POLREP # 1 and Final
Procino-Blades PFAS
Blades, Sussex County, DE 19973

Event: Removal Assessment Activities

ATTN: Region III RRC

I. Situation

A. The site is located in the vicinity of a former electroplating company, Peninsula Plating, and the current electroplating facility, Procino Plating, both of which are located in Blades, DE. The approximate geographic coordinates of the center of Blades are 38.6357° north latitude and 75.6099° west longitude. The site consists of a mixture of commercial and residential properties and has a population of approximately 1200 people.

B. Under a cooperative agreement between Region 3 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Delaware's Department of Natural Resources and Environmental Control (DNREC), DNREC sampled three public water supply (PWS) wells owned by the town of Blades, DE. Sampling was conducted because there was documented chromium groundwater contamination from two electroplating businesses which were suspected of using products containing Perfluoroalkyl Sulfonate (PFAS) compounds. Preliminary test results showed that all three municipal wells had a summed total concentration of perfluorooctanoic acid (PFOA) plus perfluorooctanesulfonic acid (PFOS) greater than the health advisory level (HAL) of 70 parts per trillion (ppt). Other PFAS compounds were also detected but at lower concentrations.

C. A potential source of PFAS analytes may be the two electroplating companies, Peninsula Plating and Procino Plating. Peninsula Plating operated until 1995 when it went bankrupt. Peninsula Plating was located directly adjacent to the Town's property where the municipal wells are located. Porcino Plating is still in operation and is located approximately 1,300 feet from the Town's wells.

D. Procino Plating has documented Resource Conservation and Recovery Act (RCRA) and National Pollutant Discharge Elimination System (NPDES) violations as well as chromium contamination in the groundwater beneath the facility. Procino Plating is currently conducting groundwater remediation under DNREC's voluntary clean-up program for chromium contamination. It is unclear if one or both of these businesses are responsible parties to the PFAS contamination in groundwater.

E. DNREC requested the assistance of the EPA after it was confirmed that the three municipal wells had PFOS and PFOA contamination above the HAL of 70 ppt. DNREC requested that the EPA sample the three municipal wells to confirm the presence of PFAS compounds and to begin sampling the private residential wells located in the nearby area.

II. ACTIONS TAKEN

A. On February 12, 2018, START on the behalf of the EPA, initially collected 3 samples from three separate municipal wells, and 1 sample at the point where all three wells converge. All the municipal wells were sampled for PFCs, Hexavalent Chromium, VOCs, TAL metals, mercury and cyanide. All three wells were confirmed to have PFC concentrations over the HAL or 70 ppt.

B. Following the sampling of the town's municipal wells, START began sampling the surrounding residents, within the sampling area, that are on private wells.

C. Samples collected from the residential locations were collected from a point of use source, such as the kitchen faucet. Two raw water samples were collected from each residential location, approximately 4 months apart, to assess whether there were any changes in the concentrations of PFAS.

D. A total of 149 PFAS samples (not including field reagent blanks) were collected.

E. From February to November 2018, 54 private residential water well locations were sampled for PFAS.

F. Of the 58 sampling locations (including the municipal wells), 11 locations had samples that exceeded respective HALs (7 residential locations, all 3 raw municipal water well locations and the 1 post-treatment municipal water sample).

G. DNRC provided carbon filtration units to the affected properties.

H. February 15 – 16, 2018, START sampled 20 residential properties.

I. February 19, 2018, START sampled 9 residential properties.

J. February 22, 2018, START sampled 9 residential properties.

K. February 27-28, 2018, START sampled 5 residential properties.

L. March 9, 2018, START sampled one residential property.

M. April 3 – 4, 2018, START sampled fifteen residential properties.

N. April 10, 2018, START sampled three residential properties.

O. May 1 – 3, 2018, START sampled twenty-four residential properties.

P. May 8, 2018, START sampled six residential properties.

Q. May 10, 2018, START sampled two residential properties.

R. June 6, 2018, START sampled four residential properties.

S. July 10 – 11, 2018, START sampled twelve residential properties.

T. August 14 – 15, 2018, START sampled nice residential properties.

U. November 11, 2018, START sampled five residential properties.

V. As the validated results were received, letters were mailed to all property owners explaining the sampling results.

III. FUTURE ACTIONS

A. No additional actions are anticipated.

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