



**TOEROEK  
ASSOCIATES, INC.**

**TRONOX BANKRUPTCY TASK ORDER**

**Site Research Summary for  
Glenrock/Cole Creek Site, Converse County, Wyoming  
Attachment B Site No. 2376**

**April 15, 2015**

**I. Introduction**

In 2014, the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Justice (DOJ) entered into a settlement agreement to resolve fraudulent conveyance claims against Kerr-McGee Corporation (Kerr-McGee) and related subsidiaries. This settlement was the result of litigation relating to Kerr-McGee's spin-off of businesses and liabilities to Tronox Incorporated (Tronox), which soon after filed for bankruptcy and therefore could not pay for legacy liabilities. These legacy liabilities were extensive, and were comprised of environmental liabilities associated with over 80 years of Kerr-McGee historic operations. In 2011, a report was prepared to evaluate the environmental liability of Tronox legacy sites that were operated by Kerr-McGee and affiliated entities (Appendix A-1 of the 2011 report provides a list of Kerr-McGee related entities).<sup>1</sup>

Toeroek Associates, Inc. (Toeroek) was tasked to perform a targeted Potentially Responsible Party (PRP) search investigation of the Glenrock/Cole Creek Site, located in Converse County Wyoming. The Glenrock/Cole Creek Site was identified as a legacy site of Tronox and as an "Other Site" in Attachment B of a Consent Decree and Environmental Settlement Agreement.<sup>2</sup>

EPA directed Toeroek to research the history of the Glenrock/Cole Creek area for evidence of site ownership or operations by Kerr-McGee related entities. This report describes the methodology used for this research; defines the area represented by Glenrock/Cole Creek; provides a summary of the research results; and recommends, where applicable, future EPA investigative action.

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<sup>1</sup> The report was prepared for the Anadarko Litigation Trust by Roux Associates, Inc. and entitled: *Environmental Liability Evaluation of Tronox Legacy Sites*.

<sup>2</sup> The Consent Decree and Environmental Settlement Agreement in the matter of In re: Tronox Incorporated, *et al.*, Case No. 09-10156 (ALG) was filed with the U.S. Bankruptcy Court for the Southern District of New York.

## **II. Methodology**

Toeroek reviewed the data sources described in Table 1 for the purpose of identifying the ownership and operational history of the Glenrock area. Toeroek compiled the data found and then conducted a data review to determine: (1) basic information about the site, including any aliases and a general timeline of its operations; (2) information regarding ownership, evidence of operation and admission of operation; (3) PRPs associated with the site; and (4) identification of Kerr-McGee related entities that operated at the site area.

