APPENDIX G

Compiled Interview Logs

ARCADIS Design & Consultancy for natural and built assets

Interview Log

Installation: Aberdeen **State:** MD

Gupta

Date/Time: 05/21/18, 2:30 PM
Interviewer(s): Ankit Gupta, Katie Barry, Suzanne Eckel, Heather Pollinsky.
Other Attendees:

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
Steve McClung	Chief, Threat Detection + Syst. Surv. GSB	15 yr	10 yr	Env Comp, 2001-2008	278-4074	
Brian Connell	Range OP's Spec	16 yr	14 yr	APG EV	278-2215	
Travis Tracey	Chief, Safety Process Improvement Div	18 yr	3 yr	Safety Specialist 7 yr	278-0489	
Nick Carr	ATC Safety Spec. Fire Marshal	1.5 yrs	1.5 yrs	N/A	278-3249	
DAVID GOAD	ATC Environmental Div Civilian	22 yr	17 yr	N/A	278-2051	

Potential Areas of Potential Interest Discussed

Kelsea Tracey	ATC Environmental contractors	6 yr	6 yr	N/A	278-5759	

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General Knowledge Discussed

- Steve (Threat Protection)
  - Intermediate Fire & Environmental laboratory (6-7 years)
  - sodium bicarbonate (lab fires)
  - Handheld fire extinguishers (halon based)
  - moved to a new facility 5 years ago from another agency - MFRI

  Training facility (~1-2 year before)
  - outdoor burn pads (area under development) - 2 gravel - still there; 2 concrete < both gone → grass & gravel
  - Back 3rd is test course
  - MFRI training in coordinan with fire department
  - Building 1074 (pads).
  - Old blockhouse, structural fire training facility.
  - Anectodal information < gravel pads - vehicles fire; rail car (section of)
- Brian (ATC Range Operations)
  - Poverty Island Range
  - AAS Range.
  - Prescribed Burn Areas / Accidental fires
  - Fire department
  - Clearings.
- Travis (ATC Safety)
  - Review of foam agents exposure
  - Prior Point Range
- Nick (ATC OSHA)
  - Fire Marshall
  - Disposal facility (fire extinguishers)

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Interview Log

S. Eckel notes

Installation: APG **State:** MD

Date/Time: 5/21/18 1415
Interviewer(s): S. Eckel, K. Barry, A. Gupta, H. Polinsky
Other Attendees:

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
Steve McClung						Intermediate Fire & Env Lab (IFEL) Bldg main bldg 1074
Brian Lonfell	provide data (firing test data)					
Travis Tracey						review personnel exposure to particular agents
Mick Carr						ATC Safety occupational side
Kelsey Tracey	help w/ coord					ATC Env office

No f Airfield

Potential Areas of Potential Interest Discussed

McClung
IFEL bicarbonate/carrier compare to Halon, hand held
~5yr new facility formerly occupied by MD Fire Institute, had been unoccupied for few yrs (1-2 yrs)
MFRI had outdoor burn pads, many now removed, land regraded & redeveloped by IFEL
concrete

MFRI trained in coord w/ FD

PI 7 & PI 18 is current outdoor testing, no outdoor testing at 1074

block house used for "structural fire" scenario some gravel & concrete pads not redeveloped section of railcar left from MFRI

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General Knowledge Discussed

IFEL did not exist before ~ 2000

Cornell - provide record of tests, but not method → info on how extinguished ← FD & Airfield
planned & accidental fires → start stop → data includes type of fire
Range fires Excel files extends back to ~ 2000

Range Fires - in general keep FD away due to risk of explosions from munitions

ARL calls IFEL for firing clearance (any hazardous operation w/ an energetic) ← and everyone

H Field - accident - don't think anything used to extinguish
- Tank firing range Tanks fires at target

Carr maintanence of fire extinguishers
fire extinguisher disposal - don't know haz classes accepted may be bldg 702 on Map 4
debate about whether scrapyard took extinguishers

Goad bldgs 319 & 321 process test, etc photos for reports just for ATC historically used as far back as can remember
AA5 - talk w/ range manager, last 20 yrs testing all on pads drain to OWS
- 2 main pads
Poverty Island - 3 main pads same as AA5, shoot into vehicles rely on vehicle system, 2nd halon, 3rd water deluge
AFFF last resort administer by FD
Tank/combat vehicle fully combat loaded

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Documents Obtained

Data Gaps or Items for Follow-Up

MFRI - need lease how long

Bldg 1074 - pad details

IFEL - fire DB

ARL Airbase 3, - soviet planes engines tested/burned → 10 Airbase ranges - nomenclature nothing aviation related

5, 6 → ARL → only Airbase which might include AFFF use

agent detonation in foam Edgewood

Burn Pit Jeff, Restoration program

Brian - Firing clearance DB & photos/report crash

ECBC Env POC

list of auto maintenace facilities & test tracks

Gaylord Dennison old timer w/ ATC

Ordinance Center School

Connell

run off to Rodney creek

crash UAS test bomb ramp at Air Field
AFFF used to extinguish ~ 6 years ago
labeled of S. Ecker Map 1

Goad Jeff at O Field, not ATC

auto maintenance Facility at each test track → Perry man Muenses Churchville ATEF ← track around Airfield

Ordinance Center & School - train auto maintenance

Edgewood tests agent simulant w/foam encapsulation

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Interview Log

Pg 1/3

Installation: APG **State:** MD.

Date/Time:
Interviewer(s): ~~Adam Ballard~~ ; ~~Mike Livezey~~ Matt Blower, ~~Ado~~ Jeff Mcdonough, Amar Wadhawan.
Other Attendees:

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
Adam Ballard	Fire dep. chief	Service Jan 2014	Fire Chief @ 2 yrs	Deputy Chief 2.5 yrs	410-306-0584 adam.c.ballard.civ@mail.mil	
Mike Livezey	Asst. fire chief	Started in 1991 - 27	6 yrs.	up the ranks for Fire chief department		

Potential Areas of Potential Interest Discussed

→ Fire suppression at bldg 6010 phillips airfield
→ Storage.
→ Ji field
→ ~~ofile~~ behind the old MFRI site - might check and drive around
→ site at edgewood where burning was practiced.
→ Fire training are at the edgewood area where the ~~old~~ horse stable were. by the noble rd.

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General Knowledge Discussed

→ FTA north of the airfield
→ G-street salvage area, huge chemical dump site but may not have sprayed foam
→ One at Edgewood may be pre-
→ ABR ranges 6, 3, poverty island, Ford farm. they back up to the romney creek
→ old Casey yard - longterm vapor testing
→ talk to murphy, may be Andy murphy
→ Beach pt. , Pyrotechnics, & storage
→ ~~wet water~~
→ Hi field
→ Applied foam offsite on multiple ocassions
↳ Mullens tire fire - 1000s of gallon of AFFF for a fire - Harford County fire records
↳
→ may be the odd foam was taken to the hazard waste pit.
→ training ~~facilities~~ operation with other county fire dept. but not to ~~smoke~~ provide support.
→

→ Same fire dept. ~~but just~~ for Aberdeen & Edgewood areas. but dep

→ vehicle wash just in front of the fire dept bldg; pump flush & wash out

→ vehicle maintenance at motorpool here and at edgewood.

→ no spill response ~~since~~ for AST since 1990

→ For FTA excavation, Andy Murphy

→ Foam dump test @ Phillips airfield & at edgewood airfield

→ new MFRI opened @ 1986 - old MFRI was at phillip.

→ Adam - ~~Task~~ Action items

(1) Le to look under system for purchasing order.

Le

→ Old Merger at Edgewood. The whole tanker was empty.

(2) Firm Blaitz - Tied Field.

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Interview Log

Installation: APG **State:** M.D

Date/Time: 5/21/18 | 14:30
Interviewer(s): A. Wadhawan, J. McDonough, M. Blower
Other Attendees:

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
Adam Ballard	Fire Chief	4 years Jan 2014	2 years	Deputy Chief 2.5 Years	410-306-0584 adam.c.ballard.civ@mail.mil	
Mike Livezey	Asst. Fire Chief	26 years	6 years	[redacted] Fire response	michael.b.livezey.civ@mail.mil	23 years @ Edgewood 3 years @ Aberdeen
Ernie Little	CAPTAIN	28 y-s	1 year	FIRE Inspector	ernest.w.little.civ@mail.mil	MFRI Captain

Potential Areas of Potential Interest Discussed

- AFFF Suppress. system filling?
- Do you have order history?
- Airfield testing process?
  + Familiar w/ process?
- Vehicle maintenance areas/wash areas?
- Disposal methods?
- Spill response?

