#### NAS OCEANA FUEL SPILL Frequently Asked Questions June 23, 2017

Approximately 94,000 gallons of JP-5 jet fuel were spilled during routine refueling operations at NAS Oceana in Virginia Beach, Virginia on Thursday, May 11, 2017. An estimated 25,000 gallons of the fuel spill went off installation into a drainage channel that runs near two neighborhoods, and marsh land of Wolfsnare Creek. The spill was contained by Thursday afternoon through the combined efforts of emergency response units from the Navy, federal, state and local agencies operating as a unified command.

The rapid response by the Navy, federal, state and local partners quickly prevented the spill from entering the Lynnhaven River and causing potentially more damage to wildlife and the environment.

All off-installation visible recoverable fuel was captured by May 26th and excavation of soil in the vicinity of the fuel farm on NAS Oceana was completed on June 9th. As an added measure of precaution, absorbent booms continue to be placed into Wolfsnare Creek to capture any residual jet fuel that may be discovered. The Navy will continue to monitor the area until satisfied that all of the fuel has been recovered.

While the visible portion of the cleanup effort is nearly complete both on and off installation, Virginia Department of Environmental Quality (VDEQ), in conjunction with the Navy Region Mid-Atlantic Environmental Division, is overseeing the installation of monitoring wells, the scheduled inspection of the wells, and the scheduled sampling of soil throughout the spill area. The Navy and VDEQ are currently working together to determine the number and placement of the wells and soil sampling. This will continue for approximately six to eight months, or as long as required. This will continue for approximately 6 to 8 months, or as long as required.

Of the 200 households affected, 48 families who voluntarily relocated are back in their homes with the exception of one family. The Navy remains in communication with the family to address any additional needs and to assist in making them comfortable to return home.

The voluntarily relocated families have received checks to pay for lodging, meals and incidental expenses they incurred during the temporary relocation. Other families are receiving assistance in filing claims for any losses potentially caused by the fuel spill.

The estimated cost for the clean-up and taking care of our neighbors to date is \$3.8 million. The final cost is still being determined.

Naval Supply Systems Command, Fleet Logistics Center (NAVSUP FLC) Norfolk, which operates the Bulk Fuel Farm at the air station, immediately ordered a an investigation into the cause of the fuel spill. The results of the investigation, disciplinary actions and corrective measures were announced June 23, 2017.

#### **Questions and Answers**

#### **DISCIPLINARY ACTIONS**

#### Q. What did the investigation determine?

A. Naval Supply Systems Command, Fleet Logistics Center (NAVSUP FLC) Norfolk's command investigation uncovered that the Filter Separator No.3 Low Point Drain Valve was opened sometime around 1400 on May 10, 2017 and remained open until roughly 0625, 11 May 2017 when discovered by two on-coming personnel conducting their initial rounds.

#### Q. Did the investigation find anyone responsible for the spill?

A. Yes. The investigation discovered a number of instances in which the sailors on watch at the time failed to perform their appointed duties. All individuals responsible for the spill will be held accountable for their actions and/or inactions.

#### Q. Will disciplinary action be taken?

A. Yes. After reviewing the completed investigation, Captain James Lowther, Commanding Officer of Naval Supply Systems Command, Fleet Logistics Center Norfolk, initiated disciplinary and administrative actions for nine military personnel responsible, both officer and enlisted.

Disciplinary actions range from the imposition of non-judicial punishment to referral to trial by court-martial. Administrative options include removal or reassignment.

Because of the ongoing legal process and individual privacy rights, names or specific disciplinary actions cannot be provided.

Nine military personnel have or will face some form of disciplinary action, and that these personnel range in grade from junior enlisted Sailors to senior officers. As of June 23, 2017, disciplinary actions have been completed for seven military personnel.

Potential administrative actions are also being considered for one civilian.

#### Q. What is the difference between Administrative and Disciplinary actions or measures?

A. Administrative options include removal or reassignment. Disciplinary actions range from counseling, through non-judicial punishment or referral to trial by court-martial.

