

Public Comments on draft Remedial  
Investigation and Feasibility Study  
International Paper, Longview MFA

INTERNATIONAL PAPER PUBLIC HEARING TRANSCRIPT

SEPTEMBER 28, 2017

Kimberly Goetz

Good evening. I'm Kimberly Goetz, hearings officer for this public meeting. This evening, we are to conduct a hearing on the draft remedial investigation and feasibility study for the Maintenance Facility Area at the former International Paper facility, now owned by the Port of Longview.

Let the record show it is now 6:48 p.m. on September 28, 2017. This hearing is being held at the Cowlitz County Event Center in the Loowil (nb: Loowit) Room I believe is the name here, 1900 7th Avenue, Longview, Washington.

Legal notices of this hearing were published in Ecology's August 17, 2017 Site Register. In addition, notices of the hearing were mailed to about 310 interested parties; email notices were sent to 183 interested parties; and notice was also published a legal ad in the Daily News on August 17, 2017.

I will be calling people up to provide oral testimony based on the order that your name appears on the sign-in sheet. Once everyone who has indicated that they would like to testify has had the opportunity, I will open it up for others.

As I stated earlier, please limit your comments to approximately five minutes. When you reach that limit, I will ask you to summarize your comments so that the next person can come up to testify.

When I call your name, please step up to the front, state your name and address for the record. Please speak clearly, so that we can get a good recording of your testimony.

We will start with William Roberts, followed by Jeff Wilson.

(Pause)

Mr. Roberts?

OK, well then I guess we will go on to Jeff Wilson.

(Audience comment)

And he's gone as well. OK. Next on the list is Doug Averett. Great. Come on up.

Doug Averett

You were close.

Kimberly Goetz

I was close?

Doug Averett

Yeah. It's "A-verett."

Kimberly Goetz

"A-verett." I'm sorry. Please forgive me if I butcher your name. I should know better with a last name like "Goetz" (you know with the "O" in the middle), but...

Doug Averett

No problem.

Kimberly Goetz

Please, continue.

Doug Averett

I want to thank everyone for the opportunity to comment.

Kimberly Goetz

(Adjusting microphone)

...Or you can sit down. Feel free – your choice.

Doug Averett

OK. I'm Doug Averett, President of the Port Commission at the Port of Longview. And the Port will submit a formal written comment, but I wanted to highlight some of our greatest concerns. We appreciate the work that has gone into the RI/FS, but oppose the remedial alternative put forward by International Paper. IP seeks a complete on-site solidification which combines low-level contaminated soils with highly-concentrated contaminated soils with a solidifying agent. These contaminated, solidified soils will then be left on-site for the Port and its constituents to deal with in the future.

IP's proposal poses long-term risks and fails to account for public concerns on a number of counts; substantially increases the quantity and mass of contaminated soils which will alter the topography and negatively impact the Port's ability to redevelop its property and meet its mission of creating economic opportunity for the state and its local community; also fails the disproportionate cost analysis because it does not consider the reasonably foreseeable redevelopment costs that are incurred because of the increased volume of hazardous substances left on-site. It also fails in its protectiveness evaluation because solidification is only effective long-term if the material remains undisturbed which does not correspond with the Port's future development plans. The Port wants Ecology to select an alternative that combines the best elements of solidification and off-site disposal that would provide the highest level of protectiveness and permanence with a moderate level of increased cost (which, by the way, the Port has offered to pay for).

It's undisputed that the contamination in this area was caused by IP's historical wood treatment operations and the burden of cleaning it up should not be shouldered by our community. You simply cannot allow a corporation to leave their contamination behind and leave town. IP contaminated, IP should clean it up. It is Ecology's responsibility to ensure that the remedy meets the MTCA – Model Toxics Control Act, but also ensures that the Port is not left with the legacy contamination and future costs. Ultimately, the Port's preferred proposal protects human health, the environment, and the economic well-being of our local community. Thank you.

Kimberly Goetz

Thank you very much. All right. Next person signed in is I believe it is Paul Helenberg. Did you decide? No? Great. Thank you.

And next up Philippe Miller?

Philip E. Miller

Philip Miller.

Kimberly Goetz

Great. Come right on up.

Philip E. Miller

I totally agree with the Port Commissioners.

Unidentified Audience Member

Well, you should.

(Laughter)

Just kidding.

Philip E. Miller

No, I know. I know. See I was manager of International Paper's operations in treated wood products until 1983 here in Longview. Then I was transferred down to Louisiana to take over one of their operations that was far dirtier than this one. And I can tell you these treating plants were dirty operations. And if IP can get away with it – I'm retired from them I don't care what they want to do to me – but don't let them walk away from this situation. They will if they can. They're beholden to their stockholders and they want to take the easiest way out. That's it.

Kimberly Goetz

Thank you very much. All right, thank you. And next is Norm Krehbiel? Did you want to testify?

(Unintelligible)

He had to leave? OK. Next is Dale Boon?

No?

I'm trying to figure out who is a "yes." Representative Walsh, did you want ... are you still here?

Rep. Jim Walsh

Yes.

Kimberly Goetz

There you are.

Rep. Jim Walsh

Hi. I'm Jim Walsh. I'm one of the state representatives for District 19 which includes Longview. I mostly testifying also to support the Port's preferred solution here. I think if you at it roughly speaking the IP suggestion is sort of the low end of the cleanup, the Port's you could say is roughly is the middle, and the baseline (ironically) is the high end. And I think all three would arguably clean this site up, but the Port's, I believe, would clean it up most effectively. And as the commissioner said, the difference between the International Paper's commitment to cleanup and the cost of the more ambitious cleanup that the Port would like to do, the Port is willing to bear. So that's not a bad idea. And most importantly, and really most importantly, I think the Port has the best concept of using this space going forward. And using it in a way that is relatively clean but productive and will allow us to have some economic activity on the site rather than the site simply lying empty for decades to come. So the combination of their cleanup commitment and also the fact that they plan to use the site, to me, is the most attractive combination. So I encourage the Department to consider the Port's preferred alternative solution. Thanks.

Kimberly Goetz

Thank you very much. All right. Next is Sandra Davis.

Sandra Davis

I'm Sandra Davis from Longview, Washington. And I have quite a few questions, and some of them have already been answered, so I apologize.

Kimberly Goetz

That's quite all right.

Sandra Davis

Leaving contaminants onsite, even with the proposed capping systems, is not a permanent solution. Nothing short of removal of contaminants to a certified offsite landfill will ensure the continued safety for Port staff, clients, and the community. As we now see in Houston, Texas, these capping systems are not permanent, especially with unforeseen extreme weather events or earthquakes.

If a cleanup plan is approved and completed that leaves contaminants capped onsite, will International Paper be responsible for costs of maintenance and for how many years?

Will there be financial assurances put in place to protect the Port from further costs of this contaminated area down the road?

If the final plan is to cap contaminants, could these mounds fail in any way in the future and who will be responsible to rebuild them?

