APPENDIX E

COPIES OF FIELD NOTES
June 23, 2015

-travelled to Newton -> RAVN AI
- Anch -> Bethel -> Newton
-long 3 hr delay in Bethel due to weather.

-Arrived Newton around 4:30PM
- Ramirez met us at airport
- and took our bags to the school when we were staying

-Picked off bags and then went to meet the Council who were having a meeting.

Kenny
Paul
Bernice
Tom
Lisa
Kathleen
George

Noli Silver 316;16

-Introduced ourselves and the project. Most of the concern was over eventual cost of clean-up.
- Discussed contaminate soil removal - winter excavation and stockpile till summer for haul-out.
- Asbestos most likely in floor tiles of older building, lead paint in older house, possible for local labor to do work, hazardous training.

-Agreed to meet with Tom John at the NVE office tomorrow at 9:00, try to visit some houses

-Meet with Steve & Joe at high tide this evening - take to landfill. Will get out at the school.

Jeff: I walked around
Identified tank farms on northern end of village.
- Almuy - no sign of excavation
- Checked out the BIA school - boarded up, had been broken into in the past. Looks to be in rough condition.

There is a dump site with bags of garbage in yellow bags near BIA school.

Met Grant Kashatok, principal of school. He opened the library for us to sleep in. Let me use his computer for emails. Our phones don't work here.

Grant's # 237-6012

8:00 pm - Steve came to get us and he & Joe took us to the landfill by boat.
AIA School - 60's to mid 80's
New school burnt down 1984
Used AIA School - New school rebuilt - 2000

- Old dump ended into Mystic R.
  1960s - 1980s. Turn used current landfill.

- Depth to permafrost approx 1'

Stanley Tom came by as we were looking at tank farms.
He said his white tank not used anymore - heating oil.
10,000 gallon. Other tank 1000 gallon also heating oil.
Only tank in use. All tanks behind Tom's store empty - have been for several years.


- Generator shed
- Transformer - 1 of them, could not read label for identifying information. Too used, even with tape here.
- Started at North end of village and worked our way south.
  - UFC tank farm
  - NTC tank
  - NUC tank farm
  - Bagged waste
  - Washetera pipeline/building

6/25/2015
- Newton's school tank farm
- Generator repair
- HUA
- Stokes shed
- Lagoon

- Missed our plane 3 hours earlier and we didn't know.
  We were able to catch afternoon plane for nice chat with Grant.
Newtok - 6/23-25  J.P.
UTC Tanks, Photo 1

72m NE 5W 170E W6' 
File of dump day before we arrived
burned much of the dump residues are
mixture of cans (tin & aluminum) drums,
ski-doos, appliances, fluorescent bulbs,
aerosol cans, motor oil, automotive
cleaners solvents,
Joe & Steve I GHP Reps in Village
who took us to the dump.

School has 2 - 30K gallon tanks
and separate power generation conex
Tanks are steel in fair good condition
Secondary containment, SW corner of
Containment in substandard condition
Kitchen vent may have ACM

Tiles in Bathroom
Kitchen tiles
False Ceiling Panels
Wooden piles underneath school have
1-2" and 1-3/4" PVC pipe on each
pipe for permafrost retention
Photo 3259 1500 gallon steel AST on
SW corner of school. Has fuel dispensing
hose

School bldg on 96 wooden piles
Non treated/untreated
Fuel storage containment area has
250 barrels in poor, fair, good
condition. Barrels contain waste oil/drain
oil and waste glycol. Joe & Steve I GHP
said waste oil burned @ school from time to
time.

Old BIA School 1949-? - mid 80's
New School mid 80's to 1994
New School burned down 1994
Old BIA School used 1994 - 2000
Current School built 2000
Prienda told us when BIA school in operation
1959 - mid 80's Village trash incinerated
ash buried by lake

Current dump used since ?
Previous dump used between ?
Current & previous at the same time?
Ash burial locations of incinerated material

Generator for village power heavily stained
w/ oil beneath footprint of shack 20' x 30'
old generator motor each at southeast stained
area.
Big Blue Storage Tank W of Washeteria 211,000 gallon, S-foam insulated 20K tanks (white) north of 211K gallon tank. None in use.

Old BIA school on 45 creosote treated piles. Water supply well in approximate center of Bldg.

Generator for Old BIA on 24' creosote treated piles.
Old BIA tank farm on wood beam platform w/creosote treated beams that are subsiding 92' N-S by 64' E-W. Look N-NW.

