

Bartness, Kari

From: Palmieri, Anne Marie
Sent: Thursday, December 30, 1999 12:02 PM
To: 'Grant, Drew'
Subject: RE: Haines Fuel Terminal figures

no panicking here.....just interested in how this would all work.

The whole perc issue really sucks. The Army thinks that the perc soil area is low priority.....I asked them to do a characterization of that area this year. The concentrations in the groundwater near the inlet are below our cleanup levels, but are only slightly above the cleanup level at the closest well to the soil contamination. Hopefully, we can get the soil out of there next year, solving that problem. I am actually more concerned with the high benzene hit on the northern side which we have NO IDEA where it is coming from. Hmm.

No plans for the army to sample the inlet surface waters or sediments. We have been disagreeing about the sediment sampling issue for several years. We will not close out the site without these samples....so I suppose the army will just worry about that in 10 years or so when they are ready to close it out.

Happy new year to you and your family.....Anne Marie. :-)

-----Original Message-----

From: Grant, Drew
Sent: Thursday, December 30, 1999 10:34 AM
To: Palmieri, Anne Marie
Subject: RE: Haines Fuel Terminal figures

Whoa now! No determination has been made yet, I'm just saying that we'll throw it onto our radar screen.

Don't get hung up on "waterbody" but think in terms of surface waters -- i.e., doesn't need to be any named creek, stream or inlet. There's an exemption of the applicability of the water quality standards (WQS) for groundwater in 18 AAC 70.005 for you guys and clean-up response actions, etc. that's gooey to me. The WQS apply to "waters" (AS 46.03.900) which includes, among other things, ponds, springs, estuaries, inlets, marshes, straits, passages, canals.

Though the GWs are exempted of sorts we currently have and do list surface waters that are in violation of the WQS where they are contaminated from c-sites and/or from GW/surface water interface -- Naknek River, Eskimo Creek and King Salmon Creek are some examples. River Terrace, on the Kenai, is another example -- though that segment of the Kenai River is not listed right now, just recently I've been put on notice of GW contamination daylighting in ditches, and the like, and entering the River. They've gotten significant hits in the Kenai.

What has caught my eye on your tank farm thing is: "11 culverts" "four surface water springs," "...appears that it's [small concentrate of perc] migrating down toward the inlet" (AMP!!), and "Also requiring attention will be effluent from a culvert observed discharging contaminated groundwater into a channel leading to Lutak Inlet, beyond the reach of on-site drainage control."

If the inlet hasn't been sampled then we'd need a strong case to list it. Are they planning on taking any samples there?

Not to panic, in those instances where we have listed waters as impaired and there is a c-site action going on we have mostly always deferred to c-site efforts, RODs, etc.

-----Original Message-----

From: **Palmieri, Anne Marie**
Sent: Thursday, December 30, 1999 9:06 AM
To: 'Grant, Drew'
Subject: RE: Haines Fuel Terminal figures

Hi Drew -

Okay - what waterbody would be "impaired"? The most contaminated samples were from small on-site seeps, and then there was some lesser contamination from the culverts carrying groundwater into the inlet. Would the Inlet then be considered impaired, even though it hasn't been sampled? I'm confused.

-----Original Message-----

From: Grant, Drew
Sent: Wednesday, December 29, 1999 2:36 PM
To: Palmieri, Anne Marie
Subject: RE: Haines Fuel Terminal figures

Thanks Anne Marie -- I appreciate the info and the clarification.

"Involved"?? not really....only in that we are "electrifying" our water quality assessment info into a database and I thought we'd build a record/open a file on this in the database... we have had an open file on it, with early reports on it back to '89. From our end it just puts it more on the radar screen...though from what I'm reading it could make our "impaired" waterbody list.... (we just developed one in '98 and the next list won't happen for a year or so...