#### Q. What is Non-Judicial Punishment?

A. Non-Judicial Punishment or NJP is a hearing in front of a commander to face punishment and address a deficiency. Punishment can include a reduction in rank; restriction, and forfeiture of pay.

#### Q. Is there additional information on the individual cases?

A. No. Details regarding the administrative and disciplinary actions taken against the sailors and civilians involved are not releasable under the Privacy Act.

#### O. What does dereliction of duty mean?

A. Dereliction of duty means someone didn't perform the job they were qualified, trained and appointed to perform.

#### Q. Why doesn't military law allow more information to be released?

A. In some instances it does. In this case it does not because of the ongoing legal process and individual privacy rights. Similar to the civil justice system, the military justice system is also based on the principle that an individual is innocent until proven guilty and that we ensure all standards, policies and regulations are complied with.

#### Q. What is the discipline the civilian employee faces?

A. Civilian discipline is different from military. Civilian employees receive a notice of the reason for proposed discipline and are given an opportunity to respond and seek legal counsel.

#### Q. How long does the civilian administrative process take?

A. Federal civilian employees are subject to the Merit Systems Principles that guarantee employees due process protections. The process, and timeline, depending on evidence and individual circumstance will vary.

#### Q. Can a copy of the investigation be obtained?

A. A copy of the redacted investigation will be available as soon as the redaction process is complete.

#### **CORRECTIVE ACTIONS**

#### **Q.** What steps were taken to prevent a reoccurrence?

A. As an immediate step, the number of watch stander personnel was doubled from 20 to 40 and the personnel at the fuel farm held a safety stand down to review processes and procedures.

- Personnel began conducting increased rounds during fueling operations with two personnel, one sailor/one civilian.
- Engineers have added a spring loaded drain valve, in addition to the current manually set valve that will automatically close fuel flow when the handle is released.
- An overfill prevention valve is also being installed in the recovery tank that would cut off flow of fuel once it hits 95% full.
  - To the extent possible, fuel deliveries will be made between the hours of 7:30 a.m. and 9:30 p.m. to avoid increased risk with overnight fueling operations through the pipeline.
  - A review is underway into the way sailors are selected, trained, and qualified for duty in the Bulk Fuels Facility to improve safety.

#### Q. Are you confident the corrective actions will prevent another fuel spill?

A. Yes. The Navy also convened a working group to identify the best practices and procedures that can be put in place not only at Naval Air Station Oceana, but everywhere the Navy operates and we changed our fuel management processes so accidents such as this do not happen again.

#### Q. How is fuel delivered and stored at Naval Air Station Oceana?

A. The fuel for jets (JP-5) operating out of Naval Air Station Oceana is stored in three 880-thousand gallon tanks at the air station's Bulk Fuel Farm. The fuel is moved to the tanks from a fuel barge on the Inter-Coastal Waterway via an above ground pipeline to the tanks at the base.

#### Q. What kind of fuel was spilled?

A. The fuel was JP-5 jet fuel. The CDC's Agency for Toxic Substances & Disease Registry (ATSDR) maintains detailed information on JP-5 on the agency's web site:

https://www.atsdr.cdc.gov/PHS/PHS.asp?id=771&tid=150 (cut and paste the url into a web browser if the link is not clickable on your device)

#### Q. Where did the spill happen on the air station?

A. The spill occurred at the NAS Oceana bulk fuel farm off London Bridge Road on the west side of the installation during a routine refueling operation.

#### Q. How much of the spilled fuel left the installation?

A. An estimated 25,000 gallons of the fuel spill went off installation.

#### **People, Wildlife and Environment**

#### Q. What bodies of water were affected by the fuel spill?

A. The fuel spill affected a retention pond on the installation. Off base, the fuel spill affected London Bridge and Wolfsnare creeks.

#### Q. Which neighborhoods were affected by the fuel spill? How many residents affected?

A. A total of approximately 200 homes were affected. Two neighborhoods - Nottingham Estates (125) and Cheltenham Square (55) with 180 homes, and several other near-by properties.