If future contaminants are found outside of the areas now known, will International Paper be held liable for this cleanup action?

We know groundwater is contaminated, through years of Port operations migration of groundwater could occur and force these contaminants to the surface. If the final plan is to cap contaminants, will the caps be designed to meet structural strength requirements?

Will there be leak detectable capping systems used? Or some other way to continually monitor this area?

Reynolds' 33-acre closed black mud pond shows that future problems are very likely to occur. Leaking has been acknowledged at that mud pond and monitoring of that site will be endless. There is no such thing as capping contaminants and assuming you will never have to deal with them again. I feel the Port of Longview's plan is a very generous compromise, even though I would like to see it all moved offsite. But I would hope whatever the final decision is, that it also include my requests for assurances that taxpayers not be held responsible for future costs.

Kimberly Goetz

Thank you. All right, and Darin Norton.

(Unintelligible)

He's gone. OK. That is everybody who signed in to testify ... oh. Senator Takko – sorry. Come on up. And Gerry?

(Unintelligible)

Come on up. And Gerry you want to testify?

Sen. Dean Takko

Did I not check something I should have?

Kimberly Goetz

If you did, I probably just missed it.

Sen. Dean Takko

I'm sorry.

Kimberly Goetz

That's quite alright.

Sen. Dean Takko

Well, thank you. I'm here in support of the Port of Longview's proposed preferred alternative. First of all, it removes more material than the IP alternative which I think is what we want to do in the long-run which is remove as much material as possible. More importantly than that, to me, is the fact that this property, if the Port's alternative is used, the property can then be used for some economic gains to our community which we sorely need. And that's what it's all about to me is we want to have this property be able to be used. In the other alternative, it would limit the use of it and I want to see as much property down at that Port used as possible. Thank you.

Kimberly Goetz

Great. Thank you. Anyone – oh, Gerry. Come on up. Great. Go ahead.

Gerry O'Keefe

Thanks. My name is Gerry O'Keefe. I'm the Senior Director of Environmental Affairs for the Washington Public Ports Association. We represent the 75 Port Districts around the state of Washington. Our principle mission is developing property and creating jobs in local communities and we're very proud of it. We've got a lot of experience cleaning up contaminated lands. We work with Ecology extensively to do that all over. The record is of, you know, achievement not only protecting the environment but also the economic benefits that come from cleaning up property and making it usable again are really profound. It's not just something that ports have done. Other local governments have been engaged in it; other parties are engaged in it as well. But it's an extraordinary thing to see happen.

Because of that experience, we're scratching our head about this particular proposal or alternative. Our understanding based on the work that, you know our experience, is that when a landowner doesn't support an alternative, the alternative isn't viable. In fact, what Ecology will mostly come to us and say is, "Have you worked with the landowner and made sure they're ok?" before you take this out to public comment. So from you know our perspective, just as a practical matter, you can't take action on this site until the Port says they're ready to take action on this site. And, you know, International paper might not like that, but you can't force the project that the Port isn't comfortable with on them. There's a million ways that they can keep it from happening, so we'd just encourage you know Ecology to take a good look at what the Port has proposed. It's a reasonable proposal, we think it addresses the problems that need to be addressed, and moreover they like it – which is a big deal. Thank you very much.

Kimberly Goetz

Thank you. Anyone else? Please come on up.

Ted Sprague

Thank you. My name is Ted Sprague. I'm the President of the Cowlitz Economic Development Council. I submitted my comments in writing previously. But one thing I just wanted to echo not only what Commissioner Averett said about the importance of this site is that the proposal that IP has could create this mound at the site which will not only prohibit future operations but could force existing operations to cease operating in the area. And that's very hurtful. We can't afford to lose opportunities but we also can't afford to lose the jobs we currently have. So that's another important component and again, the Economic Development Council has submitted written comments. We support the Port's alternative. Thank you.

Kimberly Goetz

Great. Thank you. Anyone else? Yes – please come on up.

Dennis Weber

Good evening, I'm Cowlitz County Commissioner Dennis Weber. And this site is in my commissioner district. So I feel pretty passionate about the proposals that have been made. However, I understand that in the discussion of the site one important environmental element has been neglected: the human legacy. Your constant reference to International Paper is historically inaccurate. The original owner was Long-Bell. I say that because Long-Bell and International Paper were major employers. Nobody here has talked about the number of jobs that were created by this institution and this site. That's important

because we want in the end to restore employment. As a County Commissioner, I've worked with the Department of Ecology and I've always been assured that folks in the Department want to help Cowlitz County. Quite frankly, we're still waiting. I'd like to have – I'd like to suggest a few other additional statistics for you to consider in your scientific review: the number 60, the number 50, the number 40, the number 30, the number 15, and the number 1.

60 refers to the percent of school children in Longview that qualify for free or reduced lunch. There's a poverty problem.

50 represents the number of live births in Cowlitz County that are drug-addicted.

40 percent refers to the number of people in Cowlitz County who are eligible for Medicaid.

30 percent represents how much below the state average for the median family income we find in Cowlitz County.

15 percent represents the number of adults with 4-year college degrees here in Cowlitz County – half of the state average.

And number one, unfortunately, is the rank of Cowlitz County in opioid-caused deaths. We need help. We need solutions that brings jobs. And we support the Port's proposal as one that will ultimately restore jobs at that particular site. Thank you.

Kimberly Goetz

Thank you. Anyone else?

Marvin Kallwick

I was a great big "no" on your list.

Kimberly Goetz

That's quite all right. And just remind me your name.

Marvin Kallwick

Marvin Leon Kallwick. And I forgot my bulletproof vest. I'm in favor of International Paper's preferred alternative. I'm currently a subcontractor. I work for subcontractors who still work at IP Springfield and IP Toledo and I work through the mill system. And I'm still working for IP. You haven't given IP a chance to welch on the deal yet. In regards to monitoring you would suggest that your monitoring would continue at IP or on IP property. You would also you say you're going to remove it. Remove it to where? You're also going to have to monitor it wherever you remove it to. You're not going to end your monitoring of this poison or pollutant. I think if you hold it onsite for IP my idea would be like the Times Beach dioxin thing where you can shave these rocks down, shave this bentonite down, and burn it in an incinerator later on at IP's expense. And in regards to taxation, you're talking about developing the Port property. That's going to be another 100 percent increase in our taxes, our port taxes in Longview, Washington. And in regards to our landfill, you're taking something that's a pile here and moving it 35 miles up into Headquarters and you're still going to have the same mess it's just in a different place and IP hasn't really proven itself to be a bad neighbor or a bad person at this point. You hold their feet to the fire if they do renege on cleaning the place up.

Kimberly Goetz

Great. Thank you. And next. Please come on up and remember to say your name.

Joe Gardener

My name is Joe Gardener. I'm a Cowlitz County Commissioner. And I'd just like to read a statement that we'll be submitting also as a written comment. But on behalf of the Board of Commissioners of Cowlitz County.

