

STEWART RESTORATION ADVISORY COMMITTEE

ACRONYMS & ABBREVIATIONS

Updates: October 2020

105 th AW	105 th Airlift Wing
AFFF	Aqueous Film Forming Foam
AOC	Area of Concern
amsl	above mean sea level
ANGSMOA	Air National Guard State Memorandum of Agreement
AR	Administrative Record
bgs	below ground surface
BRAC	Base Realignment and Closure
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CIP	Community Involvement Plan
DERP	Defense Environmental Restoration Program
DL	Detection Limit
DSMOA	DoD and State Memorandum of Agreement
EFF	Effluent Discharge to Outfall 010
EPA	Environmental Protection Agency
ESI	Expanded Site Inspection
FS	Feasibility Study
FSP	Field Sampling Plan
FSS	Fire Suppression System
FTA	Fire Training Area
FY	Fiscal Year
GAC	Granular activated carbon
GPR	Ground Penetrating Radar
HEF	High Expansion Foam
INF	Influent Untreated Water
ISWTS	Interim Storm Water Treatment System
JEP	Joint Execution Plan

LF003	Former Base Landfill Site 3 (aka Site 1)
LHA	Lifetime Health Advisory (Drinking Water)
LOD	Limit of Detection
LOQ	Limit of Quantitation
LTM	Long-Term Monitoring
mg/kg	milligrams per kilogram (parts per million)
MW	Monitoring Well
ND	Not Detected / Non Detect
NFA	No Further Action
ng/L	nanograms per liter (parts per trillion)
NTU	Nephelometric Turbidity Unit
OWS	Oil Water Separator
PA	Preliminary Assessment
PAG	ISWTS Post Train A GAC Unit
PAR1	ISWTS Post Train A Resin Unit 1
PAR2	ISWTS Post Train A Resin Unit 2
PBF1	ISWTS Post Bag Filter 1
PBF2	ISWTS Post Bag Filter 2
PBG	ISWTS Post Train B GAG Unit
PBR1	ISWTS Post Train B Resin Unit 1
PBR2	ISWTS Post Train B Resin Unit 2b
PCB	Polychlorinated biphenyl
PCG	ISWTS Post Train C GAC Unit
PCR1	ISWTS Post Train C Resin Unit 1
PCR2	ISWTS Post Train C Resin Unit 2
PDG	ISWTS Post Train D GAG Unit
PDR1	ISWTS Post Train D Resin Unit 1
PDR2	ISWTS Post Train D Resin Unit 2
PFAS	Per-and Poly-Fluoroalkyl Substances
PFBS	Perfluorobutanesulfonic Acid
PFHpA	Perfluoroheptanoic Acid

PFHxS	Perfluorohexane Sulphonate
PFNA	Perfluorononanoic Acid
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctane Sulphonate
POC	Point of Contact
PP	Proposed Plan
PPB	Parts per billion
PPM	Parts per million
PPT	Parts per trillion
PRL	Potential release location
PS	ISWTS Post Separator
QAPP	Quality Assurance Project Plan
QA	Quality Assurance
QC	Quality Control
RA	Remedial Action
RAC	Restoration Advisory Committee
RD	Remedial Design
RI	Remedial Investigation
ROD	Record of Decision
RSL	Regional Screening Level
SANGB	Stewart Air National Guard Base
SARA	Superfund Amendments and Reauthorization Act
SC	Site Closure
SHSP	Site Health and Safety Plan
SI	Site Inspection
SIWP	Site Inspection Work Plan
SL	Screening Level
SPDES	State Pollutant Discharge Elimination System
SWMM	Storm Water Management Model

UCMR 3	Third Unregulated Contaminant Monitoring Rule
TAPP	Technical Assistance for Public Participation
TOC	Total Organic Carbon
ug/L	micrograms per liter (parts per billion)
VOC	Volatile Organic Compound

