

**Site Visit and Council Meeting Summary**  
**Kipnuk**  
**October 30, 2009**

**Participants**

George Kalli – EN-CW-PF

Greg Carpenter – EN-ES-SG

George and Greg traveled to Kipnuk to get feedback from community and tribal members regarding the potential installation of barge mooring points there. After arriving in the community at 10:00 they met with tribal council members Jimmy Paul and Dan Mann. This meeting slowly turned into a council meeting as additional members of the council joined the conversation. A sign in sheet for this meeting follows this summary. Following the council meeting, Greg and George visited the potential mooring point installation sites before traveling to Bethel and returning to Anchorage. Following is a summary of this site visit and council meeting. Photos from this site visit may be found at O:\EN\Public\CW\0 CW Projects\Denali Statewide Barge Assessment\Community Specific Files\Kipnuk\Photos

10:00 Meeting with tribal council members Jimmy Paul and Dan Mann;

- The staging area proposed in the barge assessment report is slightly downstream of the existing site and the gravel road that allows transport of heavy materials from the barge landing. It also should be noted that the road shown in the report that connects to the staging area goes to a boardwalk that is not capable of handling heavy loads. It seems that a third mooring point installed in this area could allow mooring at the current and future sites.
- A new consolidated tank farm east of the current tanks is to be constructed by the Denali Commission. The Phase I study was completed by LCMF. Paperwork is currently being completed for Phase II. The proposed tank farm is located adjacent to the river (set back 680 feet) in an area of high erosion estimated as 9 feet per year in the Baseline Erosion Report.
- A portion of streambank near the cargo barge landing site [REDACTED] has been protected from erosion with rock since 1993. During that time about half the length that was protected has failed.
- [REDACTED] a 50 year project life would require a setback from the river of over 500 feet. The proposed tank farm is located outside of the Corps predicted 50 year erosion band at 680 feet inland from the river.
- Any mooring points we install at the fuel site should be set as far back from the river as possible. We should get back in touch with Crowley to confirm how far back is doable from their perspective.

- According to the LCMF Phase I report it is estimated that the streambank will be within 100 feet of the tank farm within 50 years. It also stated the design life of the tank farm is 30 years. It was not noted when the fuel header would be impacted by erosion but the current fuel header requires moving back every few years according to locals.
- Susan Wilson from Duane Miller and Associates came to Kipnuk last winter and spoke of 'seawall' construction. This may have been part of a hazard analysis for the community. We expressed the opinion that if they have not heard anything further about the project that they should not count on such a construction project occurring.
- According to Jimmy Paul, the Tribe owns all the needed real estate. Lot 1 is corporation land. Lot 2 is USFWS land. The tank farm and barge landing sites are owned by the Native village.

10:50

By this time several additional community and council members joined the discussion. From this point on the meeting was considered a public meeting.

- The vice president (VP) of the council (Tom) did not think that the piles would stay in the ground until he realized that they would be inland and not along the streambank. The VP was formerly a barge operator for Foss.
- The VP is concerned that the mooring points will allow barge companies to negatively impact more tundra. He would not want to allow barge companies to use mooring points until an improved staging area is constructed.
- The VP stressed that the barges currently offload off the front of the barge, not the side, so the mooring points may not be too useful. We stressed that our recommendations were based upon discussions with the barge companies and that they would be prepared to offload over the side if the mooring points were installed.
- Upon these clarifications, the VP felt that mooring points may be warranted at the fuel offloading site.
- The proposed access road to the proposed staging area in the barge assessment report leads to a boardwalk. It needs to be directed east to the current road to the staging area.
- A community could choose to pass a resolution in favor of just the mooring points at the fuel site and a complete staging area and mooring points at the cargo site. Alternately, a third mooring point could be installed at the current cargo landing site to facilitate the current use of that site. It might be easier to justify the funding of a staging area in this location if the mooring points are already

installed. Tom asked if the third mooring point could be installed to 35 feet since it is close to a slough and may be in softer soil.

