# Initial Site Screening (ISS)

**Site Name:** 3M Knoxville

Project Manager: Matthew Graesch Date: 09/19/24

☐ **3931 - Phase II Assessment Review – Brownfield Funded**
Phase II submitted as part of standard real estate development, pre-purchase agreement, or other due diligence, not a part of a community grant project, or

☐ **3837 - Phase II Assessment – Brownfield Grant Funded**
Phase II submitted as part of an EPA grant funded community-wide or targeted assessment project – see Mel Pins if questions on this determination, or

☒ **3321 - Phase II Assessment Review – CERCLA Pre-Remedial Funded**
Phase II submitted that is not part of a real estate transaction

**Location:** (Decimal Degree format)

Latitude: 41.319 Longitude: -93.065 **County**: Marion

**USGS Quadrant:** Knoxville

**Site Size:** ~80 acres **Site Dimension:** ☒ Acres ☐ Square Feet ☐ Feet ☐ Square Miles ☐ Miles

**Site Alias Name(s):** NA

**Congressional District:** 2

**Grant Recipient Name:**

**Grant Recipient Address:**

**Grant Recipient Phone:** **Grant Recipient Email:**

**Current Owner(s):** 3M Corporation

**Current Owner Address:** 3406 East Pleasant St, Knoxville, IA 50138

If different from current owner:

**Responsible Party Name(s):** Same

**Responsible Party Address:** Same

**Site Street Address or Tier, Range, Section & Subsections** (if street address is unknown)

Same

**Directions to site:** From Interstate 35, take Hwy 92 east to Knoxville. Exit on McKimber St, and proceed east. McKimber St will become Pleasant St; continue east through Knoxville. The site is on the south side of East Pleasant St one mile east of Knoxville at the intersection of county highway G44.

**Summarize the site history (past usages, past ownerships, wastes, known or suspected contamination pathways such as tanks, septic tank/tile field, lagoon, land applications, SW burial, etc.)**

**Site History:**

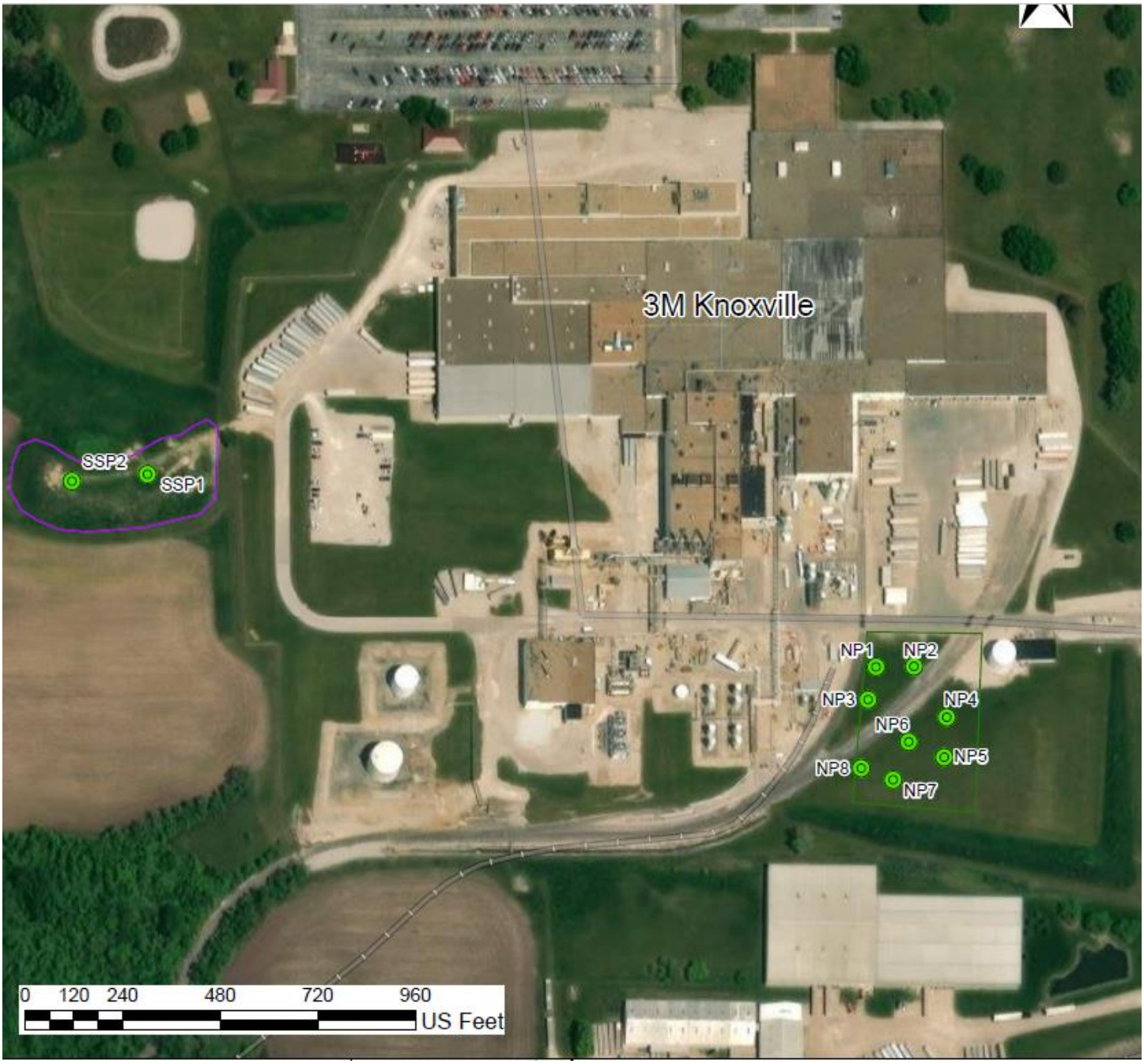
The site has been used for industrial manufacturing of tape and adhesives for ~50 years, and was previously used for rowcrop agriculture. It is not believed that PFAS chemicals were manufactured on site, but fire extinguishing equipment containing AFFF was stored, and used for training at the site.