Cowlitz County is dependent on the continued health and success of the three public ports that operate within our borders. The Port of Longview plays an extremely important role in our community and the Port's ability to continue to grow and develop has a direct impact on the County's overall economic health. Recently, Cowlitz County's efforts at responsible, sustainable growth have been hampered by policy decisions made far outside our control.

We are asking the Department of Ecology select the remedial action alternative presented by the Port of Longview, respecting their local decision making. We believe that the alternative proposed by the Port of Longview is:

1. beneficial to the public by facility redevelopment of this vital piece of public property and reduce the long-term costs to the Port,
2. protective of human health and the environment, and
3. the preferred alternative for remediation of this site that the department of ecology should select.

The Port of Longview has offered to pay additional expenses related to the offsite disposal of the contaminated waste without raising International Paper's costs for site remediation. We urge you to work with the Port to move forward with this important project, selecting the Port of Longview's remedial action alternative. Thank you.

Kimberly Goetz

Thank you. Anyone else? All right. Seeing none, we've got a little bit more legal mumbo jumbo just to throw at you here.

So again, remember that if you would like to submit written comments, they are due by October 2, 2017 at 5 p.m. to Ecology.

We can accept written comments in a number of ways. You can send them in by mail, you can use our online EComments form on our web site, or you can give us written comments here at the hearing. To get instructions on how to comment by mail or online please pick up one of the flyers that we have on the table and you can also talk with Bridgette after the meeting.

All testimony received at this hearing along with all written comments received by October 2, 2017 will be part of the official hearing record for this draft remedial investigation and feasibility study.

Ecology will send notice about the availability of the Response to Comments to everyone that provided written comments or oral testimony on this draft remedial investigation and feasibility study; everyone

that signed in for today's hearing that provided an email address; and all other interested parties on the agency's mailing lists for this draft remedial investigation and feasibility study.

The Response to Comments will, among other things, contain the agency's response to questions and issues of concern that were raised during the public comment period. If you would like to receive notice about its availability or a copy but did not fill out a card or sign in please come see me after the hearing.

The next step is to consider the comments and make a determination whether the draft remedial investigation and feasibility study is complete. Ecology's Hazardous Waste and Toxics Reduction Southwest Regional Section Manager, Ava Edmonson, will look at the public comments, the Response to Comments, and other appropriate documentation, and staff recommendations and will make a decision about finalizing these documents.

Currently Ecology is expecting to either approve the draft remedial investigation and feasibility study; not approve the draft remedial investigation and feasibility study and instead request revisions; or conditionally approve the draft remedial investigation and feasibility study based on required modifications.

If we can be of further help to you, please do not hesitate to ask or you can ask Bridgette if you have other questions.

So again, on behalf of the Department of Ecology, we want thank you for coming. And we appreciate your cooperation and your courtesy. That concludes our public hearing we are going to adjourn. The time is now 7:15 p.m. Thank you very much.

## Public Comment Form

OCT 04 2017

WA State Department  
of Ecology (S.W.R.C.)

Name:

Dale Boon

Representing:

Individual and Port of Woodland

Date:

Sept 29, 2017

## Comments:

As a fellow Port Commissioner, I wholeheartedly support the proposal presented as an "Alternative" by the Port of Longview for several reasons:

1. By removing the material from the site, it cleans up Port of Longview area, as a "clean site," not as a potential questionable area, even though it wouldn't be after its been treated etc. The old policy "Out of sight, out of the Public's eye," even though it would be

monitored at its final disposal site.

2. The site will be totally usable, instead of having an area "Red taped," as unusable forever.

3. The Port of Longview has agreed to all associated costs, for both removal and monitoring over and above what I.P. is responsible for.

I am not submitting this just as a "Port supporting a Port" but as a common sense approach to an age old problem of "Just the Right Thing to Do"

Please include me in your follow up discussions at.

[dboon@portofwoodland.com](mailto:dboon@portofwoodland.com)

Thank You  
Dale Boon  
Port of Woodland.

## Cowlitz Wahkiakum Council of Governments

As the owner of the property, and a known community steward, the Port's needs and priorities should receive high consideration. The final cleanup scenario should protect the Port's ability to use the property in the future. The preferred option by IP is not the best option for the Port and the overall community. Offsite disposal, as possible, is a better option for the long-term viability of the site. Local taxpayers should not be held liable tomorrow for a cost saving choice today by IP. The IP proposal will very likely create problems for the Port in the use of the property as well as an increased concern regarding the release of contaminants in the future.



# Board of Commissioners

County Administration Building  
207 Fourth Avenue North  
Kelso, WA 98626  
TEL (360) 577-3020  
FAX (360) 423-9987  
www.co.cowlitz.wa.us

## COMMISSIONERS

Arne Mortensen  
District 1

Dennis P. Weber  
District 2

Joe Gardner  
District 3

## CLERK OF THE BOARD

Tiffany Ostreim

September 28, 2017

Kaia Peterson – Site Manager  
PO Box 47775  
Olympia, WA 98504-7775

RE: Response to Draft Remedial Investigation and Feasibility Study – Port of  
Maintenance Facility Area Site (Facility Site ID#1080)

Cowlitz County is dependent upon the continued health and success of the three public ports that operate within our borders. The Port of Longview plays an extremely important role in our community and the Port's ability to continue to grow and develop has a direct impact on the County's overall economic health. Recently, Cowlitz County's efforts at responsible, sustainable growth have been hampered by policy decisions made far outside of our control. We are asking that the Department of Ecology select the remedial action alternative presented by the Port of Longview, respecting their local decision making.

We believe that the alternative proposed by the Port of Longview is:

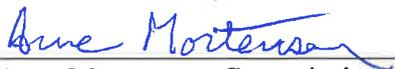
- Beneficial to the public by facility redevelopment of this vital piece of public property and reduce the long term costs to the Port;
- Protective of human health and the environment; and
- The preferred alternative for remediation of the MFA Site that the Department of Ecology should select.

The Port of Longview has offered to pay additional expenses related to the off-site disposal of contaminated waste, without raising International Paper's costs for site remediation. We urge you to work with the Port to move forward with this important project, selecting the Port of Longview's remedial action alternative.

Sincerely,  
**Board of County Commissioners  
of Cowlitz County, Washington**

  
\_\_\_\_\_  
Joe Gardner, Chairman

  
\_\_\_\_\_  
Dennis P. Weber, Commissioner

  
\_\_\_\_\_  
Arne Mortensen, Commissioner



September 26, 2017

Kaia Peterson  
PO Box 47775  
Olympia, WA 98504-7775

Dear Ms Peterson:

Please accept these comments on behalf of the Cowlitz Economic Development Council (CEDC) regarding the remediation alternatives for the Port of Longview (the Port) Maintenance Facility Area Site (Facility Site ID #1080).

