglects several other likely contaminants found in other sites that have been contaminated by ASARCO slag such as: aluminum, antimony, barium, copper, lead, manganese, molybdenum, tin, titanium, and zinc, among others. Additionally, black and green crystals were found and baghouse dust and no report documents their composition.

Ecology Response

The Remedial Investigation analytical schedule was focused to only address arsenic based on experience obtained from another USG facility in the Tacoma tide flats, specifically the USG Taylor Way Site. The Taylor Way Site consists of nearly identical contamination to the Highway 99 Site. In fact, the Highway 99 site was the USG designated disposal site for the Taylor Way site waste in the early 1970's. At the Taylor Site, we analyzed for a wide suite of metals in both soil and groundwater, and arsenic proved to be the greatest concern because of its higher mobility.

However, in response to your comment, additional analytes will be sampled for in the upcoming hot-spot delineation work. These will include antimony, cadmium, chromium, copper, lead, nickel, and zinc (in addition to arsenic). These metals will be measured in the field using an X-ray fluorescence (XRF) analyzer.

Based on these results, we will expand the list of bench-scale test analytes to include additional metals of concern. This will assist in understanding how these other metals besides arsenic will react to the proposed chemical oxidization remedy. We plan to collect current groundwater data through comprehensive groundwater sampling after the hot-spot delineation. Accordingly, additional metals will be included in the analyte list for selected groundwater monitoring wells based on the XRF results. Metals that are detected in excess of MTCA cleanup levels will continue to be tracked throughout the cleanup and conformational monitoring phases of work. While arsenic is specifically being targeted for remediation at this Site, we anticipate that other metals will also be bound and demobilized as a result of the remedy.

Comment B

The provided documents do not address how the cleanup will protect aquatic species in Hylebos Creek, including salmon and other species protected under Washington law. Significant work is underway in other parts of Hylebos Creek to benefit such species. At a minimum, any cleanup work in Hylebos Creek should meet all applicable standards for work in salmon-bearing streams such as limiting construction to times of year when fish are least sensitive to disturbance, using minimally invasive fish exclusion methods, and using stream bottom materials that are appropriate for such streams.

Ecology Response

The design details for the cleanup of the Hylebos Creek work will be presented in the Engineering Design Report (EDR). The EDR will be completed after the bench scale phase of testing, but prior to the active cleanup phase of work. The EDR will include all design details and technical specifications of the Hylebos cleanup work and reconstruction.

As you likely know, substantial permitting is required when working in and around any water body. A Joint Aquatic Resource Permit Application (JARPA) may be required prior to the Hylebos work. These permits require consultation with numerous state and federal agencies, who will likely place requirements on the design and reconstruction of the creek. Revegetation of the creek after construction will likely be a requirement of any permit as will adherence to fishwindow construction periods and proper streambed construction materials.

Further, as you may be aware, the Washington State Department of Transportation (WSDOT) is proposing a large construction project in the immediate vicinity of this Site. A part of their work proposes relocating Hylebos Creek well east of I-5. The timing of this work is currently unknown, but there is the potential that the creek may be relocated prior to the creek remediation work proposed in the Cleanup Action Plan. Further discussion of the proposed WSDOT work and potential impacts to this project can be found below in Comment D.

Comment C

The preferred remediation plan presented in the Cleanup Action Plan is not validated by the references provided, and is based on studies conducted under very different environmental circumstances. Further bench testing is appropriate for this approach before it is used locally. Additionally, some of the oxidants proposed for use in the preferred remediation plan are toxic themselves, posing a hazard to fish and aquatic organisms. Based on these concerns, Alternative 4 is the most protective alternative. Concerns about removing fill along Highway 99 persist, a

fifth alternative could be developed that would remove the "hot spots" and include an additional margin.

Ecology Response

Questioning the bearing of case studies in such different environments (Bangladesh and the Carson Valley) is understandable. We presented them because arsenic research from those locales is frequently on the leading edge and is commonly cited. Barring physical removal of the contaminated soil and groundwater, we maintain that ISCO is the preferred and recommended remediation technology for the immobilization of arsenic for the protection of human health and the environment by the Environmental Protection Agency (EPA) and Interstate Technology and Regulatory Council (ITRC). The following documents were consulted during the preparation of the remedial investigation and feasibility study reports and assisted in forming our scientific basis for moving forward with this remedial approach.