**Recognized Environmental Conditions (REC):**

PFOS and PFOA have been found in soil samples collected in advance of an expected new construction project that will require movement of soil

**Briefly describe the site assessment that was conducted (number of borings, monitoring wells, number of samples, depth of soil samples and monitoring wells, analysis, etc.)**

Ten soil borings were completed for PFAS, petroleum compounds (light and heavy), and VOCs (8260). These borings were completed in the areas where soil disturbance is expected during an upcoming construction project. Samples were collected both at the surface, and at 4-5' depth.


3M Knoxville
SSP2
SSP1
NP1
NP2
NP3
NP4
NP6
NP5
NP8
NP7
0 120 240 480 720 960
US Feet

**Summarize the findings and conclusions regarding the contaminants found and their extent and concentrations. Relate those values to known criteria such as statewide standards, MCLs, water quality standards, background levels or other benchmarks used to determine site priority.**

*Table 1: Soil Sample Results (Detected Analytes Only)*

| Analyte Group | Analyte | Iowa Statewide Standard for Soil (mg/kg) | Sample Location/Depth | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | NP1 | | | NP2 | | NP3 | | NP4 |
| | | | 0 - 1 foot | 0 - 1 foot DB | 4 - 5 feet[1] | 0 - 1 foot | 4 - 5 feet[1] | 0 - 1 foot | 4 - 5 feet[1] | 0 - 1 foot |
| | | | Results (mg/kg) | | | | | | | |
| Total Extractable Hydrocarbons | Diesel | 28000 | < 5.44 | 8.17 | < 4.9 | < 5.39 | < 5.12 | 8.42 | < 4.75 | NA |
| | Waste Oil | 9400 | < 13.6 | 23.9 | < 12.2 | < 13.5 | < 12.8 | 20.3 | < 11.9 | NA |
| | Total | NS | 15 | 32.1 | < 12.2 | < 13.5 | < 12.8 | 28.8 | < 11.9 | NA |
| Perfluoroalkyl Substances | Perfluorohexanoic acid (PFHxA) | 39 | 0.00034 | 0.00032 | NA | 0.00028 | NA | 0.00025 | NA | 0.00022 |
| | Perfluorooctanoic acid (PFOA) | 35 | 0.00057 | 0.00084 | NA | 0.00034 | NA | 0.00051 | NA | 0.00045 |
| | Perfluorohexane sulfonic acid (PFHxS) | 1.6 | 0.0024 | 0.0019 | NA | 0.0025 | NA | 0.0017 | NA | 0.00046 |
| | Perfluorooctane sulfonic acid (PFOS) | 0.00048 | **0.0074** | **0.0080** | NA | **0.012** | NA | **0.013** | NA | **0.0035** |
| VOCs | P-Isopropyltoluene | NS | < 0.0088 | < 0.0779 | < 0.0076 | < 0.00869 | < 0.00823 | < 0.00837 | < 0.00713 | NA |