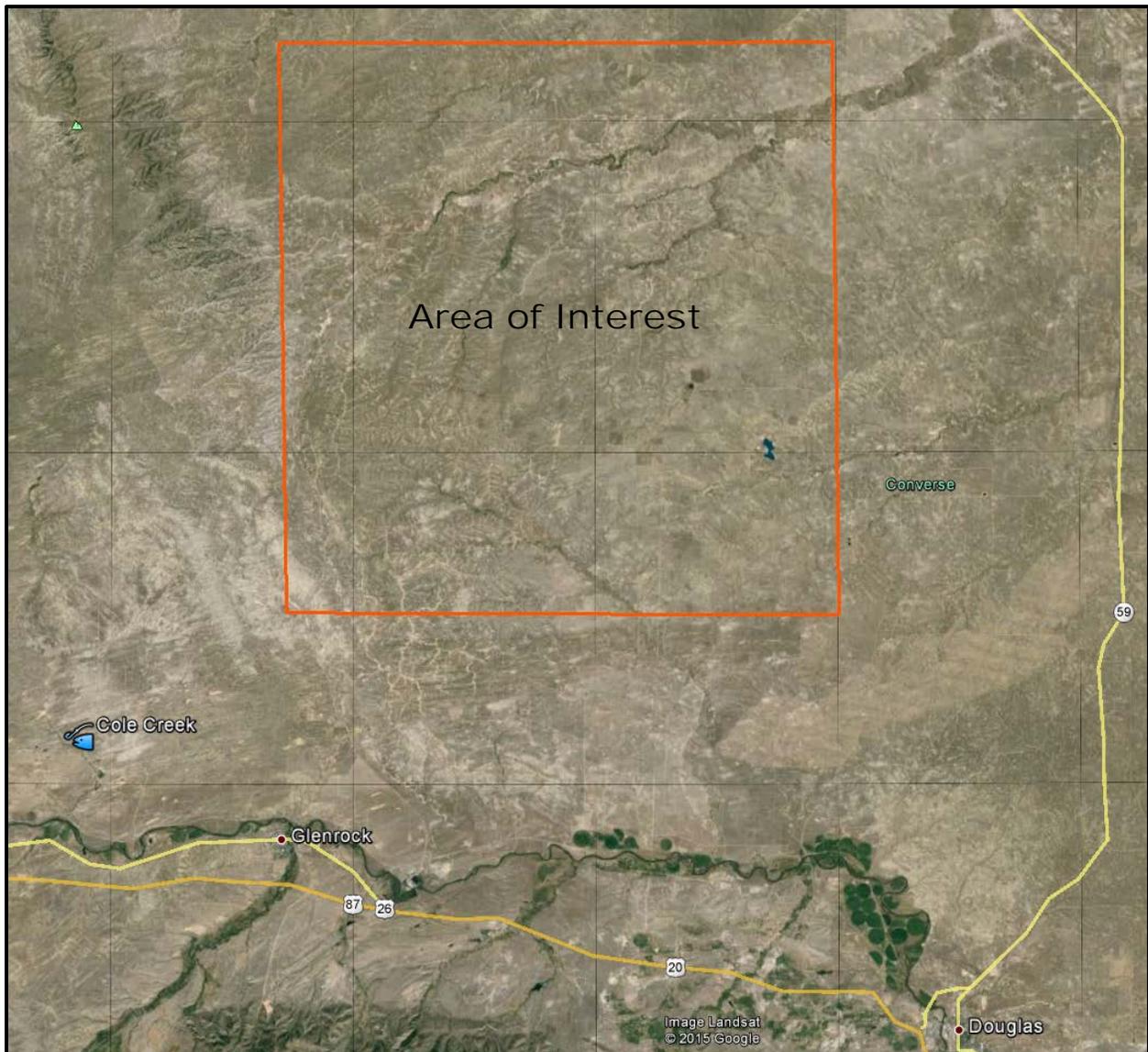
**Table 1. Data Sources Reviewed**

<b>Data Source</b>	<b>Notes</b>
Colorado School of Mines	Reviewed search engine databases, and the Mining Year Book published by the Colorado Mining Association.
DOJ's Relativity Database	Key words: Glenrock, Cole Creek. General search for Glenrock/Cole Creek produced four results, all of which were listings of possible Tronox hazardous waste sites.
Internet	Converse County, Wyoming website; federal agency websites (BLM, EPA, DOE, NRC, USGS); Google Scholar; Google Books; Hathi Trust; Archive.org; US Bureau of Mines; University of Wisconsin Ecology and Natural Resources (USGS Mineral Yearbooks); WY State Inspector of Mines Reports; WY Geological Association; General Internet Searches.
Toeroek Records	Kerr-McGee Annual Reports.

## **III. Research Findings – Glenrock/Cole Creek Site**

### **A. Site Location**

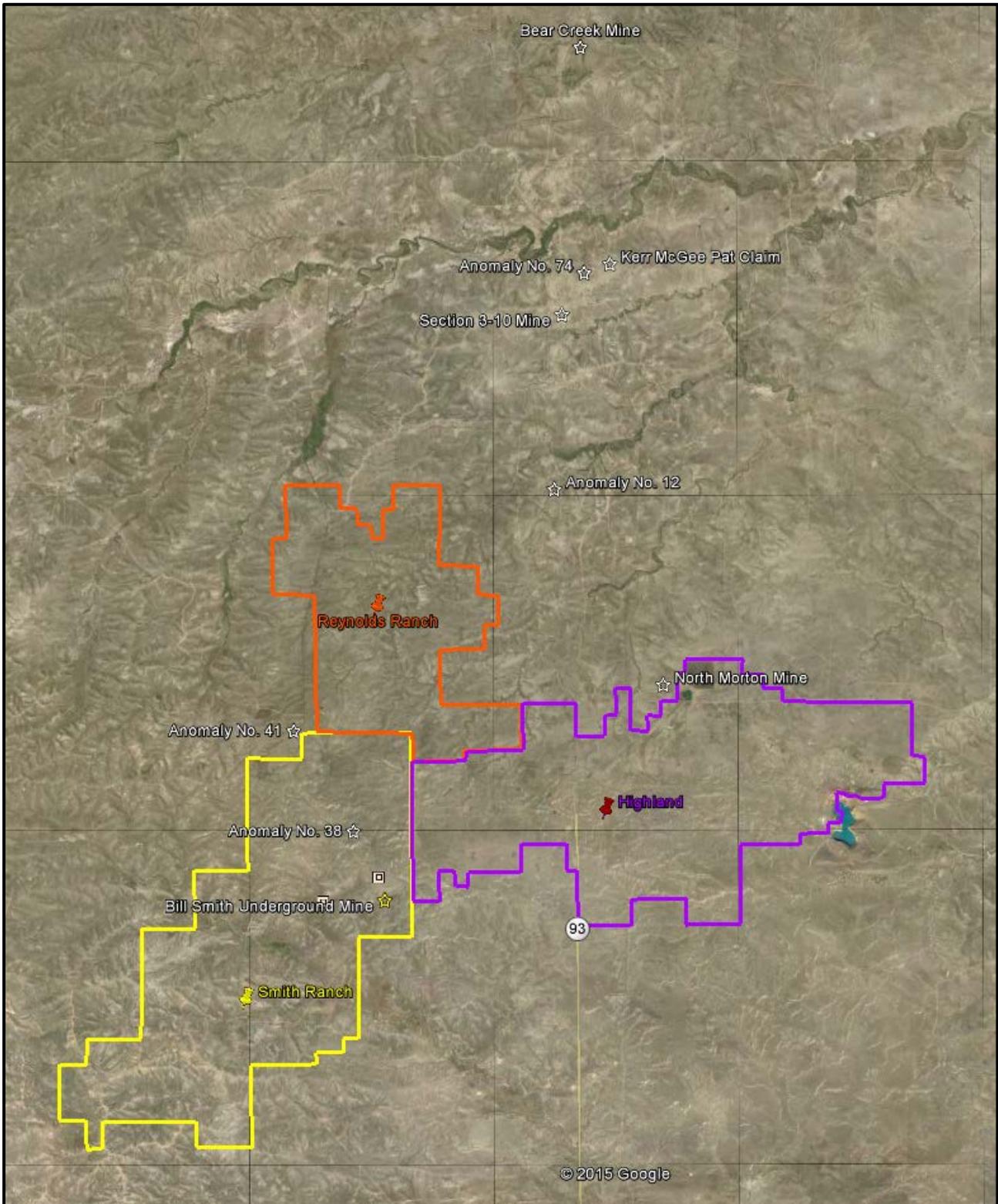
The “KMC 2005 Due Diligence Mine Exploration List” identifies the Glenrock/Cole Creek Site in Converse County as a site associated with a Kerr-McGee entity for the commodity of uranium (NR0083927, p. 16). The Glenrock/Cole Creek Site is located approximately 25 miles northwest of Douglas and 25 miles northeast of Glenrock, and east of Cole Creek within the southern portion of the Powder River Basin (GRCC-002, p. 2; generally GRCC-012 and GCRCC-013). The area of interest for this report includes land located within Ranges 72 through 75 West in Townships 36 through 38 North, and is depicted on the following page in Figure 1.