- Environmental Protection Agency. 2007. Monitored Natural Attenuation of Inorganic Contaminants in Ground Water. Volume 1 – Technical Basis for Assessment. EPA/600/R-07/139. October 2007.
- Environmental Protection Agency. 2007. Monitored Natural Attenuation of Inorganic Contaminants in Ground Water. Volume 2 –Assessment for Non-Radionuclides Including Arsenic, Cadmium, Chromium, Copper, Lead, Nickel, Nitrate, Perchlorate, and Selenium. EPA/600/R-07/140. October 2007.
- 3) ITRC (Interstate Technology & Regulatory Council). 2010. A Decision Framework for Applying Monitored Natural Attenuation Processes to Metals and Radionuclides in Groundwater. APMR-1. Washington, DC: Interstate Technology & Regulatory Council, Attenuation Processes for Metals and Radionuclides Team.
- 4) Savannah River National Laboratory. 2011. *The Scenarios Approach to Attenuation-Based Remedies for Inorganic and Radionuclide Contaminants*. SRNL-STI-2011-00459. U.S. Department of Energy Contract Number DE-AC09-08-SR22470.

What follows is a description of the groundwater chemistry defined during our remedial investigation. This information further supports our decision to use in-situ chemical oxidation as a preferred remedy. The remedy is designed to enhance and accelerate the natural arsenic attenuation processes that are already occurring at the site. Site groundwater is reducing and contains up to 46 mg/L iron, most likely in the ferrous (Fe⁺²) state. The arsenic is mostly (>90%) in the more mobile arsenite (As⁺³) state.

A slow oxidation rate of arsenite, combined with the preferential removal of arsenate from solution helps explain why over 90% of the arsenic in solution at the site is present as arsenite. Remedial investigation data show a redox gradient exists where oxygenated meteoric water is contacting the reducing groundwater. Within this gradient, ferrous iron is oxidized to ferric iron

 (Fe^{+3}) and removed from the groundwater via the formation of ferric oxyhydroxide. Ferric oxyhydroxide has a very low solubility at near neutral pH. Co-precipitation of arsenic with ferric oxyhydroxide and its removal from solution is a well-documented process, both for arsenate (As^{+5}) and arsenite, although the process is more effective for the less mobile arsenate form. Under current groundwater conditions, the rate of arsenic removal is controlled by the oxidation rate of ferrous iron, which in turn is controlled by the infiltration of oxygenated meteoric water. The oxidation of arsenite to arsenate by oxygen is a slow process, with a half-life of about one year.

The selected ISCO remedy is designed to accomplish two things: 1) Enhance the oxidation of ferrous iron; and 2) Rapidly oxidize arsenite to arsenate. At a near-neutral pH, the oxidation of iron is typically controlled by the diffusion rate of oxygen and not by kinetic limitations. Injection of a chemical oxidant would effectively eliminate the diffusion-limited control on ferrous iron oxidation, resulting in enhanced precipitation of ferric oxyhydroxide and co-precipitation of arsenic from groundwater. In addition, the oxidation of arsenite to arsenate is very rapidly achieved using chemical oxidants such as hydrogen peroxide. The combined effect of increased ferric oxyhydroxide precipitation and more effective arsenate removal within the precipitate will combine to enhance and accelerate the naturally-occurring process currently occurring at the site. ISCO is particularly well suited to cleaning up arsenic in groundwater at the Highway 99 site because it is enhancing a naturally occurring process.

Comment D

The cleanup project must comply with Puyallup Tribal Water Quality Standards and consider WSDOT plans to extend SR 167 through the project site. Every effort must be made to coordinate cleanup work with WSDOT to minimize disturbance to aquatic resources in the area.