Soil pile NW → N

15k 7k 12k 8k 10k 6k 7k 8k 5k

Storage in BIA tanks gas & diesel

10m's Store Tank

2x 6.3 x 13.1' = 3k gallon
2 - 10K gallon heating oil? tanks
Between 2 - 10K tanks ponded water w/sheen approximately 10m²

2-500 gallon AST For Gas
1-1000 gallon AST For Diesel

1000 gallon heating oil fuel rest in disuse

Marathon Electric Generator KW 100
KVa 125

Volts 490
Amperes 150 60HZ 3-phase

John Deere 3506ST 35600G

Power Generation AST's
Smaller Tanks 2 - 1/2'H x 1/2'W
NW 43'E-W

54' N-S

Larger 18'H x 12' Diameter Secondary Containment has ORP Liner on Wall containment. Geotextile on ground
3. Vertical PVC Tanks
13.5' H x 10.6' Diameter 9K gallon tank
Secondary Containment 5W

Horizontal PVC Tanks
2 - 10K gallon
1 - 5K gallon

BIA School Incinerator Ashes buried from 1963 to mid 1980's, in addition to BIA materials burned. Villagers garbage burned as well. The number and frequency of villagers burn of garbage not known. Dump that eroded in 1995 was primary location of refuse disposal from early-mid 1960's to mid 1980's. Current dump site mid 1980's to present.
BIA school 1st, followed by some residents until previous village location vacated.

- Current fuel delivery and terminal set up installed in early 2000's. Crash set up after barge got stuck in Kealakekua channel NE of Village.
- Washeteria Discharge line into lagoon not function due to differential settle mark of steel piles.
- Tom Paul estimated depth to permafrost @ 1' below surface
School Tanks 40k gallon tanks 15' H x 24' Diameter Fair Condition Secondary containment wall in poor condition. Differential Settlement Tanks on preserved wood platform at grade Inner portion of containment has waste oil storage drums. Staining associated w/ minor spillage/releases evident on vegetation inside containment and on wood platforms. 

Eastern tank has differential settling Exposed portions of liner on ground should be assessed further.

Cummins Diesel Generator Engine serial # 60275265 Model QSB
Mech Date 12/19/13 Power Model # 05GAB-470644
Serial # A110181445
KVA Base Rate 178.8
Kw " " 143
60 Hz
1800 RPM
480 Volts
3 Phase

Running
Open
KVA
125 Standby
100 Prime
112.5 Kw / 90 Prime 60 Hz
480 Volt

Generator on Wooden Pile Platform. Generator contained within Contex. Floor is clean operation inside tanks clean
Fence is approximately 28' offset from lagoon. Lagoon has a liner exposed on NW side.
Date: 6/23/2015  Auditor: AP/TP  Facility or Location: LANDFILL

Description of Facility/Location: Bandwells from river to dump. Some muddy but mostly open. Grasslands/Wetlands surrounding. No infrastructure near by.

Photographs (number and description):

55 - 78

Storage

Hazardous Materials Present: Metal cans, plastic bottles, e-waste, oil drums, appliances, stoves, refrigerators, metal frames, vehicle parts, trash in plastic bags, furniture, construction materials, snow machines, ATVs, fluorescent balls, aerosol cans, oil, auto cleaner, solvents

Storage Container(s) description (steel thickness, residual sludge):

N/A

Condition of storage container(s):

N/A

Size/volume of storage container(s):

N/A  Full/partial/empty?

N/A

Labeling:

N/A

Secondary Containment? N/A  In Use? N/A

Notes:

- garbage piled 4 - 6' high
- recent fire burned through landfill & surrounding. don't know who started it but burned for several days before our arrival.

Steve & Joe - IGAR -
- used since 1990s. Former dumpy ended into Nigglek R.
- used to dump used oil in old dump, discovered at landfill.
- collected used oil at school - school has oil burning unit.
- some indiv. use oil as lubricant.
- landfill not closed off in any way. No control over who dumps what, wind blows stuff away.
Evidence of leaks or spills? Description and size of impacted area.

Staining on floor:

Condition of Vegetation: burnt from fire - immediately next to landfill - otherwise healthy grasslands.

Soil staining:

Sheen on Standing Water: no water

Notes:

Buildings

Age: 

Building Material: 

Use: 

Fluorescent Lights/Ballasts? 