#### Q. Were the residents of the neighborhoods exposed to any health risk?

**A.** Based on data that included environmental air monitoring and drinking water well testing, the unified command responders do not believe anyone in the neighborhoods was exposed to any health risk.

## Q. If there was no health risk, why did the Navy offer to relocate the households affected by the fuel spill?

A. After visiting the neighborhoods, and hearing residents' concerns due to the odor of the jet fuel, the unified command requested and received approval to offer the voluntary relocation.

#### Q. How many households voluntarily evacuated?

A. Of the 200 households affected, 48 families voluntarily relocated. With the exception of one family, all households are back in their homes.

## Q. Who is the one remaining family? Why have they not returned home? Is the Navy still paying for their lodging or other expenses?

A. There is one family who has not returned to a residence. The Navy is not paying their lodging or other expenses. We remain in communication with the family to address their concerns.

#### Q. Did the Navy reimburse the residents who voluntarily left their homes due to the spill?

A. The Navy paid for the costs of the hotels of the residents who participated in the voluntary relocation. The Navy also provided those households with funds to cover meals and incidental expenses while in the temporary lodging. The Navy provided approximately \$180,000 in temporary lodging and reimbursements to the temporarily displaced families.

#### Q. How long was the temporary voluntary relocation?

A. Lodging was made available to residents who temporarily relocated until May 31, 2017.

## Q. What about other people who may have self-relocated? Will the Navy reimburse them for the expenses they incurred?

A. Residents affected by the spill who have not contacted the Navy are encouraged to call the OceanaComments line (757) 433-2162 or email: OceanaComments@navy.mil.

Any individual suffering property damage and/or personal injury as a result of the fuel oil spill may submit a claim with the Navy. If you would like to file a claim, please access the claims form at:

<u>http://www.jag.navy.mil/organization/documents/SF95%20Packet.pdf</u>
(cut and paste the url into a web browser if the link is not clickable on your device)

The form includes detailed instructions. The Department of the Navy is committed to resolving all claims related to this matter in a fair and timely manner. All claims processing will be expedited as much as possible. However, we cannot forecast an expected processing time.

#### Q. How is the Navy communicating with residents?

A. Communication has taken place in a variety of ways, including personal visits and phone calls, social media and text alerts, a town hall meeting, hand-delivered flyers and news media reports. Additionally, the Navy established <a href="www.cnic.navy.mil">www.cnic.navy.mil</a>\OceanaFuelSpill as a central resource for residents. Residents may also contact the base via phone at: 757-433-2162 or email: <a href="mailto:Oceanacomments@navy.mil">Oceanacomments@navy.mil</a>

The commanding officer of NAS Oceana has personally spoken with and visited homeowners affected by the fuel spill.

Nearly 100 residents and news media attended the Navy's May 15<sup>th</sup> public information meeting and were provided contact info for electronic/telephonic/mail updates and notifications from the Navy.

May 18, sailors from NAS Oceana hand-delivered letters and flyers to the 200 homes offering to temporarily relocate residents on a voluntary basis to local hotel; at 158 of those, the sailors delivered the flyers directly to occupants.

#### Q. What is the impact to health?

A. Unified response teams continually monitored the water and air quality to ensure public safety during emergency response efforts. At no time did the unified command believe anyone in the neighborhoods was exposed to any health risk and the environmental readings supported that.

The CDC's Agency for Toxic Substances & Disease Registry (ATSDR) maintains detailed information, including health effects, on JP-5 on the agency's web site:

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#### Q. What was the impact to wildlife?