- Each

Weide Airfield

- AFFF loss from suppressions system.

-

- Storage

- Flush pumps after use
  - Motorpools for vehicle repair

Spill Response

- Would have responded w/ AFFF

-

- Foam Test @ Phillips
  + Foam Dump Test
  + Activation of Suppression was dumped into nature

+

- MFRI
  + ~~New~~ Land use
  + Old MFRI @ Phillips

- Lots of money/no concern of foam purchase.

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General Knowledge Discussed

- Tree doused w/
- Doused whatever would burn
- Noble Road Fire training (Edgewood Horse Stables)
- No memory of Foam Spraying @ G-Street
- Old-MFRI next to Aberdeen FTA

Test Sites

- Ton of foam
- Air Base Range
- Poverty Island
- Fords Farm (new) - Next to poverty island
- Out into Romney Creek.

Jeff: ~~His~~

- Old Casey Yard
  + Sealing chemical
  + Long term test

- ATC, ECBC, ARL
  FDA would provide foam and ATC would use it

- Mr. Murphy (Andy?)
  + Environmental Rep.
  + Get contact information

-

1.) Casey Yard

- Bush River (Edgewood)

2.) Beach Point Test

- Pyro facility for use

J. Field

- Tim Blades

MFRI Old (1992 - 2011)

- Old site water contamination
- Rarely used foam
- Used old FTA for training

Water treatment

- What do w/ solids
  + ~~Discharge to bay~~ No due about solids
- Discharges to bay
- Winters run
- Solids would empty into Bush river

Fire Department

- Would not do munitions
-
- Application use
- Foam stored in storage shed by Edgewood FD station, Since lost

Locations

- Building 503 (E5265)
  + Old FTA for edgewood
- Every range may have AFFF
- Poverty Island
- L-Field Rocket Sled
- O-Field Dump Site
- New O-Field
- J

Notes

- Test everything everywhere
- Any fuels used AFFF
- ~~M~~-field
  + Tanker accident
  + Likely foam use
- Incident Reports to old.
- ATC access for recon fields.
- Edgewood Area
- Plane Crash
- Have Haz waste turn in facility
- Tech Escort, DoD
-

- AFFF suppression, ask ATC? → Mr. Murphy
- Responded to aircraft crashes? APG - Mr. Murphy
- Applied foam lots of times off site
  + Mullens Tire Fire - 1000's of gallons of foam
  + Hartford County Response - Will have records.

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Documents Obtained

Data Gaps or Items for Follow-Up

- Information on newly identified areas
  + History of use.
  + Storage.
  +

- AFFF Suppression systems ATC
- Off-site response records - Harford County (Action Item)
  - Contact for Harford County Chief
- Andy Murphy for information on soil excavation
- Air Base Range 6 - Check on AFFF use.

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Interview Log

Installation: APG **State:** MD

Date/Time: 5/22/2018
Interviewer(s): Ankit, Phanda, Kate, Jeff
Other Attendees:

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
Allison O'Brien	APG Program Manager	since 1995	since 2010	contractor, CRM	410-436-3767	

Potential Areas of Potential Interest Discussed

Allison cont'd

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General Knowledge Discussed

G-Street Salvage yd

Reg Draft West Canal Creek
- Phase 4 RI - capturing data gaps, will be sent to regulators this week
- EEC producing
- will include most recent & historical PFAS data

East Canal Creek - may have some

She can send us these reports

- Has FTA
  "RCRA Facility assessment" 1989 - PA/SI - good overview - answer basic questions

- Plane Crash in G-Street

John Rolbel

~1985 woods south of G Street, Sunday morning, G-Street, Seabirt, old flying club out of Weide, woods caught fire - marked on Ankit's map, location
- Baltimore Sun, RCRA Facility Assessment, FAA records
- Ft Rucker has safety records for crashes (Hap said he will do) ☐

☐ Allison will facilitate contact w/ John.

☐ Ask FD, Chief Schulze

☐ Ask GIS if they have aerials

Beach Point

Rocket Fuel fire suppression
used water from Gunpowder R to suppress
No knowledge of AFFF storage there

Smoke Pot Plant

related to horse barn FTA
remediated since late 1990s

Building 5125

POL spill
☐ Jeff will look up

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Interview Log

Installation: ABG ARNG **State:** MD

Date/Time: 5/22/18 0800
Interviewer(s): Eckel, Barry, Stone
Other Attendees: K; King, Fedner, PD' AEC ALE AECOM, Bonnie

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
Charles Schultz		since 1982				

Potential Areas of Potential Interest Discussed

Airfield 1920
3 bldg 1940's 4040 Ground support demod & rebuilt
↓ reno 1998

took some pics of AECOM maps notes

4081 built 1977 → w/AFFF → annual test fill to ~12' capture in drain
reno 12

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General Knowledge Discussed

no known crashes for which AFFF used

operational maintenance

Livezy no burn/training on Airfield

pre 1972 Edgewood was Army Chemical center had control of Airfield

few fuel spills soaked into asphalt &/or use absorbent no washing w/AFFF or otherwise

4040 mechanical Room ~3yr ago

Livezy/Schultz recall leak of AFFF in 4040 in 1998

FD didn't see any tank on trucks corroded asked by Bonnie

nozzel testing at old stables W of Airfield was already in use in 1990's when Livezy arrived
used many solvents etc. at area

FD Causey on end of Pennisula W of airfield

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Documents Obtained

demo
4062 no AFFF
4083 " " may have had suppression but not AFFF
4057 " "

Action Items

Data Gaps or Items for Follow-Up

Drainage system from pre-2012 E 4081
Rhonda may have gotten it from Bonnie

Garrison for Airfield historical testing by Army Chemical center pre ~1970

Mj King details on 4040 leak in ~3yrago

~~FOIMFRI interview log to Bonnie/AFCEC~~ Bonnie said she has what she needs

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Interview Log

Installation: APG **State:** MD

Date/Time: 5/22/2018
Interviewer(s): James Lariviere - ARL
Other Attendees: Ankit, Rhonda, Jeff, Katie, Mark, Debbie

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
James Lariviere	Environmental Protection Spec.	NA	23 yrs		240 723 6437	

Potential Areas of Potential Interest Discussed

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General Knowledge Discussed

EF15 - 1998/1999 - put explosive in tent, put AFFF in tent, exploded on west leg of Spesutie Island.
Tony Canamy, Dawn } out of this work now, but they remembered

ballistic tent: $12K
did test 5 times
site recon scheduled for

EF12 - potential use - rumor - developed fuel ~~tanks~~ bladders (10,000 gal) → blow them up → mushroom cloud → FD on hand in case out of control; ~~no~~ ~~AFF~~ one person, remembers AFFF
Frank Thompson (James' division chief)

Fuse range - large metal pan, next to wetlands
☐ Photos of EF15 above from James (from Dawn)

Airbase Ranges 3/16 - Rurik told Jim low level PFAS detections in this area
Public Health Command samples every 3 mos., all wells on ranges (comes out of sinks); every range has 17-18 $13,000 drinking water system.
☐ James will email us most recent data

Airbase Ranges 16 & 17 - concrete pad, burns up 100', drains to tank → OWS → siphon out AFFF → disposed of as waste. Hasn't been used in past 15 yrs.

Airbase Range 3 belongs to ATC - Andy would know

Weekly AFFF on jet engines

Metal plating
Building 4100 - very small scale plating historically (prob ended early 1990s)
Dr. Matt Bradshaw told him it was chrome plating. There for maybe only 2 weeks?
☐ Ask Real Property use of this building?
☐ James will look into SOP availability

HPRM database - mostly ARL - SOP databases

- [ ] Can we query database for plating operations

Mike Stewart (HazMart) - Mark asking if we can provide MCIMs for lubricants

Firefighting foam inventory

Superfund Site & Transonic - photoprocessing facility

→ piped outside side of building, ditch

- [ ] → Jeff & Rurik heavily involved in this -

Ankit: is there database of wastes, SDSs, chemicals?

