1. Introduction

1.1 Background

- Site Number: V6RG
- Contract Number:
- D.O. Number:
- Action Memo Date:
- Response Authority: OPA
- Response Type: Emergency
- Response Lead: EPA
- Incident Category: Removal Assessment
- NPL Status: Non NPL
- Operable Unit:
- Mobilization Date: 6/13/2016
- Start Date: 2/2/2016
- Demob Date:
- Completion Date:
- CERCLIS ID:
- ERNS No.: N/A - State Referral
- State Notification:
- FPN#: E16605
- Reimbursable Account #: 303D91

1.1.1 Incident Category

Emergency Removal. Discharge and/or Threat of a Discharge of Crude Oil from Abandoned Oil Production Wells. This is an Oil Spill Liability Trust Fund lead removal under the Clean Water Act as amended by the Oil Pollution Act (OPA)

1.1.2 Site Description

During the summer of 2015, the Oklahoma Corporation Commission (OCC) requested assistance from EPA-R6 with several abandoned oil wells leaking and posing a substantial threat of a discharge of oil into Lake Oologah and its tributaries. EPA FOSC Bernier assessed the referred locations and corroborated the information for at least 13 wells that were leaking and threatening to discharge oil. These wells are within the boundaries of the former EPA Lake Oologah Oil Spill Project (Lake Oologah Project) were EPA-R6 and the OCC addressed over 1,000 abandoned wells discharging or threatening to discharge oil by Plugging and Abandonment (P&A). The original project, which was divided in five major phases starting in the late 1990’s, was completed in 2012 with the understanding that the infrastructure of many of the wells that were not leaking at the time will eventually deteriorate and pose a threat or an actual discharge of oil. As a result the FOSC determined that it was imperative to re-assess more areas within the former project area to determine if additional wells were leaking and threatening to and/or discharging oil. In addition to abandoned wells, the scope of the project extends to abandoned tank batteries, flow lines, and other associated oil production equipment.

The majority of the wells within the project area are abandoned and unsecured with many substantially leaking oil onto the surrounding area. The site is within a large, mature and declining oil field, reported to be over 100 years old. Historical information indicate that drilling and production activities began shortly before 1900, with a few small operators still marginally producing today. Wells within the project area are typically shallow, with a total depth of less than 500 feet below ground surface, which usually makes for a simple P&A procedure. Most wells are reported to be completed in, and produce from, the Bartlesville Sand formation at depths ranging from 400 feet to 725 feet.

1.1.2.1 Location

The Winganon P2 project is located in an approximately 43 square mile oil field adjacent to and east of Lake Oologah in Rogers and Nowata counties, Oklahoma, and will cover areas within the original EPA Lake Oologah Project. The site encompasses approximately 24,320 acres in an area that is 3 to 6 miles wide in an east-west direction and up to 9 miles long in a north-south direction. This area includes all or parts of 43 Sections in three townships and two ranges of the public land survey system. Since the project cover Sections within several townships and ranges, a specific Project Area (PA) number was assigned to each
The Command Post for the project is located in Section 8 T 24N, R 17E, in the southwest corner of the intersection of E 300 and N 4210 county roads, Chelsea, Rogers Co., Oklahoma. The coordinates are Latitude 36.582101° N, Longitude 95.508378° W.

1.1.2.2 Description of Threat
The threat determined during previous assessments and removals completed under the original Lake Oologah Project apply to this Winganon P2 phase. Most of the wells are abandoned and the equipment associated with production has been removed, leaving the wells unsecured with many substantially discharging oil onto the surrounding area. In addition, a significant number of wells that are not visually leaking are completely unsecured (open) with oil measured inside the well within a close distance from the top of the casing. For those instances, building pressure within the formation will continue to push the oil up the casing and generate a substantial threat of and/or a discharge of oil if the wells are not addressed properly. All the unsecure and/or leaking wells are located next or near a ditch, ravine, or creek that drains directly to Lake Oologah within a short distance, including Plumb, Spencer, Lightning, Panther, Salt, and Double creeks, which flow year-round. In addition, many well locations are within the lake’s floodplain. Drainage throughout the area is within 0 to 4 miles of and contiguous to the lake. Lake Oologah is a navigable waterway of the U.S. and a drinking water source for the city of Tulsa and other smaller municipalities in the area.