A. Deceased wildlife totaled 1452 which consisted mostly of minnows, fish, tadpoles, frogs, and crayfish.

Of the deceased wildlife:

- Fish (9 species) 49.09%
- Crustacean/Shellfish (3 species) 34.78%
- Amphibian (5 species) 8.31%
- Invertebrates (3 species) 5.52%
- Bird (4 species) 1.26%
- Reptile (4 species) 0.84%
- Mammal (3 species) 0.21%

Approximately 20 were recovered, rehabilitated and released:

- Crustacean/Shellfish (1 species) 5.00%
- Amphibian (1 species) 5.00%
- Reptile (3 species) 45.00%
- Mammal (2 species) 45.00%

#### Q. Were any of the dead wildlife on the endangered species list?

A. None of the wildlife was on the Federal or State Endangered species list and none covered under the Marine Mammal Protection Act. 18 birds covered under the Migratory Bird Treaty Act died from the fuel spill.

## Q. What is the status of the installation of the monitoring wells and soil sampling? How many wells are there and where are they located? Have any wells been installed or soil samples taken? Who gets the results?

A. Virginia Department of Environmental Quality (VDEQ), in conjunction with the Navy Region Mid-Atlantic Environmental Division, will oversee the installation of monitoring wells, the scheduled inspection of the wells, and the scheduled sampling of soil throughout the spill area. This will continue for approximately six to eight months, or as long as required. The Navy and VDEQ are currently working together to determine the number and placement of the wells and soil sampling.

#### Q. Can residents eat the vegetables from their gardens?

A. According to EPA representatives, unless there was direct contact of fuel with gardens, all growing vegetables are safe to eat. No instances of contact were recorded. The jet fuel spill was contained to the ditch line along London Bridge Road, London Bridge Creek, and the tidal waters at the confluence of London Bridge Creek and Wolfsnare Creek. Gardens are not expected to be impacted from the spill unless residents were using water directly from London Bridge Creek to irrigate a garden.

#### Q. Has Wolfsnare Creek reopened for recreational activities?

A: Yes, Wolfsnare was reopened for recreational use May 25. The cleanup activities associated with the emergency phase are completed. Boaters should avoid the booms located at the mouth of London Bridge Creek

#### Q. Is there still jet fuel in Wolfsnare Creek?

A: All visible and recoverable jet fuel in Wolfsnare Creek has been removed. During the cleanup, trace amounts of the jet fuel were detected in the water column several miles north and south of where the fuel entered the Creek. The fuel levels in the water column declined during the cleanup and were almost undetectable by May 17, 2017. Small pockets of fuel, mostly as sheens, may still occur.

#### Q. Are fish and shellfish in Wolfsnare Creek safe to eat?

A: Water tests results of the surrounding waters came back clean and safe. The public however should follow the same precautions they follow for consuming seafood from any natural body of water.

# **Q.** You said in your remarks the visible cleanup is nearly complete. What does that mean? **A.** As an added measure of precaution, absorbent booms continue to be placed into Wolfsnare Creek to capture any residual jet fuel that may be discovered until we are satisfied that all of the fuel has been recovered.

#### Q. How were water and soil contaminated by the fuel spill treated or disposed?

A. Soil and vegetation removed at both NAS Oceana and London Bridge Rd. sites were treated and disposed of at Clearfield MMG Waste Management Facility.

#### Q. How will wetlands vegetation contaminated by the fuel spill be remediated?

A. Spilled jet fuel did impact the tidal marshes in London Bridge Creek and near the confluence of London Bridge Creek and Wolfsnare Creek. This is evidenced by the presence of brown marsh grass. The first stage of responding to oiled tidal marshes it to recover recoverable fuel. This has been completed. The second stage of response is to complete a Shoreline Cleanup Assessment Technique evaluation wherein trained personnel inspect the impacted area to determine: 1) the degree of marsh impact (oiling) and 2) the appropriate cleanup technique(s). The evaluation was completed, and it was determined that the marsh was only 'lightly oiled'. As such, the appropriate cleanup technique is to allow tide cycles and rain to flush the affected marsh areas and let the marsh recover naturally. Studies have shown that lightly-oiled marshes tend to recovery more quickly when physical disturbance is avoided. The Navy is continuing to work with DEQ's Tidewater Regional Office, Virginia Institute of Maritime Science and NOAA, NOAA, & Navy) on the long-term assessment of the marsh grass areas.