| Analyte Group | Analyte | Iowa Statewide Standard for Soil (mg/kg) | Sample Location/Depth | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | NP5 | NP6 | NP7 | NP8 | SSP1 | SSP2 |
| | | | 0 - 1 foot | 0 - 1 foot | 0 - 1 foot | 0 - 1 foot | 4 - 5 feet[1] | 4 - 5 feet[1] |
| | | | Results (mg/kg) | | | | | |
| Total Extractable Hydrocarbons | Diesel | 28000 | NA | NA | NA | NA | < 4.76 | < 5.1 |
| | Waste Oil | 9400 | NA | NA | NA | NA | < 11.9 | < 12.7 |
| | Total | NS | NA | NA | NA | NA | < 11.9 | < 12.7 |
| Perfluoroalkyl Substances | Perfluorobutane Sulfonate (PFBS) | 18 | <0.00020 | <0.00020 | <0.00020 | <0.00020 | 0.00041 | <0.00020 |
| | Perfluorohexanoic acid (PFHxA) | 39 | <0.00020 | 0.00022 | 0.00024 | <0.00020 | 0.001 | <0.00020 |
| | Perfluorooctanoic acid (PFOA) | 35 | 0.00042 | 0.00031 | 0.00046 | <0.00020 | <0.00020 | <0.00020 |
| | Perfluorohexane sulfonic acid (PFHxS) | 1.6 | 0.00052 | 0.00039 | 0.00052 | 0.00054 | 0.0038 | 0.00049 |
| | Perfluorooctane sulfonic acid (PFOS) | 0.00048 | **0.0022** | **0.0019** | **0.0026** | **0.0054** | **0.015** | **0.0027** |
| VOCs | P-Isopropyltoluene | NS | NA | NA | NA | NA | 0.0109 | < 0.00793 |

Notes:

## Soil Findings

See above

## Groundwater Findings:

NA

**Identify on-site or off-site potential and actual targets (e.g., municipal wells, private wells, drinking water intakes). What is known of the neighboring area, i.e., are there residences, businesses, public use areas, etc.? Are there utility lines that could be impacted by site contaminants? Identify any other use/location issues that deserve consideration.**

The neighboring areas of the site are undeveloped, or are used for agriculture. There are no known nearby drinking water wells, and the city obtains its drinking water from wells >2000' deep that are located a significant distance north of the site.

**Rate the site on a scale of 1 to 4, in decreasing order of severity or priority.**

This site receives a Priority 3 rating

**Summarize the reasoning, knowledge or any other information used in determining your recommendation regarding the priority assigned to this site.**

PFAS chemicals were detected at the 3M Knoxville plant in routine soil sampling in advance of expected construction work. PFOA and PFOS were the chemicals detected, though only PFOS exceeded statewide soil standards. This particular plant is not believed to have manufactured or made extensive use of PFAS chemicals, though commercial grade AFFF fire extinguishing equipment was housed on site, and likely training took place in the past.

The site is assigned a priority 3 rating, and will not require additional sampling at this time, but will be required to submit a soil management plan in advance of moving soil known to contain PFAS. No receptors are present in the immediate vicinity that could be affected by soil leaching or shallow groundwater (ingestion).
A risk calculation for exposure to indoor air was not conducted by DNR because the contaminants detected in groundwater are not volatile.