It has come to our attention there is a conflict between recommended clean up solutions between IP, the Port and the Department of Ecology. The Port's recommendation to consider off-site disposal appears to have the best interest of all parties involved taken into account. The Port has pledged that off-site disposal will not increase costs to IP with funding coming from insurance proceeds. Off site disposal will also benefit the public by facilitating the redevelopment of the site and will reduce long-term costs to the Port.

In addition, the Port's alternative will be protective of human health and the environment which is the goal of the clean up. The IP alternative would increase the volume of contaminated media left on Port property, would negatively impact the Port's current operations by creating a mound that could affect the movement of heavy equipment on the site, would delay the redevelopment of the site, would require the Port to incur increased costs in the future to handle and dispose of the contaminated media left behind and increases the impact of deed restriction on the Port's future operations.

After the public comment and review period, please choose the Port's alternative as the preferred alternative for remediation of the Maintenance Facility Area Site.

Sincerely,

Ted Sprague, President  
Cowlitz EDC

Port of Longview hearing on 9-28-17

International Paper cleanup on Port property

1. Leaving contaminants onsite, even with the proposed capping systems, is not a permanent solution. Nothing short of removal of contaminants to a certified offsite landfill will ensure the continued safety for Port staff, clients and the community. As we now see in Houston, Texas, these capping systems are not permanent, especially, with unforeseen extreme weather events or earthquakes.
2. If a cleanup plan is approved and completed that leaves contaminants capped onsite, will Internat'l Paper be responsible for costs of maintenance? And for how many years?
3. Will there be financial assurances put in place to protect the Port from further costs of this contaminated area down the road?
4. If the final plan is to cap contaminants, could these mounds fail in any way in the future? and who will be responsible to rebuild them?
5. If further contaminants are found outside of areas now known, will IP be held liable for this cleanup action?
6. Do we know if groundwater is contaminated? Through years of Port operations, migration of groundwater could occur and force these contaminants to the surface.
7. If the final plan is to cap contaminants, will the caps be designed to meet structural strength requirements?
8. Will there be leak detectable capping systems used? Or some other way to continually monitor this area?
9. Reynolds' 33-acre closed black mud pond shows that future problems are very likely to occur. Leaking has been acknowledged at that mud pond and monitoring of that site will be endless. There is no such thing as capping contaminants and assuming you never have to deal with them again.
10. I feel the Port of Longview's plan is a very generous compromise, even though I would like to see it all moved offsite. But I would hope whatever the final decision is - that it also include my requests for assurances that taxpayers not be held responsible for future costs.

Sandra Davis  
1002 Abernathy Creek Rd  
Longview, WA 98632

## David Futcher

As noted in your Fact Sheet, the Port of Longview has proposed an alternative cleanup plan that I hope you will allow for this project. Because the Port will pay the incremental costs for this option, and the option provides a quicker resolution to the contamination on the site, I see little reason for anyone to object to it.

The Port - and our community - needs the property to be returned to a productive use sooner than possible. Marking the contaminated property and waiting for time to take its course will mean that in the meantime, the property cannot be marketed or used for Port customers. This may cost our community badly-needed jobs and revenue to the Port.

As the mayor of the City of Kelso, I know all too well that the majority of our community's issues are caused by the tough economic climate of Cowlitz County. The jobs that might be provided by expansion at the Port are crucial in helping to mitigate these challenges.

I ask that you give strong consideration to implementing the Port of Longview's proposed alternative, requiring them to pay for the additional treatment costs.

Thank you for your consideration,

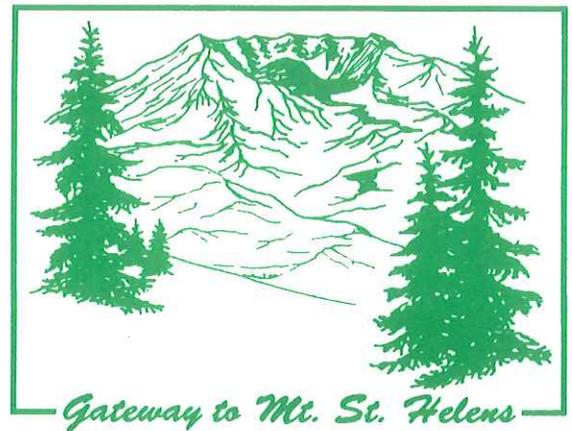
David Futcher, CPA

## Paul Helenberg

Please see attached letter from City of Castle Rock Mayor Paul Helenberg in support of Port Of Longview's remediation alternative for their Maintenance Facility Area Site.

# City of Castle Rock

P.O. Box 370  
CASTLE ROCK, WA 98611  
(360) 274-8181



September 28, 2017

Washington State Department of Ecology  
Attention: Kerry Graber  
[Kerry.graber@ecy.wa.gov](mailto:Kerry.graber@ecy.wa.gov)

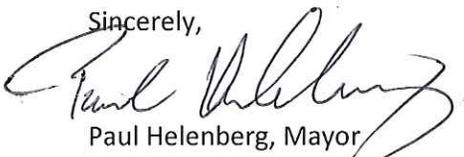
Subject: Comment on Remediation Alternatives for Port of Longview Maintenance Facility Area Site (Facility Site ID#1080); Comments on Draft Report for Remedial Investigation And Feasibility Study (RI/FS); former International Paper Company Facility.

As mayor of the City of Castle Rock, I fully support the remediation alternative proposed by the Port of Longview for contaminant clean up of their Maintenance Facility Area (MFA). There is no dispute that the site was contaminated by International Paper Company (IP) wood treating operations. The option proposed by IP would not require removal of contaminated soils; instead, IP proposes to leave a significant volume of contamination on the site. The Port of Longview – or more specifically - the taxpayers of Cowlitz County, should not be expected to bear the costly burden of any additional remediation costs that may be required should the Port of Longview decide to redevelop this area.

Washington State Department of Ecology is now requesting public comment based solely on remediation alternatives submitted by IP. The public was not provided with any information on the Port of Longview's mitigation proposal option, which is intended to significantly eliminate the contaminated soil, protect public benefits (both environmentally and fiscally), address IP mitigation cost concerns and allow facilitation for future redevelopment of this public property.

I believe the Port of Longview's mitigation is a better solution to protect, preserve and enhance this site for long-term future development. I strongly encourage Washington State Department of Ecology to support the Port of Longview's remediation alternative, including their offer to assist IP in addressing their cost concerns for this proposal. If you have any questions or wish to discuss this further, please contact me at 360-957-6899.