- It is important to ensure that the fuel barge tie off lines do not conflict with the fuel lines that run parallel to the river.
- It was verbally confirmed that the village owns all the needed land for the mooring points.
- We explained the schedule to get the mooring points installed. We plan to execute a contract for construction in December. This would require a resolution from village by the end of November.
- It was discussed that STG has a smaller hammer here than in some other communities. STG was still confident that they could accomplish the job. During our visit they were driving piles at the school.
- We were asked whether the village will own the mooring points once they are constructed. Will they be able to control their use (including preventing their use) and/or charge for their use? They currently charge for docking. We offered to follow up on this question with the Denali Commission and get back to them.
- George offered to provide Kipnuk with information regarding the CAP erosion program.

11:25 George and Greg inspected the cargo barge landing site.

- This site is located along the river adjacent to the mouth of a small slough. There were many skiffs moored along the banks of the slough. A gravel road leads to the site near the mouth of the slough and allows the transport of heavy loads into the heart of the Village.
- We were informed that gravel to improve the airport will be offloaded downstream about 750-1000 feet of the current site (near the "boat on the hill").
- There is a fuel header near the boardwalk behind the proposed staging area for the washeteria. This header may not be replaced by the planned consolidated tank farm.
- We observed piles being stored here but it was difficult to determine what project they were for.
- Current practices to offload here involves coming in the slough parallel to the road and offloading off the front of the barge.

- Three mooring points seem to be appropriate here.
  - One near the slough amongst the skiffs currently there and back ~~at least~~ 150-250 feet from the river.
  - One inland from the currently eroding embayment and back ~~at least~~ 200-300 feet from the river.
  - One 125 – 150 feet downstream of the one above and about the same distance from the river.

11:45 Greg and George inspected the stretch of river bank protected from erosion.

- Small rock was used. The rock is in a bad condition with much filter fabric exposed but it has effectively slowed erosion as evidenced by the erosional state of the adjacent streambank. About half of the project has failed (all of the upstream section the once extended up past the small island in the photo).
- In subsequent discussions we learned that there used to be additional rock along the bank upstream of this area but it eroded away.

11:55 We returned to the tribal council office where we hand drew 3 proposed mooring points at the cargo barge landing site on a roll-out map and got agreement from the VP and the remainder of the council members present. The VP recommended going down 35 – 40 feet with the pile near the slough at the cargo landing site. He also suggested that it might be best to shift the staging area slightly upstream and direct the access road to the existing road.

12:15 Greg and George inspected the fuel offloading site.

- One header's pipeline parallels the river bank back into the village. This is a potential conflict with barge mooring cables that must be considered.
- Low overhead power lines are also a potential difficulty during installation.
- There were numerous fuel tanks scattered about this area and it was hard to tell which ones were in use and which ones were abandoned.
- Three mooring points seem appropriate at this location
  - One on each side of the white tank farm as far back as possible (in the vicinity of power lines).
  - Third mooring point upstream of the other two closer to the adjacent slough (near power pole). These distances need to be confirmed with Crowley to see if they can use something that far from the river.

12:30 We returned to the tribal office and discussed the potential conflict with the fuel line parallel to the river bank. To avoid this conflict, it was suggested that instead of buried piles we install above ground dolphins/bollards 3 – 4 feet above ground. The community members present did not have any safety concerns related to above ground

structures if reflectors were placed upon them. It was agreed that we should consider use of this construction method at both locations.

**Insert photos and map**

We departed at approximately 14:30 and returned to Anchorage that evening.