**Site recommended for:**

- [x] No further action under CERCLA Pre-Remedial
- [ ] Additional investigation under state program (activity code 2824)
- [ ] Additional investigation under CERCLA (Extended Site Screening)
- [ ] Transfer to LUST/UST

**Form Reviewed:** Digitally signed by Michael Sullivan Date: 2024.09.20 17:00:46 -05'00' **Date Reviewed:** September 20, 2024

**REGION VII U.S. EPA SUPERFUND**
**NO DISCOVERY DATE**

# PRE-CERCLIS INITIATION FORM

(Required information marked with a * and in red)

**NPL Status = O-Not a Valid Site or Incident**

***Site Name:** 3M Knoxville ***Identified By:** ☐ Removal ☒ Site Assessment ☐ Federal Facilities ☐ States ☐ Other Federal Agency Check if: ☐ FUD Site

***Address:** 3406 East Pleasant ***County:** Marion

***City, State, Zip:** Knoxville, IA 50139 **State ID** (if one exists)**:** 2817 **Congressional District:** 2

**NPL Status = O-Not a Valid Site or Incident** Federal Facility Indicator: ☐ Federal Facility ☒ Not a Federal Facility ☐ Status Undetermined

***Section:**

☐ C-(STAR) SPFD Technical Assistance/Re-Use Branch ☐ L-(EFLR) Enfr/Fund Lead RV Branch ☐ F-(FFSE) Federal Facilities/Special Emphasis Branch
☐ M-(MOKS) MO/KS remedial Branch ☐ I-(IANE) IA/NE Remedial Branch ☐ O-(ER&R) Emergency Response & RV Branch

**List Site Alias Name(s):** NA

**Directions to Site:** From Interstate 35, take Hwy 92 east to Knoxville. Exit on McKimber St, and proceed east. McKimber St will become Pleasant St; continue east through Knoxville. The site is on the south side of East Pleasant St one mile east of Knoxville at the intersection of county highway G44.

**Site Description:** Large industrial site with manufacturing related to adhesives and tape, surrounded by rural/agricultural land

***Latitude:** 41.319 ***Longitude:** -93.065 **USGS Quadrant:** Knoxville **USGS Hydro Unit:** 071000081405

**(Decimal Degree Format) (with release of 3.17 see attached required location data form**

**Lat/Long Accuracy:** ☒ Seconds ☐ Degrees ☐ Minutes ☐ Miles ☐ Feet ☐ Kilometers ☐ Meters

***Owner Operator Type:**

☐ Federally-Owned ☐ Other ☐ Trustee, Federal
☐ Bank/Loan Company ☐ Former Federally Owned or Operated ☒ Private ☐ Trustee, State
☐ Brownfields/Public ☐ Government Owned/Contractor Operated ☐ Privately Owned/Government Operated ☐ Unknown
☐ County Owned ☐ Mixed Ownership ☐ Property Defaulted Back to Government
☐ District Owned ☐ Municipality ☐ State Owned

***Operational Status:** ☒ Active ☐ Inactive ☐ Unknown ☐ Blank **Native American Interest:** ☐ Yes ☒ No

***Non-NPL Status (Choose one):** ☐ Not a Valid Site or Incident ☐ Not a Valid Site or Incident: RCRA Lead ☒ Not a Valid Site or Incident: State Lead
☐ Not a Valid Site or Incident: NRC Lead ☐ Not a Valid Site or Incident: Tribal Lead

***Add Action: OU** ***PRE-CERCLIS SCREENING:** ***Planned Complete:** ***Actual Complete:**

***Lead code (choose one)** ☐ F-EPA Fund Financed ☐ FF - Federal Facility ☐ S - State, Fund Financed

**SCAP Note:**

Lead:

**Add below Action (if No Further Action):** **OU** ☐ PRE-CERCLIS ARCHIVE **Actual Complete:**

**SCAP Note:** **Comments:** ☐ Site or ☐ Action:

***Site Type:** (Choose all that apply; for every main category chosen, in bold, at least one sub-category must be selected; if more than one main and sub-category is selected indicate which is primary)