Thanks again -- I'll be in touch -- drew

-----Original Message-----

From: Palmieri, Anne Marie
Sent: Wednesday, December 29, 1999 8:38 AM
To: 'Grant, Drew'
Subject: RE: Haines Fuel Terminal figures

Drew: I didn't see the news clip you are referring to, but figure that it is the Chilkat Valley News Article on the Haines Fuel Terminal. The original can be accessed under www.chilkatvalleynews.com. The article is factually correct, except for one thing: "The fact that wells continue to exhibit high levels of contamination years after the primary contaminant source has been removed, and despite years of active remedial efforts, suggests that a very large secondary contaminant source may remain at the site," according to a chemical data report by the U.S. Army Corps of Engineers. The CVN reference is correct, but the COE report is incorrect....the primary contaminant source (i.e. soil/sludge) has not been removed. The Army did not issue any type of correction to the article.

Are you thinking about getting involved in this one? Anne Marie.

Army still seeking source of contamination

By Tom Morphet

Environmentalists reacted angrily last summer to revelations that perchloroethylene had been dumped by cruise ships into local waters, possibly poisoning marine life.

But ships apparently aren't the only source of the highly toxic solvent in Lynn Canal.

"Perc" has been found in two test wells at the defunct U.S. Army tank farm -- at one location in concentrations requiring cleanup -- and is apparently heading into Lutak Inlet.

Results of recent testing at 24 monitoring wells, 11 culverts and four surface water springs at the site also found benzene and other fuel-constituent compounds at levels high enough to surprise agencies working to identify and remove contamination.

"The fact that wells continue to exhibit high levels of contamination years after the primary contaminant source has been removed, and despite years of active remedial efforts, suggests that a very large secondary contaminant source may remain at the site," according to a chemical data report by the U.S. Army Corps of Engineers.

Moreover, the site's complex bedrock topography and groundwater flows may

confound current attempts to intercept and treat contaminated groundwater until the secondary source is located and removed, the report said.

Confirming earlier samples, recent testing found perc in amounts of 8.5 parts per billion in the facility's former drum storage area, uphill of Lutak Road and just north of the farm's main gate. The state of Alaska requires cleanup of concentrations greater than 5 parts per billion.

But for the first time, a smaller concentration of perc -- 1.1 parts per million -- has been found in a well at the old "goo pit," a site on the beach side of the road just downhill of the drum area. "It appears that it's migrating down toward the inlet," state environmental specialist Ann Marie Palmieri said this week.

Used as a de-greaser and commonly employed in dry-cleaning operations, perc is considered the most poisonous of the chlorohydrocarbons used as solvents, according to the U.S. Environmental Protection Agency. Momentary exposure causes lightheadedness and prolonged contact can bring hepatitis and liver failure.

The perc at the tank farm doesn't pose an immediate health threat, and is behind high levels of benzene as the Army's top priority. "It's significant because it's above our cleanup level, but it's not what we'd consider that screaming," Palmieri said.

A site near farm's largest tank -- also the tank closest to Lutak Inlet -- registered 370 parts per billion of benzene, compared to a cleanup level of 5 parts per billion.

"That is significant," said Palmieri, noting that three other test sites across the road and immediately downhill of the tank registered levels 2.1, 14 and 170 parts per billion. "It's continuing to migrate."

Benzene is considered a bigger problem partly because unlike perc, whose soil source has been located, its origin can't be pinpointed.

Wells that have found it are at the foot of a groundwater stream 100 feet wide or larger -- called a paleochannel -- that flows toward Lutak Inlet on the facility's north side, mixing groundwater from a large area.

According to the recent figures, samples from surface groundwater upwellings in the same area show total fuel contamination in water at concentrations almost 10 times the cleanup level.

"We're looking for the soil contamination, where is all that benzene coming from? It could be in many different places because the groundwater goes right through it," Palmieri said. "We have to find it."

One suspect location is the farm's manifold building, which acted as a switching station, sending fuel to different locations. Wells drilled around the building last month brought up tens of gallons of loose fuel, apparently held in underground pockets there.