Sincerely,



Paul Helenberg, Mayor  
City of Castle Rock, Washington



Environment Health & Safety  
INTERNATIONAL PLACE, TOWER I  
6400 Poplar Avenue  
Memphis, TN 38197  
(901) 419-3845

**SUBMITTED ELECTRONICALLY VIA EMAIL AND ONLINE PORTAL**

October 2, 2017

Ms. Kaia Petersen  
Washington State Department of Ecology  
Southwest Regional Office  
Hazardous Waste & Toxics Reduction  
PO Box 47775  
Olympia, WA 98504-7775

**RE: International Paper Response to Additional Public Comments  
Public Review Draft Remedial Investigation / Feasibility Study Report  
Port of Longview Maintenance Facility Area, Longview, Washington**

Dear Ms. Petersen,

International Paper Company (International Paper) has been working diligently with the Washington Department of Ecology (Ecology) for over 10 years to develop a public review draft remedial investigation/feasibility study (RI/FS) report for the Maintenance Facility Area (MFA) at the Port of Longview (Port). Throughout the RI/FS development process, International Paper has met with the Port on multiple occasions to discuss cleanup action alternatives and incorporate alternative modifications suggested by the Port to accommodate potential economic development opportunities. In May 2015, the Port stated that it was prepared to support the modified preferred cleanup action alternative identified in the public review draft RI/FS report (Alternative S5B). This culminated in the subsequent approval by the Washington Department of Ecology (Ecology) in late 2015 of the public review draft RI/FS report that was submitted to Ecology on December 21, 2015. The Port subsequently proposed additional modifications regarding site grades and potential future site uses, and those modifications were also incorporated by International Paper into the public review draft RI/FS report that was submitted to Ecology on July 12, 2016. Multiple modifications have been suggested by the Port and incorporated by International Paper to allow for both continued existing site uses and potential additional future site uses that have been proposed by the Port. Alternative S5B is most protective of human health and the environment (MTCA's primary objectives), and it also

incorporates the Port's requested modifications related to supporting current and future economic development objectives.

### **ADDITIONAL PUBLIC COMMENTS**

Additional public comments regarding the public review draft RI/FS report have been submitted by the Port and others during the public comment period that ends October 2, 2017, and International Paper responds below to those comments that generally fall into the following categories:

1. International Paper's alternative will create a "mound" that could not only impact future site uses, but also current site uses.
2. Economic development is not given adequate consideration by International Paper's alternative.
3. The Port has offered to pay the \$1.5 million difference in costs between their alternative and International Paper's alternative.
4. International Paper will look for the easiest way out, and an opportunity to walk away.

#### **Alternative S5B Will Not Create a Recognizable "Mound"**

Alternative S5B will not create a recognizable "mound," but will rather smooth existing site grades to fill valleys and connect existing grade breaks that are currently controlled by site features such as retaining walls. Post-remediation site grades will not exceed current site grades, and therefore will not negatively impact either current or future site uses. The Port has provided International Paper with maximum allowable site grade metrics, and those specific grade metrics have been incorporated into the July 12, 2016 public review draft RI/FS report (page 7-25).

#### **The Port's Economic Development Objectives Have Been Addressed on Multiple Occasions**

Although economic development needs are not explicitly identified as a consideration in MTCA's remedy selection process, International Paper has discussed those needs with the Port on multiple occasions since the submittal of the public review draft RI/FS report in 2011, and has incorporated multiple modifications to accommodate requests by the Port related to minimizing impacts on Port operations and allowing for potential future development. The revised cleanup action alternative identified as Alternative S5B in the July 12, 2016 public review draft RI/FS report incorporates modifications to accommodate current Port uses as well as potential future Port uses. The incorporation of three zones, including 'Zone 1' near the existing rail spur from which all impacted soil will be moved to allow for a potential future 'dump pit,' is one example of a significant accommodation suggested by the Port and incorporated by International Paper. Alternative S5B is most protective of human health and the environment (MTCA's primary objectives), and it also incorporates the Port's requested modifications related to supporting current and future economic development objectives.

## **The Port Has Made No Formal Commitment to Fund the Additional \$1.5 Million Cleanup Cost**

The Port's preferred alternative has been identified as having an additional cost of \$1.5 million without significant additional benefit related to protection of human health and the environment, but potential future benefits related to economic development. The additional excavation and offsite disposal related to this additional \$1.5 million cost also has potentially detrimental environmental impacts related to transport of hazardous materials and additional exposures, as well as continued monitoring of those materials at an offsite location. International Paper understands through public comments presented at the public hearing, publicly available correspondence between the Port and Ecology, and various media outlets that the Port of Longview proposes to pay the \$1.5 million difference between their alternative and Alternative S5B. For the record, International Paper is not aware of any formal offer from the Port to pay for these additional costs nor has International Paper had any formal discussions with the Port regarding the matter.

## **International Paper Has Acted as a Good Steward**

International Paper has consistently acted as a good steward and in the process has never indicated a potential to 'walk away' by word or deed. International Paper has worked cooperatively with the Department of Ecology and the Port to meet obligations under the 1997 Consent Decree, No. 97-2-01088-9. International Paper continues to perform quarterly groundwater monitoring and reporting; has completed and submitted the July 12, 2016 public review draft RI/FS report, and has posted and maintains financial assurance to secure its obligation and demonstrate its commitment to implement the cleanup action at the Port of Longview.

## **CONCLUSION**

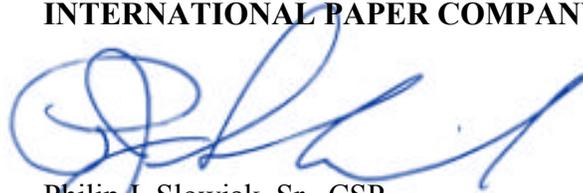
International Paper has diligently worked with Ecology and the Port to produce and revise the public review draft RI/FS report for the MFA. This has included a process extending over ten years during which International Paper has sought to accommodate the Port's evolving development objectives for the MFA. Those accommodations are further described in Tables 1 and 2 of the Technical Memorandum submitted to Ecology previously on July 21, 2017. The public review draft RI/FS report submitted to Ecology on July 12, 2016, has been prepared consistent with the Model Toxics Control Act (MCTA) requirements and supports *Alternative S5B - Solidification Outside and Inside Building Footprint with Relocation of Soil near Railroad Tracks* as the preferred soil remedy and *Alternative GW4 – Monitored Natural Attenuation* as the preferred groundwater remedy.

International Paper has evaluated cleanup action alternatives for the MFA in accordance with MTCA methodology, including developing a comparison of benefits to costs. *In situ* solidification of MFA soils was identified as providing the highest degree of protection of human health and the environment in relation to associated costs.

Moreover, International Paper has met with the Port on multiple occasions since the submittal of the public review draft RI/FS report in 2011, and International Paper has incorporated multiple modifications to accommodate requests by the Port related to potential future development. The revised cleanup action alternative identified as Alternative S5B in the July 12, 2016 public review draft RI/FS report incorporates modifications to accommodate current Port equipment and uses as well as potential future Port equipment and uses. The Port has proposed adding excavation and offsite disposal to Alternative S5B to create an additional alternative. A comparison of the Port's alternative to Alternative S5B indicates that the Port's alternative has an associated additional cost of \$1.5 million with no significant additional benefits related to protection of human health and the environment. The request to incorporate additional excavation and offsite disposal at an additional cost of \$1.5 million is not justified, and Alternative S5B is the appropriate cleanup action alternative for the MFA. Alternative S5B is most protective of human health and the environment (MTCA's primary objectives), and it also incorporates the Port's requested modifications related to supporting current and future economic development objectives.