Chris Montgomery, Mike Stewart

- [ ] send James keywords for them to search

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Interview Log

Installation: Aberdeen Proving Ground **State:** Maryland

Date/Time: 5/22/2018
Interviewer(s): Rhonda Stone James Larivier, Katie Barry
Other Attendees: A. Gupta, J. McDonough, D. White , M. Ditmore

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
James Lariviere	Environmental Protection Specialist	NA	23 Years	--	240 723 6437	

Potential Areas of Potential Interest Discussed

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General Knowledge Discussed

- ABR Ranges 3 & 6
- Bear Point Range
-

EF15 → testing w/ explosives. Filled tent w/ explosives + then used AFFF
↳ Ballistic tent 1998
5 times

Tony Canami

EF12 - potentially AFFF use
blow up fuel tanks, fire department on hand for supression
10 gal fuel bladders
↳ Testing the integrity of the bladder

Read Scags
Fred Thompson (Division Chief)

Fuze range
↳ May have confused EF-12 w/ fuze range because of proximity

Chris Murphy - waste guy

Range 6 frequency of use - weekly

Chromeplating Bldg 4600 - construction early 1990's (Rodman bldg)
- Is there an SOP -

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Interview Log

Installation: APG **State:** MD

Date/Time: 5/22/2018
Interviewer(s): Katie, Jeff, Ankit, Rhonda
Other Attendees: Debbie, Mark

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
Jeff Aichroth	Physical Scientist	9 yrs	9 yrs	–	410-436-3756	

Potential Areas of Potential Interest Discussed

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General Knowledge Discussed

Jeff Aichroth - IRP - groundwater systems, O-field, Transonic, landfill, Michaelville
- all Aberdeen
- G-St Salvage
- Perryman drinking water system

Aberdeen FTA: AFFF use here, daily, 60s-70s used, tapered off end of 60s/70s
TCE plume originates here, migrates toward southbound Harford County wells, testing/finding PFCs

New O-field: Doesn't think it was used for OBDE response
Not a potable aquifer per Jeff shallow aquifer,

Transonic: Photoprocessing - not PFAS sampling
Superfund.

On Aberdeen, putting dw wells in A aquifers down

O-field is a range, IRP site, Garrison-owned
Existing wells in new & old O-field
old O-field: automated sampling system
new O-field: passive system
1940s - 1953 O-field
↳ 1953, stopped filling, started new O-field
↳ But old O-field burned in 1970s to get rid of rounds in there
Watson Creek - nearby to O-field
☑ Ask FD if they used AFFF at old O-Field
☑ O-field site recon

2-yr EC study
☑ we have it?
11-vessel carbon units, seem to have effective removal, breakthrough always a concern
Delineation follows plume; highest concentration at head of plume.
Soils removed for TCE - doesn't know where they went
Patchwork removal of soil (TCE hot spots)

Phillips Army Landfill: doing study on this. RCRA cap, study area around it
refuse burning pit
<> construction, demolition debris → no VOCs/SVOCs
pesticides & PCBs detected below screening
<> municipal waste metals exceeded
Getting ready to do FS on landfill & AFTA site
New landfill area has RCRA cap. Doesn't know what's under RCRA cap

Aberdeen FTA - asphalt PAHs

what was burned at refuse burning pit? No, but guesses municipal

No knowledge of Bldg 1092 - Airfield Disposal Building

Michaelsville Landfill - capped (not sure when)
ROD source area, 1/4-mi restriction on land use
mon. wells

Remyman - production wells 80-100' deep, Harford County public water supply
has GAC treatment; Pretreatment ~ 15 ug/L
Probably only penetrate 1 confining layer
☐ Jeff will get boring logs for Harford County production wells
☐ Have our GIS person check if we have MW info in GIS layer
well 6 has highest concentrations
PFAS data in 2-yr EC report

Could talk to Matt Waterbury (PHC) regarding Remyman. Steve Clark might be in charge of sampling.
11 - 20,000 lb vessels
Ankotech (Calgon) - bituminous carbon

Jeff - supplied info:

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General Knowledge Discussed

BZ Burning Pit on Carroll Island - Many removal actions
(or BZ)
↳ ROD for OU A
↳ based on burning in name

Dump sites all over - disposal pits

G-field burn pit

Debbies has dump out of HQAES database, Debbie can query based on keyword.
☑ Get HQAES output from Debbie
(Rhonda knows Arcadis internal team supporting this)

WTE. Waste to Energy
Harford County leased property, coming back to APG now
municipal waste, Gel supplemented.
NEPA

Bomb Beach

ARCADIS Design & Consultancy for natural and built assets

Interview Log

Installation: Aberdeen Proving Ground **State:** Maryland

Date/Time: 5/22/2018
Interviewer(s): K. Barry, R. Stone, A. Gupta, J. McDonough
Other Attendees:

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
Jeff Aichroth	IRP Manager	9 Years	9 Years	--	410 436 3756	

Potential Areas of Potential Interest Discussed

ARCADIS Design & Consultancy for natural and built assets

Jeff

Documents Obtained

- Aberdeen Fire Training Area
  - PFAS plume to county wells
  - spent solvent fire
  - Check to see if we have removal action report
- New O-Field
  - wells
  - no potable wells
- Michaelsville Landfill X
- Paramen Drinking Water System (15000 mg/L) (~80-100ft.)
- Talk to

Data Gaps or Items for Follow-Up

- CZ/BZ Burning Pit – Carroll Island
  ↳ ROD for OU3A – AFFF/burn

* G Street Salvage Yard
- Both documents
- * Plane Crash – 1985 (woods south of G Street) ↳ aviation chief ask Chief Shultz at Weide Helipad
- write-up in RFA
- APG & Baltimore Sun did stories
- FAA kept records
- George Mercer Public Affairs Office

- Hap to look at Ft. Rucker safety records
- Johan Roebel

* WTE (Waste to energy) – Hartford County waste energy plant
burn any & all waste. – documenta

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General Knowledge Discussed

Jeff focuses on GW sites — 80-100 ft bgs (Hartford County Water Supply) xlt
- Paramen drinking water system — 15 ppb detections

Aberdeen FTA — Test everyday
1960's + 1970's operation
Flow is southbound (TCE plume impacted Hartford County wells)
highest concentration at head of plume
soils for TCE
ignigted spent solvents for

Edgewood - not a lot of potable water available

Old O Field - cleanup activities in the 70's burned it off the "clean it up". Unclear if AFFF was used in those activities. Original use, too early for AFFF.

Philips Airfield Landfill - years of operation unknown

Matt Waterbury → interview
- Steve Clark -

CE Burning Pit - Carol Island - ROD OUA

Allison
Regulatory Draft Canal Creek RI
- G street salvage yard
- PFAS sampling

check RCRA Faculty Assessement 1989
1985 Plane crash south of G Street
Weide Airfield responded (on Sunday)
APG / Baltimore Sun

* John Robel (retired to interview)
WTE - Hartford county municipal waste disposal - leased to them coming back to Army

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Subject			
Jeff Aicroth			
Project No.		Sheet	
Calculations By	Date	Checked By	Date

R. Stone and A. Gupta Interview Notes Continued

Bomb Beach - shore eroded exposing slag pile; former burn pit, pretty deep Near Maxwell Point

ASK Mike

⇒ No knowledge of Foam use, not addurey.

ARCADIS Design & Consultancy for natural and built assets

Interview Log

Installation: APG **State:** MD

Date/Time: 5/22/2018
Interviewer(s): MDARNG
Other Attendees: Arcadis, AECOM, Fire Dept, USAEC, ANG

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
Major King						
Lt Fedner	ILT EAN Branch Chief	N/A	1 year		michael.e.fedner.mil@mail.mil 443-459-6924	
"Chief" Warrant Officer Cuz Schulze	instructor pilot	1982 (1979)	2011	ops officer; commander	charles.h.schulze.mil charles.h.schulze.mil	

Potential Areas of Potential Interest Discussed

ARCADIS Design & Consultancy for natural and built assets

General Knowledge Discussed

Schulze:

Airport running since 30s
3 hangar structures since 40s
Building 4040
Old ops building - demolished & reconstr.
Building we're in
Another hangar structure (current parking lot)

old hangars did not have AFFF-suppression system

MDARNG moved here in 1960
1977 - building were in finished - 4081
↳ AFFF interior suppression system

Renovations in 1995-2000 in Bldg 4040 - ~~with~~
2012 - 4081 reno & expansion - added aviation maintenance space

AFFF came in 1977 w/ 4081, continuous service since then

Annual AFFF testing - annual discharge hangar 4081 - 6-12' high captured in drain.