**Primary Designation:** OT

☒ **MP-Manufacturing/Processing/Maintenance** - *Applicable sub-categories:*
- ☐ CA-Chemicals and allied products
- ☐ CG-Coal gasification
- ☐ CP-Coke production
- ☐ EP-Electric power generation and distribution
- ☐ FT-Fabrics/textiles
- ☐ EE-Electronic/electrical equipment
- ☐ LW-Lumber and wood products/pulp and paper
- ☐ WP-Lumber and wood products/ wood preserving/ preserving/ treatment
- ☐ MF-Metal fabrication/finishing/coating and allied industries
- ☐ OR-Oil and gas refining
- ☐ OP-Ordnance production
- ☒ OT-Other-Description (needed): Adhesives
- ☐ PR-Plastics and rubber products
- ☐ PM-Primary metals/mineral processing
- ☐ RA-Radioactive products
- ☐ TA-Tanneries
- ☐ TS-Trucks/ships/trains/aircraft and related components

☐ **RE-Recycling** - *Applicable sub-categories*
- ☐ AT-Automobiles/tires
- ☐ BS-Batteries/scrap metals/secondary smelting/precious metal recovery
- ☐ CC-Chemicals/chemical waste (e.g., solvent recovery)
- ☐ DT-Drums/tanks
- ☐ OT-Other-Description (needed):
- ☐ WO-Waste/used

☐ **MI-Mining** - *Applicable sub-categories*
- ☐ CO-Coal
- ☐ ME-Metals
- ☐ NM-Non-metal minerals
- ☐ OG-Oil and Gas
- ☐ OT-Other-Description (needed):

☐ **WM-Waste Management** - *Applicable sub-categories*
- ☐ CL-Co-disposal landfill (municipal and industrial)
- ☐ ID-Illegal disposal/open dump
- ☐ IF-Industrial waste facility (non-generator)
- ☐ MD-Mine tailings disposal
- ☐ OT-Other-Description (needed):
- ☐ ML-Municipal solid waste landfill
- ☐ RW-Radioactive waste treatment, storage, disposal (non-generator)

☐ **OT-Other** - *Applicable sub-categories*
- ☐ AG-Agricultural (e.g., grain elevator)
- ☐ CS-Contaminated sediment site with no identifiable source
- ☐ DC-Dust control
- ☐ OT-Other-Description (needed):
- ☐ GP-Ground water plume site with no identifiable source
- ☐ MO-Military/Other Ordinance
- ☐ PS-Product Storage/distribution
- ☐ RC-Retail/commercial
- ☐ RD-Research, development, and testing facility
- ☐ SE-Spill or other one-time event
- ☐ TP-Transportation (e.g., railroad yards, airport, barge docking, site)
- ☐ TW-Treatment works/septic tanks/other sewage treatment

**Signatures:**

**States:** Matthew Graesch **Date:** 091924

**RPM/OSC/SAM:** _____ **Date:** _____

**REGION VII**
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**ENFORCEMENT SENSITIVE INFORMATION**
**FOR INTERNAL USE ONLY**

# LOCATION FORM

(Required information marked with a * and in red)

***Site Name:** 3M Knoxville ***EPA ID:**

***Latitude:** 41.319 ***Longitude:** -93.065 Measurement Sequence: NA
Decimal Decree Format (See Comment A)

***Lat/Long Source:**
☐ Contractor ☐ Regulated Entity ☐ Private
☐ Dun & Bradstreet ☐ State ☐ SNAP
☐ EPA Region 7 ☐ EPA Headquarters ☐ Tribe
☐ Geograph ☐ Epic ☐ Unknown
☐ Other Federal Agency ☒ Other ☐ (Blank)