Very truly yours,

**INTERNATIONAL PAPER COMPANY**

A handwritten signature in blue ink, appearing to read 'P. Slowiak', is written over the company name.

Philip J. Slowiak, Sr., CSP  
Senior Program Manager  
Environmental Remediation

cc: S. Ginski, IP  
P. Kalina, AECOM



*Longview named one of the top ten prettiest towns in America by Forbes - March 29, 2012*

September 28, 2017

P.O. Box 128  
Longview, WA 98632-7080  
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Washington State Department of Ecology  
Maia Bellon, Director  
PO Box 47600  
Olympia, WA 98504-7600

RE: Port of Longview/International Paper Remediation Comment

Dear Ms. Bellon:

On behalf of the City of Longview, which is both a direct stakeholder and partner in Longview's economic development, I urge you to select the Port of Longview's preferred alternative and not International Paper's alternative for the remediation of the Port's Maintenance Facility Area (MFA).

The Port is a key driver in establishing and sustaining economic vitality in our region. Responsible for 1 in 10 local jobs, spurring \$444 million in spending at local businesses and generating \$5.2 million in taxes for public services, the success of the Port is directly linked to the success of our community.

Washington's ports are publicly owned assets established by the State to act as business agents of the community. Choosing IP's preferred alternative over the Port's would not only impede current operations at the Port but also shift the costs of future development within the MFA from a private corporation to the citizens of the Port district.

Historically, IP was an integral part of our community and our local economy. It provided strong jobs in an area that takes great pride in its industrial roots. We'd like IP to leave behind a legacy of cooperation and partnership and not dangerously contaminated material that will hinder our community's growth for years to come.

Please do what's best for the environment, the economy, and our community by selecting the Port's alternative for the remediation of the MFA. Thank you.

Sincerely,

A handwritten signature in black ink that reads "Don Jensen".

Don Jensen  
Mayor

cc: City Council Members  
Dave Campbell, City Manager

## Three Rivers Regional Wastewater Authority

The Three Rivers Regional Wastewater Authority would be concerned about any and all chemicals and discharges from the clean up process that may be introduced into the sanitary sewer system. Longview Ordinances and the Three Rivers Regional Wastewater Authority Discharge Policy have limitations and prohibitions in place to protect the wastewater plant and collection system.

## Jeff Wilson

The port of Longview desires Ecology to accept the Port's preferred cleanup method and so must I. Having cast my support for this option I do so by not having reasonable expectations of Ecology. Why? Our entire community has suffered from Ecology's inconsistent and irregular decision making process so as an elected I must reside that Ecology will do the "right thing". This project has taken a very lengthy legal battle and the funds are secured, therefore no doubt of fiscal responsibility here, so choose wisely Ecology and choose this option as we need to stay open for business while we at the Port do the "right thing".

Please understand my tone and passion in this matter and other related decisions made by Ecology have left such negative impression that I relate to my constituents. Part of my position is to represent 1/3 of my community district on such issues, therefore I am obligated to inform Ecology of that many view the departments actions as rouge and confidence in business projects is at an all time low for my involment in our community economic growth. Yes, I said economic growth. The growth that affoards our communities a better chance to make positive changes in our society.

Looking forward to Ecologys' decision? Yes! Expecting fairness? We will wait and see.



September 29, 2017

Kerry Graber  
P.O. Box 47775  
Olympia, WA 98504-7775  
Kerry.graber@ecy.wa.gov

Re: The Port of Longview's Comments on the Draft Remedial Investigation and Feasibility Study Report  
Facility Site ID# 1080  
Cleanup Site ID# 3685  
10 International Way, Longview

Dear Ms. Graber:

The Port of Longview submits the following comments regarding the Draft Remedial Investigation and Feasibility Study Report (Draft RI/FS) as prepared by AECOM, and submitted by International Paper Company (IP).

At the outset, the Port would like to correct a partial inaccuracy in the Washington Department of Ecology (Ecology)'s August 17, 2017 request for comments on the Draft RI/FS. Ecology states that IP "found contamination" at the Maintenance Facility Area (MFA) during cleanup of the Treated Wood Products Area. This is only partly true. IP did not just "find" contamination; they caused it. While the Port now owns the MFA site, IP is the party responsible for the contamination due to its historical wood treating operations on neighboring property.

As the property owner, the Port is interested in a long-term solution at the MFA site. For more than ten years, the Port has worked with Ecology and IP to complete the investigation and cleanup of the MFA Site. There is no dispute that IP is responsible for the investigation and cleanup of the MFA Site. What has been at issue is whether IP should be allowed to consolidate soils that are either clean or have low contaminant concentrations with soils with higher contaminant concentrations and solidify it on-site. The Port understands that Ecology considers all of the solidified material to be "contaminated." Combining these soils with a solidifying agent leaves behind a significantly increased volume of contaminated material that will change the topography of the Port's property and directly impact the ability to use and redevelop it in the future. Should the Port need to remove solidified material in the future, it will have to handle and dispose of it as contaminated. Increasing the volume of solidified material on Port property therefore has real adverse impacts on the Port.

The Port has objected to this cleanup approach ever since it learned that IP intended to leave a significant volume of solidified contaminated media on the Port property (Exhibit A). Such impacts are contrary to the Model Toxics Control Act (MTCA) and to the Port's mandate to develop and manage its property for the economic benefit of its community.

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LONGVIEW, WASHINGTON 98632

**WASHINGTON'S WORKING PORT**

The Port's objections have not come without solutions. The Port's original position was to excavate and remove all contamination. However, in an effort to arrive at a mutually agreeable solution, the Port has backed off its original demand for complete removal and instead has spent the past decade attempting to work with IP and Ecology to craft a remedy to allow some of the contamination to remain through a treatment process.

Unfortunately, IP has not reciprocated with a flexible approach. Instead, IP has adamantly opposed the Port's proposals for offsite disposal at every turn. The Port acknowledges that its proposed alternative will be incrementally more expensive than the IP alternative -- primarily because the Port's proposal involves off-site disposal of some less contaminated soil, while IP's proposal would consolidate the less contaminated soil with the more contaminated soil and solidify the increased volume of contaminated soil for on-site disposal. To address the incremental cost increase, the Port offered to pay for the additional costs of off-site disposal, thereby avoiding impacts on the usability of Port property and future costs associated with redevelopment of Port property. That is, the Port has proposed an alternative cleanup strategy that will achieve Ecology's cleanup goals at no additional cost to IP.