Mayor's office should have drain plans

On flight line - std issue fire extinguisher
then halon 80s-90s
then trimex → 2000s

Crash incidents: ff response, but no AFFF

3 retired workers from 70s → Schulze will find contact info (Bonnie coordinated)
↳ 2 maintenance, 1 flight instructor

Fire training here: Livesay - nothing burned on airfield
King - we would have done trimex training
Schulze - maybe some area around building - doesn't recall - familiarization training. Prob not discharge.

[illegible] airfield w/ community

in 1960s - license agreement w/ Army Chemicals Center (later merged w/ APG)

King - runway used to be airplanes before MDARNG took over small heli since 1960s

Emergency discharge or leaks?

No use to clean spills, clean w/ spill kits

Apron replaced in 2012

No AFFF leaks. → Livezey → tank leaked in 4040 "old flying club" → tank was completely empty in 1990s
No discharge other than planned annual test.
- nothing was recovered
- monthly check, not sure how quickly leak happened.

Livezey: burn area near horse barn - AFFF use
FTA already in use in 1990 → 2000
(used for years prior)

Casey yard - AFFF use to suppress vapors from chemical incident long enough to get victims out
CSEP (chem stockpile emergency plan)
(3-5 y period)

4040 - broken pipe - mechanical room. 3 winters ago - King will follow up ☐
cold, pipe burst. Others think water line.

1998 - 4040 AFFF leaks - went to CFMO (same as above)

Records of purchases ☐

No excess; only store what is in tank

Central Wash Building - washing occurred outside
- storage of wash material
- requirement for annual wash of aircrafts
- drain
- prior to drain, collected water
→ then to recirculating systems

Matthew Coyle - GIS - any ARNG GIS will be contained in APG GIS files

- Just helicopters here
- ~~AFFF~~ Halon system onboard

ARCADIS Design & Consultancy for natural and built assets

Interview Log

Installation: APG **State:** MD

Date/Time: 5/23/2018
Interviewer(s): Katie, Amar
Other Attendees:

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
Andy Murphy	Environmental Protection Specialist	NA	NA	NA	410-436-4569	
Bill Aguero	Hazardous Wastes Chief	NA	NA	NA	NA	

Potential Areas of Potential Interest Discussed

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General Knowledge Discussed

Andy - FD turned in old stock (Bill Streaker in DPW Eng & Constr. branch)
↳ Andy will check records
↳ original containers

- SPCC - OWS, ATC
- test pits

Larry Birchfield - env branch ATC
OWS on ranges,
env pad Poverty Island.

OWS waste → shipped offsite as non haz or (remote possibility) Aberdeen WWTP accept?

Test pad mine pits → ~~no~~ soils contaminated brought to them

AFRL - SLAB -

Before Aberdeen privatization, ATC provide documentation to Wiggens → vac truck to WWTP if acceptable. When privatized, now to City of Aberdeen

Soil removal action - AFTA

May 1995

J-Field - no AFFF use there - toxic burn pits
Beach Point - white phosphorous burn pits

WWTP in Edgewood
ECBC there - no AFFF use

Airbase Range 6
Poverty Island

ECBC - Pyro Joe
Joseph Domanico

Interview w/ Andy Murphy
& Billb Angueiro.

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General Knowledge Discussed

→ Fire dept. turned in old stock of AFFF, Bill Stricker - Might have gone to industrial WTP in PA.

→ No waste from the OWS & either shipped offsite or the WTP

→ Bill strecker wrote the SPCC plans.

→ Larry Birchfield - incharge of env. branch at ATC

→ ARL - group. Shoot into equipment & may require AFFF. at ABRG.

→ If contaminated sod the test pits

Andy May 1995.

→ Bill / Andy - excavation of FTA, Nov. 17 disposal ~~bag~~ ? Bill / Andy to provide information

→ I-fied - old toxic burn pits with white phosphorus but not AFFF use
Wet phosphorus burn off

→ Beach Point — Ridgewood WWTP,
Pyro Joe - ECBC - Joseph Dominico - Andy to provide contact information

ARCADIS Design & Consultancy for natural and built assets

Interview Log

Installation: APG **State:** MD

Date/Time: 5/23/18 10:55
Interviewer(s): Rhonda Stora
Other Attendees: Gupta

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
~~Arnold O'Sullivan~~				2009-2012		
Arnold O'Sullivan	NERA	~11 yrs	2012 to present	AST program 2009-2012		

Potential Areas of Potential Interest Discussed

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General Knowledge Discussed

BRAC 2005 - TRADOC pulled out

1980's consent agreement - 100's of LUSTs
- Paul Harvey has removal records

Old MFRI site - UST w/ OtW separator
↳ Underground line from UST to fire pad - cleaned (all unpermitted tanks)

Fire Training site - MFRI (train all fire fighters in state)

*ARL missions - aircraft graveyard (might be ATC) * Ask ~~Dave Good~~ or Jamie Laviere
↳ stuff done w/ ended up there

Foam runway for "bung jumper" - for airborne
↳ Lawson AAF - Benning
Pope

Big 325 - Large spill from AST (6000 gallon) ~ 25-30 years ago
or 340

5215 - disappeared w/ BRAC

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Documents Obtained

- Notes by Ankit
  - Big spill by Building 325/340, 640,000 gal AST
    ⇓ replaced
    ⇓
    bulk storage tank is leaked.
  - ~~Bldg~~.

Data Gaps or Items for Follow-Up

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Interview Log

Installation: APG **State:** M.D

Date/Time: Wed. 5/23/18 | 13:30
Interviewer(s): M. Blower, S. Eckel
Other Attendees:

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
Mike Livezey	Asst. Fire Chief	26 years	6 years	Fire Response	michael.b.livezey.civ @mail.mil	2nd interview

Potential Areas of Potential Interest Discussed

ARCADIS Design & Consultancy for natural and built assets

Subject	Mike Livezey Interview		
Project No.		Sheet	
Calculations By	Date	Checked By	Date

H-Field

- Dumped 1 tank load, maybe 2 (30-50 gal)
- Can point out area w/in a few acres. In 2009
- Likely had response before that/no recollection.
- Left to elements to clear
- Shelled area hard to get to.

E5005 Storage Area

- Storage area only
- Took over in 90', ~~dumped~~ left in 2000'
- Stored 1 unit during construction phase.
- May have had training there
  + Hi-ex, AFFF
- Can point out more during site recon
- Training in 90's..

Off Post Fire - Mullins

- Occured 1982, 1984, 1995
- Hauled thousands of gallons of foam
- Location Marked on Map

- J-field
- 26th Street

☆ Burn pits are demo pits.
- Never near pits, if spread used water.

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Subject			
Project No.			Sheet
Calculations By	Date	Checked By	Date

Beach Point

- No memory of AFFF here
- Joe Monar(?), ran Pyro building
- Retired, talk to Andy Murphy about contact for Pyro Joe
- E3580 for building

J-Field

- Do not have knowledge of AFFF use
- Tim Blades - Demo Facility - He would have history and records
- Talk to Andy Murphy

L-Field - Rocket Sled

- Doubt of AFFF there, strap missiles to table and destroy stuff
- ~~Similar~~ No portable water cannons / AFFF
-

Storage: - 5 gallon pails
- 5-10 minutes foam, it's out
- Not a lot of foam used typically for response.