AGENCIES

ANG	Air National Guard
ANGB	Air National Guard Base
ATSDR	Agency for Toxic Substances and Disease Registry
CED	Civil Engineering Department
DoD	Department of Defense
EPI	Environmental Probing Investigations, Inc.
NGB	National Guard Bureau
NRCS	Natural Resources Conservation Service
NYCRR	New York Codes, Rules, and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOT	New York State Department of Transportation
PANYNJ	Port Authority of New York and New Jersey
SANGB	Stewart Air National Guard Base
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey

GLOSSARY OF TERMS

Aqueous Film Forming Foam (AFFF): Fluorine containing foams (firefighting foams) that have been stored and used since the 1960s for fire suppression, fire training and flammable vapor suppression at hundreds of military installations and civilian airports.

Base flow: Base flow is a portion of the stream flow that is not runoff; it is water from the ground, flowing into the channel over a long time and with a certain delay.

Granular activated carbon (GAC): Used in carbon filtering, a method of filtering that uses the bed of activated carbon to remove impurities from a fluid using adsorption.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA): Is a law enacted by Congress in 1980 that provided broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. The Environmental Protection Agency (EPA) developed a process known as the Superfund (CERCLA) Cleanup Process. The environmental restoration sites at Stewart Air National Guard Base (SANGB) comply with the federal clean up law, CERCLA, and SANGB conducts environmental remediation in accordance with the CERCLA cleanup process.

Defense Environmental Restoration Program (DERP): Provides the guidelines and structure for how Department of Defense (DoD) components conduct environmental restoration activities. Most activities are conducted in accordance with CERCLA; however, some activities may be conducted in accordance with other applicable Federal, State, interstate, and/or local requirements.

Detection Limit (DL): The smallest analyte concentration that can be demonstrated to be different from zero or a blank concentration with 99% confidence. At the DL, the false positive rate is 1%. A DL may be used as the lowest concentration for reliably reporting a detection of a specific analyte in a specific matrix (soil, water, etc.) with a specific method with 99% confidence.

Downgradient: A location that receives groundwater from another location; similar to downstream.

Effluent: Effluent is an outflowing of water or gas to a natural body of water, from a structure such as a wastewater treatment plant, sewer pipe or industrial outfall.

Feasibility Study (FS): “Course of Action (CoA) Analysis,” review of alternatives for the cleanup and/or containment of the contamination, including no action, land use controls, and unlimited use and unrestricted exposure options.

Groundwater: Water found in the spaces between soil particles and cracks in rocks underground located in the saturation zone. Cracks in rocks can be due to joints, faults, etc. Groundwater is a natural resource that is used for drinking, recreation, industry and growing crops.

Hydraulic lift: An elevator operated by fluid pressure, especially one used for raising automobiles in service stations and garages.

Limit of Detection (LOD): The smallest concentration of a substance that must be present in a sample in order to be detected at the DL with 99% confidence. At the LOD, the false negative rate is 1%. A LOD may be used as the lowest concentration for reliably reporting a non-detect of a specific analyte in a specific matrix with a specific method at 99% confidence.

Limit of Quantitation (LOQ): The smallest concentration that produces a quantitative result with known and recorded precision and bias. For DoD/DOE projects, the LOQ shall be set at or above the concentration of the lowest initial calibration standard and within the calibration range.

Long-term Management (LTM): Management to maintain the remediation, if needed. May include sampling of monitoring wells, inspections, testing, etc.

Micron: A unit of measurement that equals 1000th of an inch.

Per-and Poly-Fluoroalkyl Substances (PFAS): Per-and poly-fluoroalkyl substances (PFAS) are manufactured chemicals used in products that resist heat, oil, stains (on textiles) and water. The release of PFAS into the environment has become a concern because these chemicals can persist in humans, animals and the environment.

Perfluoroalkyl substance: Perfluoroalkyl substances are fully fluorinated (perfluoro-) alkane (carbon-chain) molecules. Their basic chemical structure is a chain (or *tail*) of two or more carbon atoms with a charged functional group *head* attached at one end. The functional groups commonly are carboxylic or sulfonic acids, but other forms are also detected in the environment.