Moreover, while the Draft RI/FS notes the benefits of on-site solidification, it fails to account for its risks. For instance – under section 9.1.2 "Permanence"—the discussion of permanence and the ranking of technologies does not take into consideration the significantly increased volume of solidification-treated soil which in turn results in a significant increase in volume/mass of contaminated media. Because Ecology considers all of the solidified material to be contaminated, the proposed remedy substantially increases the quantity of contaminated material to remain on Port property. This is not merely an oversight; it is a legal deficiency. When conducting a disproportionate cost analysis (DCA), a party must evaluate the "degree to which the alternative permanently reduces the toxicity, mobility or **volume** of hazardous substances." WAC 173-340-360(3)(f)(ii) . This proposal also contemplates containment of the solidified soil under a paved cap. As such, this is not a permanent solution because long-term maintenance of that surface is required.

The Draft RI/FS also fails in its "Protectiveness" evaluation. Solidification is only effective long term if the material remains undisturbed. That is not the expectation here. This is not a site where the landowner is agreeing to leave the residual contamination undisturbed through a voluntarily negotiated deed restriction. There must be consideration of the Port's future development plans in assessing protectiveness of the solidification alternative. The Port has significant concerns regarding the increased volume of contaminated materials, the resultant decreased distance between ground surface and contaminated materials, and the increased risk to Port and contractor workers under various construction and maintenance scenarios.

In addition, IP's proposed Draft RI/FS fails to consider the reasonably foreseeable costs that the Port would face when redeveloping this property and other public concerns raised by the Port. Leaving a large volume of contaminated material on Port property will negatively affect the Port's ability to redevelop its property and meet its mission of creating economic opportunities for the State and its local community. One clear impact is the anticipated costs for handling and disposal of the solidified material as contaminated for any future excavation needed to construct buildings, install utilities, develop future Port facilities, and install railway lines. If IP was required to address these future remedial costs associated with the Port's redevelopment of its property, we believe that the overall cost differential would tip to the Port's favor. But to date, IP has refused to consider the Port's concerns, despite a requirement in WAC 173-340-360(3)(f)(vii) that obligates IP to consider concerns from local governments that have an interest in or knowledge of the site.

Not only does IP fail to take into consideration the true costs of its proposal, it also artificially inflates the cost of the Port's proposal in order to secure a favorable cost comparison. Specifically, IP through its consultant AECOM has modified the Port's alternative cost estimate to include freeze-wall shoring for 5 and 8-foot excavation areas where the Port has suggested that shallow, low-contamination soil could be excavated and disposed of off-site prior to solidifying the higher contamination deeper soil. As the Port has made clear in prior comments as well as the contemporaneous comment submitted with this letter (GeoEngineers' September 25, 2017 memorandum, Exhibit B) AECOM's modification for freeze-wall shoring is entirely unwarranted. Freeze-wall shoring is extraordinarily complex and not cost effective for a relatively shallow (5 to 8-foot deep) excavation area without adjacent structures to protect. These costly shoring assumptions miss the mark and unfairly distort the cost comparison.

In sum, the Port urges Ecology to reject the proposed remedial alternative in IP's Draft RI/FS because it poses long-term risks and fails to account for public concerns. Instead, Ecology should endorse a cooperative resolution that does not unfairly burden the Port with future property use impediments and costs. The Port believes that an alternative approach that combines the best elements of solidification and off-site disposal would provide the highest level of protectiveness and permanence with a moderate level of increased cost – cost that the Port has offered to pay. Ultimately, there should be a remedy that protects human health and the environment, while allowing the Port to serve its statutory mandate of economic development and productive use of its property.

Very truly yours,

A handwritten signature in blue ink that reads "Norm Krehbiel". The signature is written in a cursive, flowing style.

Norm Krehbiel  
Chief Executive Officer

**Port of Longview's Prior Communications and Reports Directed to the Washington State Department of Ecology**

Hendriksen, L. "POL-IPCo- Treatability Comments." Received by Kaia Peterson, 1 July 2011. E-mail.

Hendriksen, L. "Preliminary Comments on IP's May 2011 Draft MFA RI/FS." Received by Kaia Peterson, 8 July 2011. (with attached memoranda).

Hendriksen, L. "Re: Department of Ecology comments on Draft Mechanics Shop Investigation Work Plan, Port of Longview's Maintenance Facility Area, Longview, Washington." Received by Kaia Peterson, et al, 23 Nov. 2011. E-mail.

Hendriksen, L. "POL Comments regarding the Mechanic Shop Investigation Report." Received by Kaia Peterson, et al, 7 May 2012. E-mail

Bailey, C. "RE: Comments on URS treatability document." Received by Kaia Peterson, et al., 23 Jan. 2013. E-mail (with attached memorandum).

Hendriksen, L. "Port of Longview Rail Loop." Received by Kaia Peterson, et al, 5 Mar. 2013. E-mail. (with attached letter and diagram)

Hendriksen, L. "FW: Draft Final Revised RI/FS Report - Cleanup Action Alternative Conceptual Technical Memorandum; IP Longview." Received by Kaia Peterson, et al, 14 Oct. 2013. Email. (with attached memoranda).

Hendriksen, L. "Port of Longview FS Comments." Received by Kaia Peterson, et al, 21 April 2014. E-mail. (with attached memorandum).

Hendriksen, L. "FW: revised slides." Received by Kaia Peterson, et al, 19 March 2015. E-mail (with attached presentation).

Bailey, C. "Port of Longview comments on Draft Final Revised RI/FS Report for the MFA." Received by Kaia Peterson, et al, 26 Oct. 2015. E-mail.

Hendriksen, L. "Port of Longview Alternative." Received by Ava Edmondson, et al, 26 Sept. 2016.

Hendriksen, L. "RE: MFA alternative proposal." Received by Ava Edmondson, et al, 27 Sept. 2016. E-mail. (with attached memoranda).

Hendriksen, L. "RE: Port of Longview's Proposed Alternative for Remediation of MFA Site and Reponse to Comments included in January 31, 2017 letter from K. Peterson." Received by Kaia Peterson, 14 April 2017

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**TO:** Lisa Hendriksen, Port of Longview

**FROM:** Chris Bailey, John Herzog

**DATE:** September 25, 2017

**FILE:** 242-010-03

**SUBJECT:** Review of July 2017 AECOM Comment Memo and Ecology comments on Memo

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On July 21, 2017, AECOM, on behalf of IP, submitted a technical memorandum that provides responses to recent and past comments that the Port of Longview has provided to Ecology regarding the ongoing process of selecting a cleanup action for the MFA Site. The July 2017 memorandum also provided new information regarding the cost estimate for IP's preferred alternative (S5B) from the Feasibility Study (FS). Based on the information in AECOM's July 2017 memorandum, Ecology provided comments on the new cost assumptions for Alternative S5B in an internal email dated August 10, 2017. This memorandum provides comments on several elements of AECOM's July 2017 memorandum as well as Ecology's August 2017 email.