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Subject	- Spilled a little.		
Project No.	- Any fire truck ~~or~~ post 80's has foam	Sheet	
Calculations By	-	Date	Checked By	Date

Casey - ~~Chemical~~ (CSEP)
- 1 ton containers of mustard
- Stacked. Yearly / 4x/year. Ran program
- Several years (timeframe). Flowed foam on ~~beak~~ ~~long~~ enough to get people out
Time - 90's
- Emergency Plane Crash Test / Sprayed foam

Noble Road
- Turned over to APG F.D for testing purposes
- Regularly tested. Foam multiple times
Time - In the 90's
-

Edgewood Fire Station
- Washed off into grass
- Rarely washed tank, ~~flem~~
- Anytime we used foam, run water through tank and flushed out ~~for~~ an hour.
- Testing: Hit tree w/ foam

- Database started in 2012
- Previous reports boxed up

ARCADIS Design & Consultancy for natural and built assets

Subject			
Project No.			Sheet
Calculations By	Date	Checked By	Date

Fords Farm

Vehicle fires

- Definite foam use
- M1 tank. Fuel in tank caught fire.
- Time - 2012
- F.D took care of fire, called by ATC.
- 30 gal of concentrate likely used. one engine on fire.
- Likely vehicle test area ✓ - Check w/ ATC

✓ Phillips Station - Building 1059

- Applied foam for aircraft accidents, 2015 UAV crash
- Had bomb test on Bomb Loading Platform yesterday.
- Airfield may have in depth response reports.
- ~~OLD AFFFA~~

Bomb Beach

- Burn Pit, no response

General Note

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Subject			
Project No.			Sheet
Calculations By	Date	Checked By	Date

Building 1060 - Storage - Will look at for recon

* - ATC, ARL, MDARG on "customer" controls loading of AFFF suppression system.
- No knowledge of filling procedures
- Foam on river after Wide Sup. system failure (already mentioned)
- May have used Old AFFF to nozzle test there.

Smoke Pilot Plant

- No AFFF use (or memory of)
-

EF-15 + EF-12 (ARL)

- ATC/ARL tenants would give left over AFFF to F.D
- No knowledge of ARL areas.

ARCADIS Design & Consultancy for natural and built assets

Subject			
Project No.			Sheet
Calculations By	Date	Checked By	Date

Building - E5179 - Right across the street
- Building burned down, no AFFF use

5215 - POL

- No memory of use.

Building 525

- Just ~~[illegible]~~ emergency response, no fire on arrival

ARCADIS Design & Consultancy for natural and built assets

Subject			
Mike Livezy w/ Blower / Eckel			
Project No.		Sheet 1	
Calculations By	Date 5/23/18	Checked By 1100 am	Date

Y Off Post Tire Fires '82, '83, '95 big one
likely 10 acres tons of foam, Thousands of Gallons
Mollins LF

Y H Field
Tank fire 2009 May 21st
at least 2 engine tank load could have been 2 loads
ATC owned, could be ARL
Mike says likely more than 1 AFFF response not documented
no storage, no application method Time frame/dates

Y E5005 Storage Area across Rd from Fire House
Storage warehouse
used since pre-1990 may have been auto shop was paint booth

training area AFFF & High X 1990's
outside storage bldg
received in 5-gal pails on pallets

FU Beachpoint Mike no recall foam
Pyro Joe Monar or Demonico ?? retired ~15 yrs
Andy Murphy knows him on first name basis

FU N J Field - no recall AFFF
contact Andy Murphy

N E5179 Bldg fire no AFFF - structural fire

ARCADIS Design & Consultancy for natural and built assets

Subject	M. Livezy w/ Blower / Foxtel		
Project No.		Sheet	2
Calculations By	Date 5/23/18	Checked By 1100 am	Date

N L Field Rocket Sled
smash chance if vital equip ~~that~~ & need extinguished fast

Y Casey CSEP yard of 1 ton containers of mustard
~~annual~~ test on gas containers
required quarterly
- 1 scenario is populated release & suppress vapor to get enough time to evacuate
- went on for awhile ~ 3-5 yr period in 90s

Y Noble Rd FTA
old buildings Mike says may have been boilers or incinerators
train many times sometimes water, some foam
1990s
no storage

Y Edgewood fire station
clean up wag wash exterior & grass
flush pump at front ramp by rinsing after every foam use
all stations
5-gal pails handed up & poured into top of tank on truck
every truck & could have spilled over time

Y Ford's Farm
M1 Tank fire extinguished w/ foam in 2012 — 30 gal concentrate or less from DB
very likely other foam responses
DB starts in 2012

Y P Airfield just like any station
truck wash pump flush fill engine tanks
FD has response back to 2012

ARCADIS Design & Consultancy for natural and built assets

Subject	M. Lirezy		w/ Blower
Project No.			Sheet 3
Calculations By	Date 5/23/18	Checked By 1100 am	Date

N Bomb Beach Maxwell Point likely burn pit
no AFFF / FD response

Building 1060 at P Airfield storage of AFFF
FD does not fill fire supression system tanks

General Nozzel Testing every station, possibly on P Airfield runway

N Smoke Pilot Plant
no AFFF at burn pit
no recall fires in bldg

FU? EF-15 & EF-12 no knowledge of AFFF
can't think of what they'd need for
others + ARL

General Sometimes ARL, etc. would donate left over foam to FD

N E5179 no foam on fire

N 5214 demo'd w construction of new 6000 series C4I SR
no AFFF

ARCADIS Design & Consultancy for natural and built assets

Subject	M. Livezy	w/ Blower / Eckel	
Project No.		Sheet 4	
Calculations By	Date 5/23/18	Checked By 1100 am	Date

N 5 25 propane explosion
no fire in bldg blown out by explosion

General

(1) new MFRI in Edgewood used to be Lauder Creek
FD doesn't dispense foam unless emergency anymore ← ~last 5yr
FD trains on MFRI now

(3) O Field FD has made no response

(4)

general Air base 6 FD says lots of Foam
Matt coordinate visits for H field & Ford Farm

(9) see Suz notes of Fire Stations & Fairfield
(10) nozzel testing at all station

Y Bldg 300 was old Firehouse built in 1917
new station ~ 2000
5180 Edgewood same & single fire station since 1940s
Y foam arch testing at E 5180

ARCADIS Design & Consult for natural and built assets

Interview Log

Installation: APG **State:** MD

Date/Time: 05/23/18 | 13:30
Interviewer(s): Amar Wadhawan ; Katie Barry
Other Attendees:

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
Doug Evans	IGI&S Manager	3 yr	3 yr	MD State Gov	410-306-1168 douglas.k.evans.civ@mail.mil	
Bryant DeBruyne	Sr GIS Analyst	Since 1991	1996	Active Army	410-278-4388 Bryant.A.DeBruyne.CTR@mail.mil	

Potential ~~Areas of Potential Interest Discussed~~

→ If Chrome plating was done at the old metal working shop, owned by ATC, down Rodman Rd.
→ Chemical dryer for the GIs. to be recieved from Bryant / Doug
→ They are supposed to be doing a complete well inventory – Rurik Leader would know more
→ Curtis Swanger has as-built drawings for bldgs for storm / sewer drains
→ As built for the ~~bldg~~ new hanger at wield airport
→ Wells – producing or potable, the features would say what they are used for.
→ Sewer line construction information in the bases.

ARCADIS Design & Consultancy for natural and built assets

Interview Log

Installation: APG **State:** MD

Date/Time: 5/23/2018
Interviewer(s): Kane, Amar
Other Attendees: —

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
Bryant Debruyne	GIS					
Doug Evans	GIS					

Potential Areas of Potential Interest Discussed

GIS layers & as-builts

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General Knowledge Discussed

- Plume layers ☐ chemical layer
  ~~☐ mw~~ mw layer would have construction
- Hangar 1060 drain maps storm drains
  sewers
  as-built for Uteide
- chemical data - PFAS hits?
- monitoring well data - construction available in layers

Rurik - well inventory coming up

Kurtis Swanger - as-builts for specific buildings
1st floor, far corner wing A
end hallway, left, closed office glass door
across from break room

producing = potable → what it supplies

layer has pipe material

ATC
1990s
ordnance school
metal working shop
down Rodman Rd.
chrome plating?