The fuel choked the filters of the farm's soil-cleaning vacuum system, shutting it down at least a month until a fuel separator is added and carbon filters its uses are retrofitted for higher concentrations of fuel.

Randy Katzenmeyer, who operates the vacuum, said high concentrations of fuel there coincide with rumors that the pipeline system around the farm routinely was purged at the manifold when changing between types of fuel during operation. "There seems to be quite a bit of fuel around there."

Also requiring attention will be effluent from a culvert observed discharging contaminated groundwater into a channel leading to Lutak Inlet, beyond the reach of on-site drainage control.

"Some manner of interim drainage management should be considered to control

the migration of contaminated water," according to the recent report. The location of the upwelling should be studied to see if it suggests a location of a contamination source, the report said.

Identifying holes in research done so far will be addressed in a sitewide management plan to be created by federal and state regulatory agencies, as will the next step in the cleanup process.

But the Army will first work on developing alternative clean-up levels, Palmieri said.

Information including a Tlingit-Haida subsistence study left out of a recent risk assessment will be folded into the work, as will calculations aimed at allowing a higher cleanup level. "They'll try to get a site-specific cleanup level," Palmieri said.

The next meeting of the local restoration advisory board is set for April 13. Turnout at the meetings has been low, Palmieri said.

The Army was unable to provide a response to questions about the recent report, including how it would affect the overall cleanup plan and whether the unlocated contamination would have to be found.

-----Original Message-----

From: Grant, Drew
Sent: Tuesday, December 28, 1999 3:34 PM
To: Palmieri, Anne Marie
Subject: RE: Haines Fuel Terminal figures

Hey, thanks AMP!! I opened these earlier in the day.

Do you have the newspaper clips that I saw too?? I can't find them now...if you have them electronically would you forward them too? Thanks -- all for now, more later -- drew

-----Original Message-----

From: Palmieri, Anne Marie
Sent: Tuesday, December 28, 1999 10:32 AM
To: dgrant@envircon.state.ak.us
Subject: Haines Fuel Terminal figures
Importance: Low

<< File: fig5.PDF >> << File: fig2.PDF >> << File: fig3.PDF >> << File: fig4.PDF >>
<< File: fig1.PDF >> Drew - here are maps with sample results for the Haines Fuel Terminal spring sampling event conducted by the Army Corps of Engineers. The surface water contamination is mostly from on-site (inside the fence)seeps, however there is contaminated groundwater migrating off-site into the Inlet. The COE took another round of samples in October and should release those results in the next month or so. Let me know if you have questions. Anne Marie.

-----Original Message-----

From: DPW Envrn Env Prot (Marsh, M)
[\[mailto:MarshM@richardson-emh2.army.mil\]](mailto:MarshM@richardson-emh2.army.mil)
Sent: Wednesday, August 25, 1999 8:16 AM
To: 'Palmieri, Anne-Marie'
Cc: 'TeVrucht, Mollie L POA02'
Subject: FW: figures
Importance: Low

For your files!!!

Thanks, Melody

-----Original Message-----

From: TeVrucht, Mollie L POA02
[mailto:Mollie.L.TeVrucht@poa02.usace.army.mil]
Sent: Monday, August 23, 1999 9:01 AM
To: 'marshm@richardson-emh2.army.mil'
Cc: 'C Fosbrook'; Floyd, Christopher B POA02
Subject: FW: figures

Mel - Here are PDF versions of the Haines figures that Paige prepared.
Perhaps they would be useful for Anne Marie.

Mollie

-----Original Message-----

From: Paige R. Peapples [mailto:peapples@crrel.usace.army.mil]
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<<mailto:Mollie.L.TeVrucht@poa02.usace.army.mil>>
Subject: figures

<<fig5.PDF>> <<fig2.PDF>> <<fig3.PDF>> <<fig4.PDF>> <<fig1.PDF>>

Mollie,
Here are the figures.
Take care!
Paige