Ecology Response

For the Highway 99 project, Ecology has considered and included the Puyallup Tribal Water Quality Standards in preparing cleanup levels and remediation goals as applicable or relevant and appropriate requirements (ARARs). Both the Puyallup and Nisqually Tribes were contacted during the development of the Remedial Investigation and Feasibility Study work and both tribes were active participants during the State Environmental Policy Act (SEPA) checklist reviews for the proposed cleanup work. The Nisqually Tribe specifically requested we prepare an Inadvertent and Unanticipated Discovery Plan prior to completing remedial activities at the site, which was added to the draft Agreed Order at their request. Another important stakeholder, the Washington State Department of Transportation (WSDOT), has also been involved during our cleanup process. WSDOT submitted a letter to Ecology on October 8, 2015, after the official comment period for this project had concluded. In that letter, WSDOT stated their proposed plans to extend State Route 167 from Puyallup, across I-5, and connect to State Route 509. Ecology and WSDOT subsequently met to discuss how the proposed construction would impact the cleanup of this site. It is important to note that the construction plans are in a very early stage of design and are far from final. However, preliminary design drawings do indicate a new off-ramp from southbound I-5 to SR167 that would cover a significant portion of the Highway 99 cleanup site.

WSDOT also expressed intent to acquire most if not all of the land parcels consisting of the site to accommodate the new off-ramp construction. Further, construction of the new off-ramp would require that the channelized section of Hylebos Creek between the site and I-5 be relocated east of I-5. Numerous habitat improvement opportunities for Hylebos Creek would be available in this scenario but would need to be carried out by WSDOT during construction. Ecology and WSDOT will continue to coordinate to ensure that disturbances to aquatic resources within Hylebos Creek are minimized and ultimately improved as a result of this work.

This new information at this stage of the cleanup process caused much discussion both within Ecology and with USG on how to proceed with the proposed cleanup. Based on the proposed construction timeframe of the SR167 project of 2019-2029, Ecology ultimately determined that further delay in the cleanup was unacceptable and that the cleanup work as stated in the Correction Action Plan and new Agreed Order will proceed as planned. Obviously, as the construction window for the SR167 project approaches and Ecology obtains more detailed plans from WSDOT, our own cleanup plans may be modified to be compatible with the WSDOT construction. The selected cleanup remedy of utilizing in-situ chemical oxidation (ISCO) of the contaminated soil and groundwater remains the most effective remediation solution. Long-term monitoring of the cleanup will still be implemented and WSDOT has been made aware of the requirements.

Attachment A. East Fork Corporation comment letter



LAURA MAFFEI, R.G. Admitted in Oregon, Washington & Alaska Imaffei@cablehuston.com www.cablehuston.com

August 3, 2015

VIA EMAIL (Jason.Landskron@ecy.wa.gov)

Jason Landskron, Project Manager Washington Department of Ecology P.O. Box 47775 Olympia, WA 98504-7775

Re: USG Highway 99 Cleanup Site Draft Agreed Order – Public Comment

Dear Jason:

I am writing on behalf of my client, East Fork Corporation ("East Fork"), regarding the draft Agreed Order between US Gypsum ("USG") and the Washington Department of Ecology ("Ecology") for the Highway 99 Cleanup site ("Site"). East Fork received a notice from Ecology that it is a Potentially Liable Party for the Site on March 30, 2015. East Fork formally objected to its designation as a Potentially Liable Party in a letter to Ecology dated February 26, 2015.

East Fork has two comments related to the draft Agreed Order:

1. Paragraph V.M. states that East Fork is "the current Owner/Operator of the Site," with a similar statement for Linda Plein/Batrob. This implies that East Fork and Ms. Plein each own the entire Site, which is incorrect. East Fork recommends changing the paragraph with the following language to better reflect the actual ownership of the Site:

"On March 27, 2015, Ecology issued a letter of PLP Determination to Ms. Linda Plein for Batrob LLC, the Owner/Operator of the portion of the Site located at 7220 Pacific Highway E, Milton, Washington 98354; and on March 30, 2015, Ecology issued a letter of PLP Determination to Mr. Eric Thompson for East Fork Corporation d/b/a/ General Trailer Parts LLC, the Owner/Operator of the portion of the Site located at 7200 Pacific Highway E, Milton, Washington 98354."

2. Terms related to ownership of the property, especially with respect to negotiation of Environmental (Restrictive) Covenants ("RCs"), are problematic. Paragraph P states that Ecology will prepare the RCs "in consultation with USG" and that USG "shall record the Environmental (Restrictive) Covenant." This implies that Ecology

East Fork Corporation comment letter, contd.