**NOTE:**

1. ALL PROPOSED NEW DEVELOPMENT IS PRELIMINARY PLANNING LEVEL ONLY. ACTUAL FACILITY/IMPROVEMENTS LOCATIONS, LAYOUT, DIMENSIONS, ETC. WILL REQUIRE SITE VISITS/INVESTIGATION TO DETERMINE SITE CONDITIONS, PROPERTY OWNERSHIP AND OTHER INFORMATION NEEDED PRIOR TO FINAL DESIGN.
2. A DETAILED STUDY OF EROSION AND SEDIMENT TRANSPORT IS NEEDED PRIOR TO FINAL DESIGN.
3. PERMAFROST IS ANTICIPATED ONSHORE AND OFFSHORE. ONSHORE, PERMAFROST MAY BE UP TO 3/4" THICK. THE DEPTH TO PERMAFROST IS EXPECTED TO INCREASE OFFSHORE.



PROJECT NO.	08293108
DATE	07/29/08
PROJECT NAME	
CLIENT NAME	
SCALE	
DATE	
PROJECT #	0
<b>E20</b>	

**KIPNUK  
KUSKOKWIM RIVER DELTA**

**AERO-METRIC**  
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FIELD DRIVE ANCHORAGE,  
AK 99501-4116  
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10/30/09

KIPNUK COMM. MTNG.

SIGN-IN SHEET

<u>NAME</u>	<u>AFFILIATION</u>
GEORGE KALLI	US ARMY CORPS OF ENGS
GREG CARPENTER	US ARMY CORPS OF ENGS.
James Mesak	KTC.
Paul J Paul	KTC
THOMAS J HANDLEY SP	KTC
John L Amik	KTC
Samuel J. Carl	Kipnuk Light Plant
Jimmy Paul	Tribal Admin.
DANIEL MANN II	TRIBAL OPERATIONS



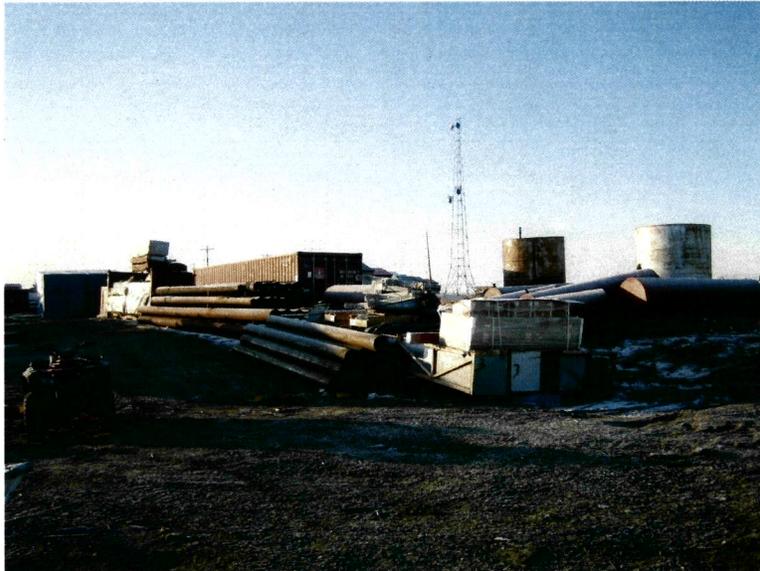
Current landing site looking west (downstream)



Current landing site looking southeast



Current landing site looking east (upstream)



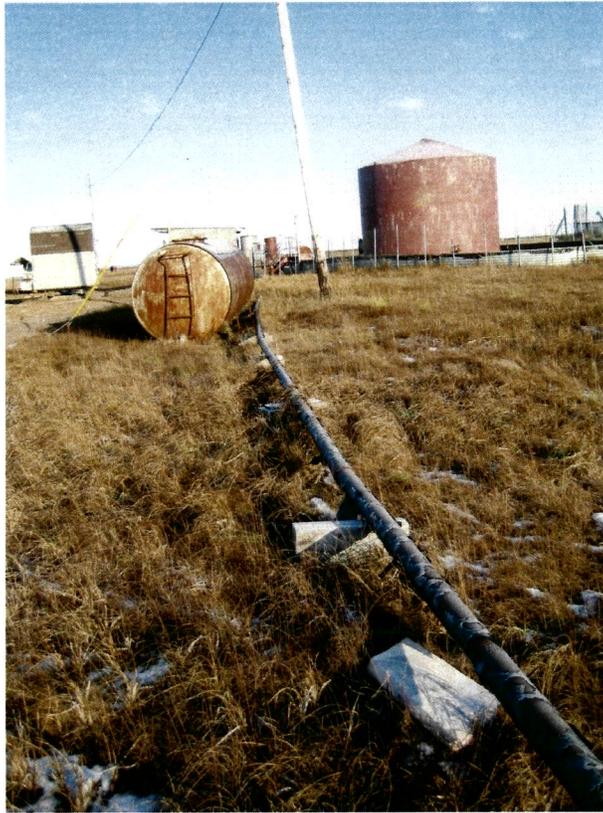
Current landing site looking south – note compacted access road