#### Q. After a month what has been the impact on marshlands?

A. Too early to say what the long term affects are. Since the cleanup operations ended we've seen no additional wildlife impacted by the spill. The marsh grass itself will be photographed for several months at the same location to determine the recovery of the affected plant life.

## Q. How do you know when you've recovered or otherwise accounted for all the fuel spilled?

A. The Unified Command determined the end point to be when no free product is left (non-recoverable). The objective was to recover the product with the least amount of environmental impact. As of the last day of the on-base portion of the cleanup, June 9, 775,000 gallons of mixture (water/fuel) and 1706 tons of soil were removed.

#### Q. What agencies assisted the Navy with the cleanup?

A. NAS Oceana and the Navy are worked with U.S. Coast Guard, City of Virginia Beach, the Virginia Department of Emergency Management, the Virginia Department of Environmental Quality, Virginia Department of Health, Virginia Beach Animal Control, U.S. Navy Natural Resources, Virginia Department of Game and Inland Fisheries, U.S. Fish and Wildlife Services, U.S. Department of Agriculture-APHIS-Wildlife Services, USDA, Tri-State Bird Rescue & Research, INC., and HEPACO.

#### Q. How many people were involved in the unified response?

A. More 150 service members, civilian government employees, local, state, and federal employees, and personnel from the city of Virginia Beach.

#### Q. Did the fuel reach the Lynnhaven River?

A. No. On May 11, crews placed water booms on Wolfsnare Creek on the tributary located between Elon Drive and North Adventure Trail, and protective berms on NAS Oceana to contain the spilled fuel. There have not been any confirmed reports of fuel reaching the Lynnhaven River.

#### Q. How long will the cleanup take?

A. The emergency response phase ended on May 26 when the Unified Command was disestablished. However, the assessment and remediation phase, under the supervision of the Virginia Department of Environmental Quality will continue until it is determined the Navy has completed all required actions.

#### Q. Who will pay for the cleanup?

A. The U.S. Navy is responsible the cost of the cleanup.

#### Q. How much is oil spill response costing?

A. The exact cost of the response has not been determined as the response is ongoing. However, we have spent approximately \$3.8 million to date in the cleanup operations and support to the affected families.

#### Q. What is the cost of the fuel?

A. the cost of the fuel is approximately \$184,000 at \$1.91/gal.

#### Q. Has any property damage been attributed to the spill?

A. Several residents reported damage from response equipment. The Navy is working with the residents to address their concerns.

#### Q. How does this affect the value of my land/resale value?

A. Home and property values are typically based on a variety of factors. We recommend discussing any concerns with a real estate professional.

#### Q. Were airfield operations affected by the spill?

A. Airfield operations were never negatively impacted and were able to operate normally.

### Q. Has a spill of this magnitude ever happened at Naval Air Station Oceana? A. No.

#### Q. Will an accident like the fuel spill make NAS Oceana a target for BRAC?

A. Any decisions relating to BRAC will be made in accordance with applicable laws and Department of Defense BRAC procedures.

#### Q. Have there been any reports of illness or injury due to the fuel spill?

A. Initially, we heard from several residents complaining of headaches and nausea following fuel spill when the odor was high, and that prompted the offer for voluntary relocation.

#### Q. What if a resident feels their health has been impacted by the fuel spill?

A. If anyone has medical concerns, we encouraged them to consult with their healthcare provider.

#### Q. Will the Navy pay for health costs associated with the spill?

A. Residents who incur expenses from any aspect of the spill from may file claims for potential reimbursement. In those instances, we encourage residents to keep all bills, invoices and other supporting documents to submit with their claims package.

## Q. Did the response team ever feel anyone in the neighborhoods was exposed to health risks?

Unified response teams continually monitored the water and air quality to ensure public safety during emergency response efforts. At no time did the unified command believe anyone in the neighborhoods was exposed to any health risk and the environmental readings supported that.