Jason Landskron, Project Manager Washington Department of Ecology August 3, 2015 Page 2

> and USG will agree to terms restricting future uses without consulting the current owners of the properties in question. This paragraph should be modified to say that USG will negotiate the terms of each RC with the respective property owner and, after approval from Ecology, that the property owners (not USG) will record the RCs. USG does not have the ability to unilaterally bind the property owners to future use restrictions and the language in this paragraph should reflect that.

East Fork appreciates the opportunity to present these comments on the draft Agreed Order between US Gypsum and Ecology. Please feel free to contact me with questions or concerns.

Best regards,

Jama Maffei, R.G.

LCM:tjb

Eric Thompson, East Fork Corporation c: Madeleine Thompson, East Fork Corporation George Heilig, Heilig, Misfeldt & Armstrong, LLP

Attachment B. City of Milton comment letter



August 4, 2015

Washington State Department of Ecology Jason Landskron, Project Manager P.O. Box 47775 Olympia, WA 98504-7775

RE: Comments on USG Highway 99 Cleanup Site

Dear Mr. Landskron,

We appreciate the opportunity to comment on this project, as it lies within the City of Milton's jurisdictional limits. I've had the opportunity to circulate the clean-up plans internally and would like to pose a few questions, as well as provide a couple comments as it relates to this proposed clean-up of contaminated soils and its interface with the groundwater system in this area.

- It's understood that this section of Hylebos Creek has long been manipulated in this area in order to prevent flooding and the protection of businesses along the Highway 99 corridor. With the significant resources that continue to be utilized in helping the upper watershed in this area, are there plans associated with this project in reducing its currently channelized state and provide some sort of buffering in order to provide some habitat benefit that has been lost from previous stream manipulations?
- With the recent passage of the Transportation Plan by the Washington State Legislature, it appears that the Highway 167 connection to Interstate 5 will begin to be implemented, through design, permitting and construction of this long awaited project. This project location appears to be in the vicinity of the proposed connection. Are there implications associated with this clean-up work and the proposed highway 167/I-5 connection? In addition, it's unclear if long-term monitoring of the clean-up actions will continue once the remediation efforts have been completed.
- It's unclear what is meant by "Land Use" controls as it is associated with the Clean-Up Plan for this particular site. Milton is working very hard to balance the needs of the environment to that of providing economic development opportunities to the residents and businesses that call Milton home. Could you please expand on what is meant in

City of Milton 1000 Laurel Street, Milton, WA 98354-8850 Ph 253.922.8733 / Fax 253.922.2385

City of Milton comment letter, contd.

land use controls so that Milton can help plan accordingly in finding this balance and planning appropriately as we are required to do under the Growth Management Act.

• The City is very willing to help in any way that it can in helping this process move forward and the processing of any local permits that may be required under this clean-up plan.

Again, we appreciate the opportunity to be involved in this process and project as it begins to move forward. Please let us know if there is anything that you need from the City of Milton. Please, feel free to contact me at any time. I can be reached at my email at <u>anix@cityofmilton.net</u> or by phone at (253) 517-2715. We look forward to hearing back from you on this.

Regards,

Aaron C. Nix, M.P.A. City of Milton Director

Cc. Debra Perry, Mayor City Council Katie Bolam, City Clerk

Attachment C. Citizens for a Healthy Bay comment letter



535 Dock Street Suite 213 Tacoma, WA 98402 P: (253) 383-2429 F: (253) 383-2446 chb@healthybay.org August 11, 2015

Jason Landskron, Project Manager Washington Department of Ecology P.O. Box 47775 Olympia, WA 98504-7775 Jason.Landskron@ecy.wa.gov

Re: USG Highway 99 Cleanup

Dear Mr. Landskron:

Executive Director Melissa Malott

Thank you for providing Citizens for a Healthy Bay the opportunity to review and comment on the draft documents for the proposed cleanup of a contaminated site known as USG (a company formerly known as US Gypsum) Highway 99.