### **General Remedy Selection Issues**

GeoEngineers and the Port have provided numerous and repeated comments disagreeing with the remedy selection process used in the FS, including the elements, or lack of elements, included in the alternatives developed for evaluation, and the evaluation process used to select the preferred alternative. Several of these issues were addressed in AECOM's July 2017 memorandum. The following discussion provides responses to several comments on general issues provided by AECOM/IP.

- **Institutional Control Requirements.** The Port understands that any alternative that leaves contaminants in place exceeding unrestricted cleanup levels will require institutional controls. Institutional controls associated with prevention of direct contact with contaminated soil will be required for all contaminated soil remaining on site, including soil that has been treated by solidification. However, clean soil or structural fill overlying contaminated soil is assumed to be excluded from institutional control triggers, allowing the Port to perform shallow excavation, construction, or maintenance within this shallow interval without the administrative requirements and waste characterization and disposal requirements of zones with known contaminated soil. The current conditions at the MFA Site, with the contaminated soil interval starting at least 3 feet below ground surface and separated from overlying clean structural fill by a geotextile, allows the Port to work within this shallow zone without the expectation of encountering contaminated soil and without triggering the anticipated deed restrictions. While AECOM/IP have attempted to account for this issue in the selected Alternative S5B by creating zones of clean shallow soil, this is accomplished by creating zones where contaminated (solidified) soil falls immediately below the final paved surface, thus exacerbating this factor in the remaining areas of the Site. The current condition at the MFA includes a geotextile and several feet of clean structural fill between contaminated soil and the ground surface, allowing the Port to conduct shallow construction and maintenance without the expectation of encountering contaminated soil. The Port continues to expect that the conditions following cleanup action at the MFA will be more protective to Port workers than the current conditions, and a

similar buffer between the ground surface and contaminated soil will be preserved to allow shallow construction and maintenance without triggering deed restriction requirements.

- **Volumetric Expansion of Soil.** Unmitigated expansion of treated soil resulting from the solidification process negatively affects several factors for the Port; modification of surface topography, modification of thickness of clean surface interval, and increased volume of contaminated media present on Port property. Simply put, these results are expected to increase the likelihood that future construction and maintenance activities within the cleanup action area will incur additional costs for the Port relative to not just a clean site, but relative to current conditions in which shallow soil/structural fill is considered clean. The Port continues to assert that the expected expansion resulting from the solidification process should be mitigated by utilizing off-site disposal of soil to prevent future restrictions and costs for the Port. The resistance to mitigating the effects of solidification is essentially deferring cleanup costs to the future when the Port has to excavate and dispose of contaminated solidified soil to perform construction as minor as utility installation.
- **DCA and Selection of Soil Alternative.** IP has repeatedly indicated that the combination of solidification, institutional controls, and a low-permeability cap is more protective and effective in the long term than excavation and off-site disposal. The Port continues to disagree with the assertion that solidification of contaminated soil should score higher than off-site disposal for common DCA criteria such as protectiveness and long-term effectiveness. This is particularly true in the context of the comparison of a full-solidification alternative to an alternative that utilizes solidification for the most contaminated soil, with off-site disposal reserved for lower concentration shallow soil to mitigate the effect of the expansion associated with solidification. In this context, the soil that is excavated from shallow zones across the site and transported off-site for disposal would be otherwise mixed with deeper, higher concentration soil during the solidification process and across much of the site would end up being located immediately under the final asphalt surface. The resulting solidified soil will resist leaching relative to untreated soil, but will still pose a direct-contact risk to Port workers should the paving be breached or during routine maintenance. GeoEngineers and the Port continue to assert that an alternative that relies on a reasonable level of off-site disposal to prevent leaving contaminated media (solidified soil) in close proximity to the ground surface should score higher than an alternative that relies solely on solidification with institutional controls used to prevent exposure to contaminated soil immediately below the ground surface. Off-site disposal of contaminated soil is a common and permanent remediation technology for contaminated soil (i.e., non-NAPL soil) and should be considered as a way to mitigate the impacts of the solidification process.

### **Comments on Revised Alternative Cost Estimates**

In their July 2017 memorandum, AECOM included a revised cost estimate for Alternative S5B that was selected as the preferred alternative in the FS. The July 2017 AECOM memorandum is the first time the Port has had the opportunity to review the updated alternative costs and this memorandum is the first opportunity the Port has had to provide comments. The primary modification was to include shoring for the excavation element of Alternative S5B in the area referred to as Zone 1. The shoring method included in the revised cost estimate is an extension of the freeze-wall method proposed for excavation in the existing FS alternatives that rely primarily on excavation and off-site disposal. GeoEngineers has previously commented that this shoring method is an extraordinary complex and expensive option to use for a relatively shallow (8-foot deep) excavation in an area without adjacent structures to protect. Excavation within Zone 1 could be accomplished using less expensive shoring methods or without shoring by sloping sidewalls, at significant cost savings.

In addition to revising Alternative S5B costs by adding shoring for excavation in Zone 1, in their July 2017 memorandum AECOM presented a revised version of the cost estimate for the Port's alternative that was presented to Ecology in April 2017 as a hypothetical blended alternative relying on both in situ solidification and off-site disposal. In their July 2017 memorandum, AECOM modified the costs for the Port's alternative, adding freeze-wall shoring to the scope of all excavations. In addition to the application of freeze-wall shoring for the 8-foot deep excavation of Zone 1, AECOM modified the Port's alternative cost estimate to include freeze-wall shoring for the estimated 5-foot deep pre-excavation of vadose zone soil proposed in Zones 1 and 2 where the Port has suggested that shallow, low-contamination soil could be excavated and disposed of off-site prior to solidifying the higher contamination deeper soil. GeoEngineers disagrees with the assumption that the excavation included in the Port's alternative requires a complex and expensive shoring method rather than simple sheet pile or using sloped sidewalls. These assumptions in AECOM's version of the alternative have the effect of unnecessarily driving up the cost of the Port's alternative.

In an internal email submitted on August 10, 2017, Ecology engineer Charles Hoffman provides comments on the revised cost estimates in AECOM's July 2017 memorandum. In Hoffman's message, he indicated that the revised costs presented in AECOM's memorandum are appropriate. GeoEngineers feels that this determination is based on a limited understanding of all site and project factors. This determination fails to consider that, while feasible, the freeze-wall shoring method assumed in the cost analysis is not a cost effective method for shallow excavation without adjacent structures or other conditions that typically warrant the use of complex and expensive shoring methods. Shallow excavations with relatively unlimited space to slope sidewalls, particularly vadose zone soil with limited porewater to "freeze", are not the typical conditions requiring the use of freeze-wall shoring. Mr. Hoffman's review of the cost estimates should have recognized that use of these highly conservative, and disproportionately costly shoring assumptions are intentionally inflating the cost differential between Alternative S5B from the FS and a hypothetical alternative that utilizes shallow excavation and off-site disposal to mitigate the effects of solidification.