Heating oil tank? 

ACM?

Paint?

Electrical Transformer:

Serial Number:

Notes: Steve & Joe cant.

- Burn box not used much
- Clinic handles own medical waste, only non-medical waste to landfill.
- Wanted to collect e-waste for haul to Anchorage - stored at side of landfill, burned and damaged?

Interviews:

- From oil removal from appliances, snow machine
  - Stored in hay, material shed behind NRC building. Free: Total Reclaim, Anchorage. Oil shipped out when possible.
- Had contest for school kids to gather trash, paid per volume, from around village. Put in yellow trash bags stored across river, waiting to haul it all to landfill.
  - Some other trash bags mixed in as well.
Date: 6/24/2015  Auditor: Al/An

Facility or Location: Old B1A School.

Description of Facility/Location: Buildings: school, warehouse, well house, outdoor basketball court, Tank Farm. Abandoned above ground piping leading to Tom's Store tanks? North.

Photographs (number and description):
  123-134  142  159

**Storage**

Hazardous Materials Present:
- Tank empty, creosote on wood pilings and on wall in tank farm. Contaminated soil in tank farm.

Storage Container(s) description (steel thickness, residual sludge):
- A6ST - vertical, on wooden pallets.

Condition of storage container(s):

Size/volume of storage container(s):
- $2 \times 15,000$, $2 \times 10,000$, $1 \times 12,000$, $1-8,000$

Full/partial/empty: $\bigcirc$

Labeling:
- On beam, sign referring to gasoline & diesel

Secondary Containment?
- In Use?: $\bigcirc$

Wood beam lined with sheet metal or inside

Notes:
- Fenced.
- Wellhouse - possible fiberglass insulation around pipes. Strong chloroform smell. Treatment system, holding tank.
- Tank farm - soil on pallet of new tank, approx. 6' x 12' x 1' thick. Grass growing on top, sites on plastic, cont soil referred to in SHE report?
- Size - 42' North to 5 x 64' East row.
- Overgrown with grass, healthy deg.
Date: 6/24/2015  
Auditor: Ap

Facility or Location: Appliances, skidoos, staging area

Description of Facility/Location: Open dump, no controls.

Photographs (number and description): 113-117, Z70

**Storage**

Hazardous Materials Present: Old skidoos, stove, washing machines, freezers, school desks, chairs, furniture, oil drums

Storage Container(s) description (steel thickness, residual sludge):

Condition of storage container(s):

Size/volume of storage container(s): Full/partly/empty?

Labeling:

Secondary Containment? No  
In use?

Notes:

- 60' long by 20' wide at greatest width.
- According to Steve, spear and oil removed from appliances, skidoos before dumping.
- Surrounding a mix of grass, mud, healthy veg. No sheen on surface water.
Date: 6/24/2015  Facility or Location: Tan's Store Tanks

Description of Facility/Location:
Located between Tan's store and Newton Rd - close to twin tanks.

Photographs (number and description):
135-140  143-144

Storage

Hazardous Materials Present:

Storage Container(s) description (steel thickness, residual sludge):
2 x 10,000 - I says stove oil, I says diesel written in spray paint.
Condition of storage container(s):

Size/volume of storage container(s):

Labeling:

Secondary Containment? None

Notes:

- 2 x 3000 gallon tanks - one on wooden cradle.
- Black plastic - liquid collected under paint could degrade to veg. Surrounded by cut up oil drums.
- 2 x 500 gallon - 1 x 1000 gallon.
- All tanks now empty per Stanley Turn-out of service for several years.
- Between 10,000 gallon tank ponded water with sheen about 10 sq. ft. in area. Some stranded veg near standing water. Rest of veg tall, healthy.
Date: 6/24/2015   Auditor: Ari
Facility or Location: BIA House

Description of Facility/Location:

Family house built in 1970s by BIA.
Tom John's mother's house.

Photographs (number and description):
153-158 outside: 287

Storage

Hazardous Materials Present:
Possible ACM, lead

Storage Container(s) description (steel thickness, residual sludge):

Condition of storage container(s):

Size/volume of storage container(s):

Labeling:

Secondary Containment?

In Use?

Notes:
- Flooding a mixture of old and new tile. Could be ACM.
- Entryway extended by Tom's father in 1960s. Paint peeling from ceiling. Possible lead paint?
Date: 6/24/2015   Auditor: A.D.   Facility or Location: Bagged waste holding area

Description of Facility/Location:

Photographs (number and description):

Storage

Hazardous Materials Present:

Unknown, SLS mostly household items.