Current landing site looking west (downstream) toward proposed landing site



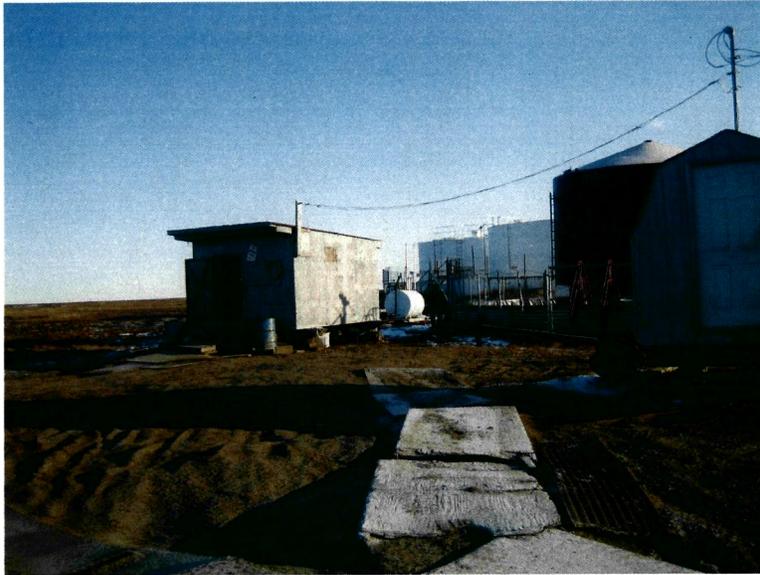
Boardwalk behind landing site



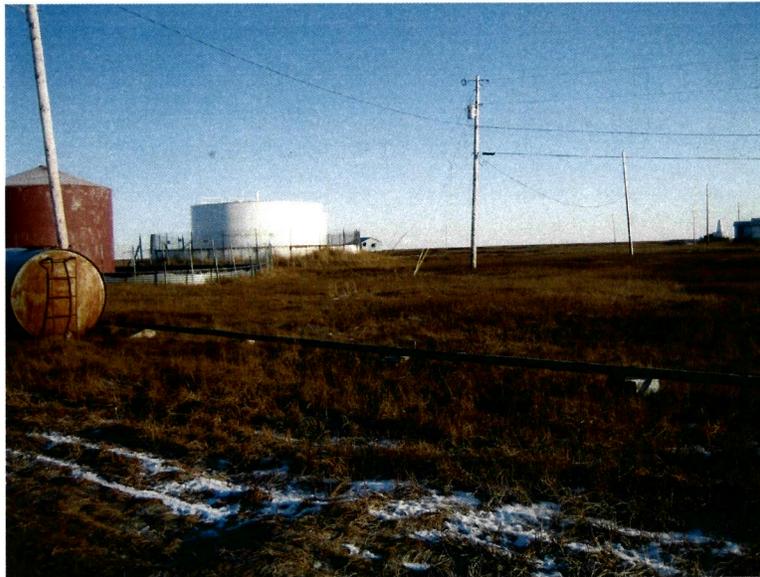
Pipeline paralleling riverbank at fuel offloading site



Fuel offloading site



Fuel offloading site



Fuel offloading site