Poverty Island
- suppression box

Edgewood
wheeled vehicle
shop

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Interview Log

Installation: APG **State:** MD

Date/Time: 5/23/2018
Interviewer(s): Kate, Amar,
Other Attendees: Mark Dittmier

Person(s) Interviewed Charles DePase

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
Charles DePase	Lead General Engineer, DPW, ECD, Engineering Branch	NA	NA	NA	410-306-1169 charles.a.depase.civ@mail.mil	

Potential Areas of Potential Interest Discussed

Biosolids land application

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General Knowledge Discussed

1999 Aberdeen WWTP privatization - ~~so, before that~~

Edgewood WWTP - hauls to Delcora, Chester, PA for incineration
↳ this started ~10-15 years ago when zinc orthophosphate started being added for corrosion control (Zn in biosolids, can no longer land apply)

Aberdeen WWTP - late 1980s-90 - land application to Phillips AF, Spesutie Island? vague memories of.

Edgewood WWTP - M-field or O-field? Remembers downrange some where.

Remembers this from more than once, several years?

retired - Ed Logan - Md Env. Service - operated WWTP

retired - Ron Gentry

Archibald "Archie" Forman - WWTP Edgewood
cell: 410-459-8495 - on at midnight

WWTP Edgewood landline 410-436-3702, building E-3857

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Documents Obtained

none

Data Gaps or Items for Follow-Up

Follow up with Archie

Check with Jan Michael Graine re: state permitting process

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Interview Log

Installation: Aberdeen Proving Ground **State:** Maryland

Date/Time: 05/23/2018
Interviewer(s): R. Stone
Other Attendees:

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
Mark Gallager	Historian	NA	NA	NA	410-306-1169	

Potential Areas of Potential Interest Discussed

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General Knowledge Discussed

Across the street / Kiddy-corner from Fire Station - near credit union
E5179 Bldg
↳ Fire in bldg w/i the last 5 years * Follow up w/ Fire Dept *

H street fire - 2 deaths
↳ Not a lot of detail on the fire. Range activities might be classified

Causeway to Espsutie Island - burned bldg fire

*Right of main gate - Club Bldg, burned deliberately as an exercise at least 10 year ago - Marylander Club *
Fire Dept Follow-up

Paul Harvey in DPW Bldg in charge of tank program
DPW Warehouse - possible storage of materials - likely not

Uniform water proofing - Zone of the impregnation Bldg
↳ Treating uniforms for "agent protection" 15-17 years
Located in Edgewood - Map 8
Demolished as historic *Ask Jeff other historian *
↳ he might have information

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Interview Log

Installation: APG **State:** MD

Date/Time: 5/23/18
Interviewer(s): Stone Eakes
Other Attendees:

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
MARK GALLIHUE	Historian	17 years ~~[illegible]~~	0900	N/A	mark.f.gallihue.civ@mail.mil (410)306 2282	

Potential Areas of Potential Interest Discussed

AFFF Plating use
none

Crashes
- suggested Jeff Smart may know more about accidents

Gallagher

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General Knowledge Discussed

~~last~~ ~5yrs ago E5179 near fire station
long bldg where center of bldg burned

Tank fire w/ fatalities
he thinks it is one of busiest ranges
he aware of accident, but doesn't know any details

Causeway to Spesutie Is
large home burned then made final demo a training exersize
before 1965

Old main gate Maryland Rd ~10yrs (Aberdeen Gate/Middle Gate)
club bldg (Marylander Club) intentionally burned

G St plane crash - he has no knowledge

more familiar w/ Garrison operations & trend of Garrison is continuing to contract out
less likely plating operations would be responsibility of Garrison

Gallagher

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Documents Obtained

Data Gaps or Items for Follow-Up

Action Items

at or near bldg E 5179 bldg fire
was AFFF used ???

Storage Tank Program Paul → Harvey can't remember last name

Zone of Impregnation Jeff smart

ARCADIS Design & Consultancy for natural and built assets

Interview Log

Installation: APG **State:** MD

Date/Time: 5/23/2018
Interviewer(s): Kahl, Amar
Other Attendees:

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
Lisa Szymanski	Senior Realty Specialist				lisa.l.szymanski.civ@mail.mil 410-306-2670	

Potential Areas of Potential Interest Discussed

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General Knowledge Discussed

MFRI - still government property - leased property

Airbase 3 - ABR3 - test range

Chrome plating - too detailed information

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Interview Log

Installation: APG **State:** MD

Date/Time: 5/23/18
Interviewer(s): Gupta
Other Attendees:

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
Paul Harvey		1990's restoration 2013 in program				

Potential Areas of Potential Interest Discussed

ATC OWS - says ATC would have those discharge requests
doesn't know where water discharged to no knowledge of OWS overflows
not under Paul's perview due to de minimis Q

ASTs - any large spills?

15 kgal heating oil spill Wiede contained in swale, no fire 2017
400 gal 2013 at new construction → tertiary ~~sewer~~ containment Bldg 2901

Harvey 5/23/18

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General Knowledge Discussed

never saw AFFF deployed
heard about filled hangar w/ foam
can provide list of down range OWS

Harvey 5/23/18

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Documents Obtained

Data Gaps or Items for Follow-Up

Action Items

DB of Downrange OWS

Paul Harvey

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Interview Log

Installation: APG **State:** MD

Date/Time: 5/23/2018 4:40 pm
Interviewer(s): Anlut, Matt, Rhonda, Amar, Suz, Katie
Other Attendees: no

Person(s) Interviewed Paul Harvey

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
Paul Harvey		since 1990s	since 2013	restoration since 1990s		

Potential Areas of Potential Interest Discussed

OWS
Spills

Paul Harvey

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General Knowledge Discussed

OWS

Talked to Larry Birchfield - ATC? Dave Good should have

Discharge requests to Rich Wiggens

15,000 gal heating oil spill ~ 1 yr ago Weede Airfield - plugged outfall - no AFFF use

Can give info on large, reportable spills

400 gal heating oil in 2013

OWS - not sure where water discharged; he is more concerned w/ oil

He can get us a list of dam range OWSs.

Paul Harvey

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Documents Obtained

n/a

Data Gaps or Items for Follow-Up

☐ He will get us list of dawn range OWSs.

ARCADIS Design & Consultancy for natural and built assets

Subject	Interview notes from Paul Harvey		
Project No.		Sheet	
Calculations By	Date	Checked By	Date

- Oil water Seper.
  + Told AFFF would be contained in containers, then taken and placed in wastewater plants
  + Any info on these OWS's, how
    - ~~Have you to~~
    - Waste Water requests: — Wiggins went to him
    - They're not USTs.
  + As you manage ASTs, aware of spills where F.D
    - 15,000 gal spill of heating oil at Weide.
    - Oil contained in storm water feature
    - Plugged outfall
  + Didn't use foam on spills to his knowledge.
  + Oil spill would be 911 call
  + Most spills are small
  + Ankit: Any records?
    + F.D has them
    + Have some reports.

- Had 400 gal spill @ in 2014 → 2901 Bldg.
  + Excavated soil
- 4 20,000 gal ASTs w/ tertiary containment.

A.A Action Items
- Get list of downwater seperators from

- OWS
  + Not sure where they discharged water
  +

- Any times when AFFF was used
  + No oil spills haven't resulted in fires.
  +

ARCADIS Design & Consultancy for natural and built assets

Interview Log

Installation: Aberdeen **State:** Maryland

Date/Time: 05/23/2018 0932
Interviewer(s): A. Gupta
Other Attendees:

Old Ordnance Center.
— Refurbishment of materials/tanks..
— City of Aberdeen Supply wells

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
Vance Hobbs	Chief Environmental Division.	1 1/2 YEARS	1 1/2	REECO, ASA IE&E 4 years	306-2550.	

Potential Areas of Potential Interest Discussed

- List of historic
- ✓ J. Michael Greene / Chief of Compliance (Bldng. 525 — Liquid Propane) — biosolids disposal } — 10 PM at night
- No aviation crashes
- ✓ Arnold O'Sullivan (OWS) - NEPA
- ✗ Rich Waggens * (approve wastewater discharge.) / Overbay.
  - water team lead
  - Robert Warlick's Edgewood WWTP ✓ ~~14 years~~
  - Tony Hale —
- Charlie DePace — Water Privatization — Sludge Contract
- Ask Rurik for water presentation from Cindy Smith, offsite water receptors

- Vaccummed up AFFF from Phillips Airfield Hangar by a private contractor managed by Bill Arguero's team
- Current practice - Aberdeen WWTP - composted - take it to Hartford County - up for sale or free.
  privatized in 1999
- ~~At one time, sludge applied to fields~~
- Edgewood - current practice - sludge taken off to Delaware, incinerated & then applied to a landfill

* Historical permits from Aberdeen / Edgewood.