Board of Directors Bonnie J. Becker Cheryl Greengrove Kathleen Hasselblad Bett Lucas Melissa Braisted Nordquist Marco Pinchot Lee Roussel Angie Thomson Sheri Tonn Citizens for a Healthy Bay (CHB) is a 25 year old environmental organization whose mission is to represent and engage citizens in the cleanup, restoration and protection of Commencement Bay, and surrounding waters and our natural habitat. We are a 501(c)3 nonprofit corporation providing practical, solutions-based environmental leadership in the Puget Sound area. We work side-by-side with local citizens, businesses and governments to prevent water pollution and make our community more sustainable.

Staff and volunteers with Citizens for a Healthy Bay have reviewed the Agreed Order, the RI/FS, the CAP, the updated Public Participation Plan and the SEPA review. We have grave concerns about this project and the preferred alternative. We recommend that either Alternative 4 be selected, or another alternative be developed that removes the highly toxic hot spot and expands the plan to adequately address contaminated sediments in Hylebos Creek. These concerns and comments are outlined below.

Background

A tax-exempt 501(c)(3) Washington nonprofit corporation

The proposed cleanup would address contamination left at the USG site from a cleanup carried out in 1984-86. USG used the site to dispose of waste from their rock wool manufacturing plant in Tacoma. Waste included ASARCO slag, baghouse dust, and black and green needle-like crystalline material. A 1993 document (Agreed Order DE 93TC-5163) reported that materials were sent to Chem Security Services, Inc., a hazardous waste management facility at Arlington,

Citizens for a Healthy Bay comment letter, contd.

West Hylebos Wetland Park to the north.

Other work to improve the area includes removing non-native trees and shrubs such as cherry laurel, knotweed, Himalayan blackberry and reed canary grass. It will be replaced with native species such as Oregon ash, Sitka spruce, western red cedar, black twinberry, Indian plum, red osier dogwood and salmonberry.

Project Benefits

- An improved habitat for fish including Chinook, Coho and chum salmon.
- Improved habitat for other species including frogs, birds, and small mammals.
- Removal of multiple fish barriers, including the existing concrete culvert and several man-made barriers.

By comparison, the draft documents do not address any protections for aquatic species, At a minimum, work in Hylebos Creek should properly protect this salmon habitat by meeting all applicable standards for work in salmon bearing streams, such as limiting construction to appropriate fish windows, using minimally invasive fish exclusion methods and using stream bottom materials appropriate for such streams, not "clean sand" as is identified in the documents.

Thirdly, the preferred plan for remediation is largely based off projects done in Bangladesh and the Carson Valley under very different environmental circumstances, and is not validated by references provided in the Draft Cleanup Action Plan. The Bangladesh project used as a model which the USG project is based off, as described in Appendix A, is not likely relevant to the chemistry of the groundwater at the USG Highway 99 site, which makes it an inappropriate model on which to base this cleanup. For example, carbonate concentrations are much lower than in the Bangladesh aquifers, and Carson Valley waters are much more alkaline than the groundwater at this site. The preferred alternative requires significant bench testing, yet there is no planned public review of the data before the actual chemical scheme is selected. Some of the oxidants that are proposed are toxic themselves, and pose a significant hazard to fish and other aquatic organisms. Moreover, the Bangladeshi model is completely untested in the United States under U.S. standards and environmental conditions.

Because of these concerns and uncertainties, we believe that Alternative 4 is the most protective alternative. The consultants indicated a concern about removal of fill along Highway 99. If this fill is truly clean, we believe that a fifth alternative could be developed that would remove the footprint of the "hot spot" plus a margin for safety. The concern about the stability of the fill can be mitigated through careful engineering design and appropriate shoring. This has been accomplished in many other projects throughout our region.

Finally, there should be active coordination with other important stakeholders in the area. This project falls within the jurisdiction of the Puyallup Tribe so Puyallup Tribal Water Quality Standards must be included in the list of regulations and the Project must comply with them. In addition, WSDOT is planning to construct an extension to SR 167 that will go directly through the

project site (see http://www.wsdot.wa.gov/Projects/Gateway/sr167phase1.htm). Every effort should be made to coordinate cleanup work with WSDOT to minimize disturbance to aquatic resources in the area.

Please contact our office if there are questions regarding our comments. Thank you for the opportunity to provide feedback for this project.

Sincerely,

Meh: Matot

Melissa Malott Executive Director, Citizens for a Healthy Bay