**Designate Lat/Long:** ☒ Primary ☐ NPL Coordinate

***Collection Method:**

☐ Address Matching -House Number
☐ Address Matching - Block Face
☐ Address Matching - Street Centerline
☐ Census Block - 1990 - Centroid
☐ Census Block/Group 1990-Centroid
☐ Census Block/Tract - 1990 - Centroid
☐ Census - Other
☐ GPS Carrier Phase Static Relative Position
☐ GPS Carrier Phase Kinematic Relative Position
☐ GPS, with Canadian Active Control System
☐ Interpolation-Digital Map Source (TIGER)
☐ Interpolation-Map
☐ Interpolation -MSS
☐ Address Matching -Nearest Intersection
☐ Address Matching - Primary Name
☐ Address Matching - Digitized
☐ ZIP+2 Centroid
☐ ZIP+4 Centroid
☐ ZIP Code - Centroid
☐ GPS Code (Pseudo Range) Differential
☐ GPS Code (Pseudo Range) Precise Position
☐ GPS Code (Pseudo Range) Standard Position (SA-Off)
☐ GPS Code (Pseudo Range) Standard Position Service SA-On
☐ Interpolation -Photo
☒ Interpolation – Satellite
☐ Interpolation -SPOT
☐ Address Matching - Other
☐ Public Land Survey-Footing
☐ Public Land Survey-Section
☐ Public Land Survey-Quarter Section
☐ Public Land Survey-Eighth Section
☐ Public Land Survey-Sixteenth Section
☐ GPS-Unspecified
☐ Classical Surveying Techniques
☐ LORAN
☐ Unknown
☐ Interpolation-TM
☐ Interpolation - Other

***Reference Point:**

☐ Administrative Building
☐ Air Monitoring Station
☐ Air Release Stack
☐ Air Release Vent
☐ Atmos. Emissions Trtmnt Unit
☐ Boundary Point
☐ Building Entrance
☒ Facility/Centroid Cent
☐ Facility/Station Bldg Entrance
☐ Intake Point
☐ Lagoon or Settling Pond
☐ Liquid Waste Treatment Unit
☐ Loading Area Centroid
☐ Loading Facility
☐ Monitoring Point
☐ NE Corner of Land Parcel
☐ NW Corner of Land Parcel
☐ Other
☐ Plant Entrance (Freight)
☐ Plant Entrance (General)
☐ Plant Entrance (Personnel)
☐ Process Unit Area Centroid
☐ Process Unit
☐ Release Point
☐ SE Corner of Land Parcel
☐ Solid Waste Storage Area
☐ Solid Waste Trtmnt/Disp. Unit
☐ Storage Tank
☐ SW Corner of Land Parcel
☐ Treatment/Storage Plant
☐ Unknown
☐ Water Monitoring Station
☐ Water Release Pipe
☐ Well
☐ Well Protection Area

***Reference Datum:** ☐ NAD27 ☐ NAD83 ☐ Other ☒ Unknown ☐ WGS84

***Accuracy Meters +/-:** ☐ ***Accuracy Unknown** ***Collection Date:**

**Verification Method:**

☐ Ground Truth Conducted
☐ Point In Polygon (County)
☐ Point in Polygon (Zip)
☐ Point in Polygon (Other)
☐ Proximity to Alternative Facility Coordinate
☐ Proximity to Polygon Centroid (County)
☐ Proximity to Polygon Centroid (Other)
☐ Proximity to Polygon Centroid (Zip Code)
☐ Verified Relative to Map Features (1:100K/Tiger)
☐ Verified Relative to Map Features (1:24K)
☐ Verified Relative to Map Features (Other)
☐ Verified, Unknown Method
☒ Not Verified
☐ Blank

***Point/Line/Area:** ☐ AREA ☐ LINE ☒ POINT ☐ REGION ☐ ROUTE ☐ BLANK

***Source Map Scale:**
☐ 1:10,000 ☐ 1;20,000 ☐ 1:50,000 ☐ 1:100,000 ☐ 1:500,000
☐ 1:12,000 ☐ 1:24,000 ☐ 1:62,500 ☐ 1:125,000 ☒ NONE
☐ 1:15,840 ☐ 1:25,000 ☐ 1:63,360 ☐ 1:250,000 ☐ UNKNOWN
☐ OTHER

COMMENTS:

**Signatures:**

**RPM/OSC:** Matthew Graesch **Date:** 091924

**Branch Chief:** **Date:**

Comment A: A sequential number to indicate the order in which points on a line or area are connected. For an area, the maximum point is connected to the first. Required if the feature is polygonal or linear 3 numeric.