* J-Michael to send us photos of AFFF Suppression system testing at
* " to send us loca^n & details of sludge from edgewood
* " to send us details of sludge incinera^n analytical testing.
* Any historical informa^n on sludge applica^n on-installa^n

ARCADIS Design & Consultancy for natural and built assets

Interview Log

Installation: APG **State:**

Date/Time: 5.23.18
Interviewer(s): Rhonda Stone
Other Attendees: Gupta, Eckel

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
Vance Hobbs	Chief Environmental Division	11 1/2 Years	7 1/2 Years		240-306-2550	
Jan Michael Green	Chief of Compliance	NA	NA	NA	NA	

Potential Areas of Potential Interest Discussed

/to bbs

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General Knowledge Discussed

* Paul Harvey - list of active + historic oil water separators, spill history * Talk to him

Big 525 - Liquid propane explosion (w/i last 7 years) - contact Jan Michael Greene or Dave Good / Jan Michael Greene May have not been a fire

done
Arnold ~~DeSo~~ O'Sullivan - NEPA now, but previously ran tank program

Rich Wiggins (Env) - approved discharges to WWTP *

Overbay - COR for privatization OMD *

> Talk to them about any foam disposal from OWS

Robert Warlich - Edgewood WWTP, OMD
Tony Hail - site manager for Edgewood OMD
~~Rick~~ Jeff King - OMD Chief

Drinking Water Wells

City of Aberdeen has wells
* ask Runk about Andy Smith presentation *
Runk for off-post drinking water wells

Biosolids - Dennis (APG)
- Jan Michael Greene (Chief of Compliance)

Charlie DePace - Water Privatization Contract - ECD (Eng. Construction Division)
L Managed contract to get sludge out of WWTP

Jan Michael Greene – vacuumed up + hauled off-site for disposal / AFFF @ Phillips

Biosolids

- APG – make compost out of APG sludge – take to Hartford County – either buy or free
  1980's-1990s applied sludge to fields * Mr. Greene to provide location *
- EA: Delaware county – incination – sludge taken to PA
  * send location of incineration → Chester, PA
  DeCora?

* ↓ Historical permits for APG – check MDE's website

*Mr. Greene to provide analyte list for test completed prior to discharge to WWTP

5/23/18 Vance Hobbs

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General Knowledge Discussed

Any recall of fires
~Bldg 525 propane explosion in past 7yrs

Any recall of aviation crashes
no recall in his time

Any recall of Fire Training Areas
no recall

Suggest follow OWS, test pads, ATC

If OWS waste disposal would go to city Wiggins

~~Tony Hale~~
not aware biosolids disposed on-Post other than Specutie

Old Ordinance Center did refurbishment of historic peices maybe Cr plating
historians may know

City of Aberdeen has water wells
Cindy Smith water well PPT

Graces Qtr & Carroll Isl
IR

changes in property ~~rates~~ sold/no longer under control

been trying to give away Atison dam

Hobbs

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Documents Obtained

Data Gaps or Items for Follow-Up

Action Items

- Paul Harvey re: OWS spill history — former person in position Arnold O'Sullivan
- Rurik re: zone of impregnation
- Rich Wiggins Jerry Bartly on WW
  - Dennis Overbay Aberdeen — biosolids & other info & water wells
  - Robert Morlick Edgewood
- Chief of Compliance Biosolids in Specific Is
- Charlie DePace water privatization 1st flr DPW

Jeff Smart re Old Ordinance Center potential Cr Plating

Rurik PPT by Cindy Smith re: water well lease

Rurik re: off site privat water well search

OVER

get rid of various dams - Lisa ✓

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Interview Log

Installation: APG **State:** MD

Date/Time: 5/24/2018
Interviewer(s): Katie, Suz
Other Attendees: –

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
Bill Streaker	ENGINEERING TECH	31	2	ASCF CHIEF 16	410 306 4165 WILLIAM.B.STREAKER.CIV@MAIL.MIL	

Potential Areas of Potential Interest Discussed

Unused containers of AFFF being turned in to haz waste (per Andy Murphy & Bill Aguero)

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General Knowledge Discussed

Conversion to Universal Gold & Centurion (Universal foams for Polar solvents & hydrocarbons)

E10 - ethanol could be used on

at least 12 yrs ago

some to training for FD

turned some

Big fire @ Tire Shop
bulk of it went there
200-250 gal foam

1995 fire
DNR or Col - black & white water in Swan Creek - foam still floating on water - boat recon.

5gal buckets to storage

55 gal drums wax from ordnance school
↳ empty drums

At least one got mix protein + ~~AFFF~~ foam
↳ chicken guts
1-2 drums
turned over to haz waste

MilSpec 3M - PFOS
↳ turned in to haz waste
↳ downloaded from trucks
↳ a couple 55-gal drums

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Interview Log

Installation: APG **State:** MD

Date/Time: 5/24/18 1130
Interviewer(s): Barry Eckel
Other Attendees:

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
Bill Streaker	Engineering Tech	31 Years	2 Years	Assistant Chief 16 Years	410-306-1165	

Potential Areas of Potential Interest Discussed

changed to universal gold & centurian ~12 yr ago

some old AFFF used for training

some used

~~in storage & gal~~ ~~empty~~ 55 gal drums from Ordinance Center empty drums used to contain AFFF & protein foam turn in for disposal to hazwaste

3M? foam drum turned in for disposal

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General Knowledge Discussed

DNR reported black & white water in Sucam creek from tire fire
white from foam

When turned in for disposal went to 5110 for disposal

overall message AFFF which would not be used
was turned in for disposal, used for training or
used on Mullins fire

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Interview Log

Installation: APG **State:** MD

Date/Time: 5/24/2018
Interviewer(s): Katie, Suz
Other Attendees: —

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
Dr Hazoor Khan		since 1991		solid waste permits		

Potential Areas of Potential Interest Discussed

Biosolids application areas, timing

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Documents Obtained

1991 - when he started (maybe a little before)
2003/2004 stopped
~~edge~~ cake Aberdeen → privatized → composting
liquid Edgewood → didn't meet spec → incinerated

contractors did land application

Prior to 1991 - not sure what happened pre-land app.

Andy Silva/Powell pre-Hazcor.

Data Gaps or Items for Follow-Up

200-300 cy stockpile, concrete pad, walled, not covered
drainage on bottom ~~to~~ → back to the WWTP

Land application 3-4 times per year

Apply, let grass grow

Permit Aberdeen, separate for Edgewood.

ATC field - maybe proposed, included in permit, doesn't remember using.

Follow-up

☐ MDE permits will show locations

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Documents Obtained

inside Cruise Rd & Combat (?) Drive
(parallel, closer in)

also Dynameter Rd, Trench Warfare

No trees here at this time

Spesutie Island - near shock tunnel for testing

Data Gaps or Items for Follow-Up

Edgewood - Bannsage, Finnsile, Ricketts Point, Guard St.

Martha Hanson

Storage locations @ WWTP

Aberdeen - cake sludge
Edgewood - liquid sludge

Tomorrow
- 1081 as-builts
- industrial waste pipes
- 5014 metal work decant thunk
Cr plating

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Interview Log

Installation: APG **State:** MD

Date/Time: 5/24/18 1045
Interviewer(s): Barry, Eckel
Other Attendees:

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
Hazor Khan	permit preparer	started ~1991	since 1991			

Potential Areas of Potential Interest Discussed

Biosolids application to land
general area E of airfield

land application started ~1991 stopped ~2003 because Aberdeen privatized & Edgewood didn't meet permit & disposed offsite

don't know disposal before land application
Cindy Powell did work before Hanzor

Khan

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General Knowledge Discussed

biosolids stockpiled at WWTP on concrete pad not covered
pad had drain ~~may have gone~~ went back to WWTP

applied to land 3-4 x /yr

application fields left unmaintained

general locations of application areas marked in dashed lines on
Katie's maps 8, 3, 184

ATC Field was proposed in permit, but not used

NOTE:
Couldn't find exact application locations on existing maps &
did not have permit maps available

Khan

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Documents Obtained

Data Gaps or Items for Follow-Up

Obtain permit from MDE to see maps of land application areas

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Interview Log

Installation: APG **State:** MD

Date/Time: 5/24/2018
Interviewer(s): Ankit, Kate, Suzanne
Other Attendees: Joe King, Mark Dittmer

Person(s) Interviewed Rurik

Name	Title/Rank/Role	Time at Installation (or Other Affiliation) (years)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
Rurik	Installation Restoration Program (IRP) Manager	NA	NA	NA	410-436-7313	
Joe	Contractor (Ret'd DAC, Actual)	20+yrs	2yrs	Army Officer, AEC,	JOSEPH.F.KING4 [redacted] .ctr@mail.mil 436 3790	

Potential Areas of Potential Interest Discussed

Superpond
well inventory
Building 5215 POL
Andy Smith water presentation

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General Knowledge Discussed

Navy Superpond:
Equipment fire. Thinks it would have been a one-time use if any?
1997-2000

Mark - ship fire training?