Storage Container(s) description (steel thickness, residual sludge):

Plastic garbage bags

Condition of storage container(s):

Most material in bags, some spilling out or dumped alongside pile.

Size/volume of storage container(s):

Full/partial/empty?

Labeling:

Secondary Containment? None   In Use?

Notes:

School kids gathered trash from around the village in the area. Stored in yellow trash bags along with other trash bags on Newton side of river near old BIA school. Needs to be hauled across the river to the dump.

- Vegetation healthy, no standing water.
- General area where old trash burning occurred, according to Ron John.
Date: 6/23/2015
Auditor: A.D.
Facility or Location: Army

Description of Facility/Location:

Building / Storage tank

Photographs (number and description):

50-52, 285

Storage

Hazardous Materials Present:

Healthy oil tank - 1500 gallons

Storage Container(s) description (steel thickness, residual sludge):

Double walled?

Condition of storage container(s):

Good

Size/volume of storage container(s):

Full/partial/empty?

Labeling:

Labeled

Secondary Containment?

In Use?

Notes:

- Check for signs of former excavation of contaminated soil.
- No evidence - not exactly where excavation took place.
- Vegetation healthy.
Date: 6/24/2015   Auditor: HP/JT   Facility or Location: Power Generation Building

Description of Facility/Location:
Marathon Electric generator - diesel
Wood building or wood sheds

Photographs (number and description):
96-97    163-164
100-106

Storage

Hazardous Materials Present:
Oil, diesel

Storage Container(s) description (steel thickness, residual sludge): N/A

Condition of storage container(s):
N/A

Size/volume of storage container(s): N/A   Full/partial/empty?

Labeling: N/A

Secondary Containment? N/A   In Use?

Notes:
- lots of oil staining below building 20' x 30'
- stained veg at building
- old gen set motor - 6' x 15' area soil staining
- debris in yard: empty oil drums, wiring, construction materials, electrical conduits
- electrical generation for village except for the school.
Description of Facility/Location:
Storage shed in back. Frieda Carl showed me where it was.

Photographs (number and description):
107, 108

Storage

Hazardous Materials Present:
- batteries, old paints, fire extinguishers, degreasers, soda cans, cardboard, insulation, gas containers, sewing equipment, insulation wrap in foil, kerosene, solvents, oily rag container

Storage Container(s) description (steel thickness, residual sludge):
Shed - 15 x 15 wood plywood. Door off, some materials close to falling out doorway.

Condition of storage container(s):

Size/volume of storage container(s):

Labeling:

Secondary Containment?
Partial - shed wall, no door

In Use?

Notes:
- Waste stored haphazardly in shed. Combo of recyclable & hazardous. Some on shelves, some piled on floor
- Vegetation surrounding shed healthy. No standing water
- Frieda Carl: collected these materials to transport out of village for disposal but costs too high.
- Garbage burning at old SIA school and buried where trash bags now stockpiled. May have also buried trash and ash near a lake in the past. Near airport?
- Drinkable water: washeteria - piped from pond and treated. Some from Mactanik. Some from snow & ice. School well.
Date: 6/24/2005  
Auditor: JF/JP  
Facility or Location: UPC Tank Farm

Description of Facility/Location: Tank Farm

Photographs (number and description):
150

Storage

Hazardous Materials Present:
Diesel fuel

Storage Container(s) description (steel thickness, residual sludge):
5 A 651 - 1 Nor. C. 15 use - picture of Jeff touching it
15,000

Condition of storage container(s):
Top 7/3 of 10,000 gall. tanks rusted.

Size/volume of storage container(s):
2 x 10,000, 3 x 15,000 - all diesel

Labeling:
Signage for tank farm - safety

Secondary Containment? In Use?
Yes

Notes:
- Wood being covered with black plastic liner
  Liner torn in some places.
- Salt on wooden boards - some broken - not treated
- Standing below fill spout
- Vegetation good
- Tank farm on a rise about 5' higher than river.
Description of Facility/Location: Tank farm in 3 separately fenced areas.