Due to the close location of the wells to the lake and the topography of the area, the FOSC has determined that the discharge or potential discharge of oil had or could continue impacting navigable waters of the U.S. and adjoining shorelines if not addressed promptly.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results
The initial and ongoing part for this phase includes the assessment of wells within previous project areas of the original Lake Oologah Project. For every well that a determination is made by the FOSC that a removal action is necessary, EPA will conduct a title search for a viable RP and, if any, required them to perform a removal to stop a discharge or threat of a discharge of oil. For those wells without a viable RP, EPA will proceed with a removal, which most likely include P&A procedures.

2. Current Activities
2.1 Operations Section

2.1.1 Narrative
Pre-assessment activities included visiting the area to corroborate the information provided by the OCC and several land owners in the area about the leaking oil wells. Once the FOSC determine the need for a removal action and after securing OPA funds, the Superfund Technical Assessment and Response Team (START) was tasked to update the former Lake Oologah Project database where well locations and information is stored. This allowed for the transfer of well locations into handheld GPS devices and to generate the necessary maps to reach and re-assess the wells. In addition, land owner information was updated to secure property access agreements. Since the command post for the original Lake Oologah was de-mobed at the end of the last project phase, a new and location was established on a property nearby the former. Due to the terrain, overgrown vegetation, and remote location of the wells, an off-road utility task vehicle (UTV) will be use to reach most of the locations.

2.1.2 Response Actions to Date
The FOSC and START team arrived to the site on 13 July and met with OCC representatives to discuss the scope of the project, gather information about additional leaking wells and about the few remaining active oil & gas operators in the area in case the FOSC needs to coordinate an RP response for any active leaking well. Assessment activities started within Project Areas PA 43 and 45 in the southeast portion of the project and moved north. Maps identifying and correlating PAs with county Sections have been uploaded into the images tab of the site website at www.epaosc.org/wiganonospillP2. As of June 22, 2016, 323 wells have been assessed over 7 PAs. Of those, the FOSC has determined that 49 wells need to be P&A since they are leaking or unsecured and about to leak oil and posing a substantial threat of a discharge of oil.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)
As of with previous phases of the Lake Oologah project, for every well or equipment determined to be discharging and/or threatening to discharge oil, the team will perform an oil & gas title and owner/operator search from sources including county records for Oil & Gas Assignments, OCC records for operator licenses/permits, and the Secretary of State records for business registrations. The team will attempt to contact at least, but not limited to, the last owner and/or operator and will issue Notices of Federal Interests (NOFI) to determine the viability of a responsible party (RP). If a problem well or equipment belongs to an active leases, the FOSC will also issue a NOFI to the owner/operator and coordinate a removal that could include cleanup, repairs, and/or P&A.

2.1.4 Progress Metrics

<table>
<thead>
<tr>
<th>Waste Stream</th>
<th>Medium</th>
<th>Quantity</th>
<th>Manifest #</th>
<th>Treatment</th>
<th>Disposal</th>
</tr>
</thead>
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2.2 Planning Section
2.2.1 Anticipated Activities
Assessment activities will continue until all the pertinent PAs are covered. It is expected that at least 3 more weeks are required to complete the majority of the assessment. At that point, the search for potential RPs will be formalized. At the same time preparation for removal activities will move forward by securing a task order with EPA’s Emergency Rapid Response Team (ERRS) who will be the prime contractor for P&A activities.

2.2.1.1 Planned Response Activities
None until P&A activities begin. If during the assessment a well or other equipment is found to be currently discharging oil, response and removal measures will be taken by the FOSC, including activating ERRS or coordinating with an RP if the source of the discharge is an active facility.

2.2.1.2 Next Steps
Continue assessment

2.2.2 Issues
- H&S: extreme heat, overgrown vegetation, and active season for ticks and chiggers could somewhat slow down assessment activities.
- Due the remoteness or terrain an UTV or hiking are the only option to reach the majority of the wells.
- Most of the wells and equipment are part of oil leases that have been abandoned and inactive for over 30 years, making the viability of a last owner/operator almost impossible.

2.3 Logistics Section
No information available at this time.

2.4 Finance Section
No information available at this time.

2.5 Other Command Staff
No information available at this time.

3. Participating Entities
3.1 Unified Command

3.2 Cooperating Agencies
The Oklahoma Corporation Commission (OCC)

4. Personnel On Site
1 EPA FOSC
1 START
2 OCC

5. Definition of Terms
No information available at this time.

6. Additional sources of information
No information available at this time.

7. Situational Reference Materials
No information available at this time.