Well inventory:
Joe King - construction, location, condition, purpose
should be done by Sept.
How many abandoned?
Ankit - can we get some info in next 2 weeks?

Karen Jobs - samples downrange wells
- doesn't include PFAS
- reports from Karen should have data

Harford County Wells - 5 & 6 have PFAS low levels

Airbase 6 - PFAS conc's a bit higher here & near AFFA
2 yr study
+ 5 year Review
→ jets run, shoot into, catch fire

Mark up of digital map - wells - Ankit's computer

Drinking Water Wells
Western Boundary
- Aberdeen wells
- Plum Pt new wells

~~Marks Creek~~
Extraction wells in Plume = remediation
Extraction well in Westwood = potable well for equipment use
Spesutie Island - ARL wells

Spesutie Island, H-field, downrange - in Karen's reports. If we're sampling it, it could be potable

Wellhead Prot. report - municipal

Western Boundary - EPA sampled 5216 → kicked off investigation
& 5-yr reviews w/ PFAS data.

Well construction data
↳ up to 2005/2006
↳ may not have older wells included
↳ building next door to ~~record~~ Park's office contains hardcopy volumes w/ this info.
↳ infor may be in RI WP & RIWPs.

Building 5215 POL facility - no knowledge spill/AFFF

Cindy Smith water presentation - doesn't know

EDR well survey:
- Clorox plant in Aberdeen near western Boundary. Don't expect PFAS in that location
- Private wells near 5216 went to city water
  ↳ prior, one woman was supplied ~~fe~~ w/ filtered water
- Natural gw path to water; 5216 polluting plume (750 gpm)

Cantonment area all on Army system water
Unknown downrange well receptors

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General

~~Documents Obtained~~

water leaving through creeks/streams actually pretty clean

Rur: Haven't seen much eco-receptor specific interest. EPA agreed to regional eco investigation of creeks, wells. Didn't see contam coming out, other than typical.

~~Mark~~ O-field discharges into Bush R.
Nike into creek, but not operating now

General feel - eco not big focus

Chrome-plating ops - no specific knowledge for Building 4600

Data Gaps or Items for Follow-Up

~~Ordn~~ ATC would know

Mark remembers ordance school rehab

Rurik: Cr^{6+} in gas masks? → no plating: whettlerite → CO protection

chemical agent resistant coating (carc) → not plating

Building 3516 → no specific knowledge

Biosolids:

storage - likely next to plants

Navy:

munipond & superpond

Do we need to talk to anyone? ATC was the manager on this.

As far as Rurik knows, no fires coming from there (underwater testing)

O-field - meant to burn

1940s, 52, 56 - historical aerials

EPICS. Could physically come here to review

env. photointerpretation center

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Documents Obtained

Data Gaps or Items for Follow-Up

☐ Ask Karen for full reports (she sent scanned portions thus far)

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Interview Log

Installation: APG **State:** MD

Date/Time: 5/24/18 0800
Interviewer(s): Gupta Berry Eckel
Other Attendees:

Person(s) Interviewed

Name	Title/Rank/Role	Time at Installation (or Other Affiliation)	Time in Current Role	Previously Held Roles (and Time)	Contact Phone/Email	Other Notes
Rurik	Installation Restoration Program (IRP) Manager	NA	NA	NA	410-436-7313	

Potential Areas of Potential Interest Discussed

Rurik

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General Knowledge Discussed

Superpond - recalls fire, but don't know about foam usage ~1997-2000 timeframe
fire was likely an equipment fire

Drinking water (DW)

Western boundary is the known DW issue
extraction wells are for remediation
west wood extraction well is potable well for IRP use

well survey location/condition, purpose, status tracking all on post wells regardless of who owns/purpose

Karen Jones sampling down range wells for compliance
should include results for sampling

~~Superpond area + range wells~~

L shape are Harford Cty wells

Airbase 6 AA5 area seemed to be elevated PFC concentrations

well next to superpond is supporting superpond operations - don't know if potable

Library has volumes of compilation of well logs → ~3' worth of folders by area
building next to Rurik's office Library has AR + miscellaneous

Rurik

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General knowledge

Documents Obtained

Rurik has no recall of Cindy Smith PPT

off post wells
Chlorox plant in Aberdeen

* due to 5/6 well impact local private wells went to city water

knowledge of chrome plating - says ATC would know
no idea of 35/6 useage

Data Gaps or Items for Follow-Up

Superpond well potable

obtain ongoing well survey results can provide "bigmap" pdf, but same as what we have now
can provide most current report
final report due Sept

~~Well Head p~~

Karen Jones - get both full reports

still need Cindy Smith PPT

* County for documentation of private wells → city water

GIS for historical aerials epoch-environmental photo anaylsis reports
hard copies at installation

Biosolids land application

sludge storage facilities?
assume storage next to plants
no lagoons
not Rurik's scope of knowledge

original FTA soil remediation likely disposed offsite

6/7/18 Thursday

8:35 - Matthew Waterbury - EA

- old AFFA - major site he's aware of
- PFAS monitoring at FTA

2015 report DPW Env Div. - will send
Emerg. Contam.

Since then, source water assessment (not sure why done) monitoring done in Western Boundary Area. At least 1, maybe 2 rounds of sampling recently. He will follow up. More recent, less extensive?

- Drinking water side - involved in 2016 kick off group to sample DW w/in Army. Main post APG purchases from City of Aberdeen from offsite -- no sampling of this system for APG. UCMR3 → required sampling of Aberdeen water for PFAS/PFOA.

North water - APG main - purchase from Chapel Hill WTP - City of Aberdeen
Harford County

South water - Edgewood

ATC, ARL have individual wells in 2016 → PFAS sampling on all! He will send ☐ Overall findings (done UCMR 6 PFAS, Army expanded to 14-16 PFAS) - NDs, except 2 locations (only 1 had PFAS/PFOA - 1st round 2 ppt → 2nd round ND

1st reported at just above, went back for mw correction, then below

Another PFAS compound detected at location & another ARL site - Spesutie Island - EF7 & EF7a.

A couple samples at ARL sites - they have treatment systems including GAC - purpose was to remove Cl (for Fe & Mn flocculation, then filtration). Data we will see is before & after treatment.

HOCl → then GAC

Sampling at South. Van Bibber WTP - Army - owned & operated. Get water from Winters Run (stream) - gets low in summer → purchase water from Harford County. Samples from Van Bibber quarterly - PFOS/PFOA detections. Van Bibber located "off" installation. Winters Run almost a mile away from EA. Watershed upgradient. Quarterly for 1 yr, then every 2 yrs.

matthew.~~water~~j.waterbury.civ@army.mil
title: hydrologist
Drinking Water Branch, Army Public Health Center, En Health Source & Eng Directorate

Was at townhall for Picatinny - Army position -

if privatized, ask private company if/will they sample. 2013 UCMR sampled, but not since.

A lot of INCOM installations through APHC when going. Sampling kits, data - has their data in "DOORS" database. Ft Leavenworth - American Water - detected, but not involved b/c privatized. Monitoring samples come thru them, but Eurofins for PFAS.

☑ Send him email.

-A He is out of office tomorrow, Mon hopefully

A- LUCIP