Fluorine atoms are attached to all possible bonding sites along the carbon chain of the tail, except for one bonding site on the last carbon where the functional group head is attached.

Perfluorobutanesulfonic Acid (PFBS): PFBS is a chemical compound with a four-carbon fluorocarbon chain and a sulfonic acid functional group. As an anion, it functions as a stable fluorosurfactant because of the strength of carbon-fluorine bonds.

Perfluorooctanoic Acid (PFOA): PFOA was used as an active ingredient in the production of the legacy firefighting foams. In the past, foams containing this substance have been used at a number of Department of Defense and civil aviation sites for training and real-world fire exercises.

Perfluorohexane Sulphonate (PFHxS): PFHxS was also commonly found in the legacy firefighting foams, as an impurity in the manufacturing process.

Perfluorooctane Sulphonate (PFOS): PFOS was used as an active ingredient in the production of legacy firefighting foams. In the past, foams containing this substance have been used at a number of Department of Defense and civil aviation sites, for training and real-world fire exercises.

Polyfluoroalkyl substance: Polyfluoroalkyl substances are distinguished from perfluoroalkyl substances by not being fully fluorinated. Instead, they have a non-fluorine atom (typically

hydrogen or oxygen) attached to at least one, but not all, carbon atoms, while at least two or more of the remaining carbon atoms in the carbon chain tail are fully fluorinated.

Potential release location (PRL): Area where PFAS had been stored, used or released, which may include crash sites, hangars, fuel spill areas, hazardous waste storage facilities, and firefighting equipment testing areas.

Preliminary Assessment (PA): A “paper study”, historical investigation to determine likelihood of contamination at the site, includes documentation of potential responsible parties.

Proposed Plan (PP): “CoA Recommendation,” describes the remedial alternatives analyzed by the lead agency, proposes a preferred remedial action alternative, and summarizes the information relied upon to select the preferred alternative.

Remedial Action (RA): Actual work involved in clean-up. May include soil removal, covering, soil vapor extraction, etc.

Remedial Design (RD): Detailed design of the remediation work based on the ROD.

Remedial Investigation (RI): “Nature and Extent,” type, quantity and quality of contamination.

Receptor: In the context of an environmental investigation, a receptor is the entity (organism, population, community, or set of ecological processes) that may be affected by contact with, or exposure to, a contaminant.

Record of Decision (ROD): “CoA Approval” – documents approval of the Proposed Plan.

Sand filter: A filter used in water purification and consisting of layers of sand arranged with coarseness of texture increasing downward.

Sediment: Sediment is made of the weathered remains of rocks, minerals, plants and animals that are moved and deposited to a new location.

Site Closure (SC): No further action; conditions for unlimited use and unrestricted exposure have been achieved.

Site Inspection (SI): “Presence or Absence,” field work to determine contaminants, pathways, receptors, and recommendation for further action.

Stormwater: Stormwater runoff is the water that washes over a developed area after a precipitation event. As it travels, this water picks up pollutants such as oils, fertilizers, pesticides, and sediment among many other harmful substances, from rooftops, roadways, parking lots, etc.

Surface water: Surface water is water that collects on the ground and can be in the form of creeks, rivers, lakes, wetlands, oceans and more.

Third Unregulated Contaminant Monitoring Rule (UCMR 3): Program used by the United States Environmental Protection Agency to collect data for contaminants suspected to be present

in drinking water, but that do not have health-based standards set under the Safe Drinking Water Act.

Time-critical Removal: Lead agency has determined that a removal action is necessary and must be initiated within 6 months.

Turbidity: Turbidity is a measure of the degree to which the water loses its transparency due to the presence of suspended particulates. Measured in NTU.

Upgradient: A location that is the source groundwater for another location; similar to upstream.