Photographs (number and description): 47, 49, 147-149, 185-205

Storage

Hazardous Materials Present: Diesel, unleaded gas, heating oil, creosote treated platforms

Storage Container(s) description (steel thickness, residual sludge):
6 ABST

Condition of storage container(s): Good

Size/volume of storage container(s):
Vertical Area 1 - 2 x 9000 gal - heating oil
Area 2 - 1 x 9000 gal - gas - unleaded

Labeling:

Secondary Containment? - 3' high wood beam, covered with heavy plastic

In Use? Good condition

Notes:
- Horizontal Area 3 - 2 x 10,000 gal gas, 1 x 5000 gal fuel oil, 3 oil drums empty, plastic containers
- Vertical tanks sitting on creosote treated wooden platforms.
- Healthy veg.
Date: 6/24/2015  
Auditor: A91JP  
Facility or Location: NTC Tanks - Stony Town

Description of Facility/Location:  
2 tanks

Photographs (number and description):  
46, 48 179-184

Storage

Hazardous Materials Present:  
Heating Oil

Storage Container(s) description (steel thickness, residual sludge):  
2 AcST

Condition of storage container(s):  
Good

Size/volume of storage container(s):  
10,000 gallon double walled - no longer used, heating oil - past.

Labeling:

Secondary Containment?  None  
In Use?

Notes:  
1000 gallon on wooden crate covered by black plastic.  
10,000 gallon sitting on ground.  
healthy veg.
Date: 6/29/2015  
Facility or Location: Washeteria

Description of Facility/Location:
- Inactive Water Treatment Facility
- Building approx. 30 years old.

Photographs (number and description):
280

Storage

Hazardous Materials Present:
- Chloride, propylene glycol stored in labelled containers

Storage Container(s) description (steel thickness, residual sludge):

Condition of storage container(s):

Size/volume of storage container(s):

Labeling:

Secondary Containment?  
In Use?

Notes:
- About 30 year old. 6 warden, 4 diger. Not in use as pipeline to usage broken, diger do not work with transformers.
- 30 gallon plastic drum - stored propylene glycol.
- Use chloride in water treatment.
- Water Treatment Center -原型 in water from ponds near airport. Treat. - full sprout outside for use by village.
- Blue storage tank 211,000 gallons. 5 New white tanks.
- 20,000 gallon each - foam insulated, not in use.
Date: 6/25/2005  
Auditor: 19639  
Facility or Location: Newtok School  
Tanks

Description of Facility/Location:
Tanks
Individual tanks, drums in tank farm

Photographs (number and description):
82-84, 87-94, 209-210, 212-213, 220-221, 229, 243-245, 249-250, 267-268

Storage

Hazardous Materials Present:
diesel, heating oil, creosote treated

Storage Container(s) description (steel thickness, residual sludge):
50+ drums - labelled: paint thinner, mixed waste, waste oil, dirty water waste, used glycol. Some empty? Some partial, some full.

Condition of storage container(s):

Size/volume of storage container(s):
Tanks - 7 x 40,000 gallon - heating oil
- Sat on treated wood pallets

Labeling:
- Above ground fuel line past sewage lagoon then underground.

Secondary Containment?
In Use?

Notes:
Tank Farm
- Chain link surrounds tank farm, needs repair.
- Standing on and below platforms.
- Soil standing/strewn veg, 6'x36' area in SW corner
- SE corner - most staked water, strewn veg.

Tanks
- 3-250 gal tanks on cradle, metal containment boxes, heating oil
- 1-2000 gal tank by corex - diesel, strewed veg
- 1-1500 gal tank at South end of school build
Date: 6/25/2015  
Facility or Location: Neustik School

Description of Facility/Location:
School building, pump generation core, HVAC building, storage & mechanical sheds.

Photographs (number and description):

Storage

Hazardous Materials Present:
ACM, fluorescent lights,
Storage shed - gas & oil containers, supran cansisters, invasion.

Storage Container(s) description (steel thickness, residual sludge):
Storage shed - lead waste oil burning unit.
- four "empty" drums outside

Condition of storage container(s):

Size/volume of storage container(s): Full/partial/empty?

Labeling:

Secondary Containment? In Use?

Notes:
- Main building - ACM in bathrooms tiles, kitchen tile, false ceiling, kitchen vents possible. Fluorescent lights.
- building in trailer, PVC piping for permeation testing.
- Water treatment and water well, running water in school. Wastewater/sewage to lagoon.
- lower gen. corex - 2 diesel generators, clean, no staining.
- HVAC - clean - discharge to river bank.
- Lots of construction debris alongside storage shed and between shed and corex.