**Figure 1: General Location of the Glenrock/Cole Creek Site (Google Earth)**

There are approximately 115 named uranium mine sites and various unnamed uranium mines located in Converse County (GRCC-015). Considering the scope of work, Toeroek did not locate all uranium mines within the Glenrock/Cole Creek area, but instead focused on uranium mines associated with Kerr-McGee within this area.

Specifically, the Site area includes the Bill Smith; Smith Ranch; Reynolds Ranch; Highland; North Morton; Bear Creek; Anomaly Nos. 12, 38, 41 and 74 Mines; Section 3-10 Mines; as well as other unspecified mines (BILL-001 p. 4; GRCC-012; GRCC-013 p. 31; GRCC-017; GRCC-011 p. 1; GRCC-015). A map of the area of interest depicting the approximate locations of the named mines and the permitted areas for Reynolds Ranch, Smith Ranch, and Highland is provided as Figure 2.



**Figure 2: Glenrock/Cole Creek Mine Sites (Google Earth)**

The Glenrock/Cole Creek area has been the location of mining activities, primary coal beginning from the 1880s and uranium beginning in the late-1960s (GRCC-018; GRCC-021). Many of these mines were shut down and/or reclaimed by 1985 because of poor uranium market conditions (GRCC-002, p. 4).

## **B. Operations**

Coal mining operations began in the 1880s and continued through 2000 (GRCC-018; GRCC-019). Oil operations have also been prominent in the southern portion of Converse County around the town of Glenrock, and includes the Big Muddy Oilfield and the Cole Creek Oilfield (GRCC-004; GRCC-005).

Uranium was first discovered in the 1960s with production continuing to the present day (GRCC-021; GRCC-024). To the north and northeast of Glenrock, uranium ore bodies were discovered in 1968 in the Highlands Flats-Box Creek District (GRCC-006). Uranium deposits in this area are located primarily within Sandstone deposits.

The closest and most prominent uranium mines to the Glenrock and Cole Creek areas are the Bill Smith, Smith Ranch, Reynolds Ranch and Highland areas (shown in Figure 2). This area has been consolidated into what is now part of the Smith Ranch/Highland Uranium Project that is operated by Power Resources Inc. and Crow Butte Resources Inc., d/b/a Cameco Resources (Cameco) (GRCC-003, p. 1). This mining area is generally discussed below and is also discussed in the Bill Smith Mine (Site No. 2373) Tronox Report submitted to EPA on February 27, 2015.

Also detailed below are other uranium mines located within the area of interest.

### Smith Ranch/Highland Uranium Project

From the 1970s to the early 1980s, areas within and adjacent to the Smith Ranch/Highland project site were extensively mined for uranium. Both surface and underground mining methods were employed in the area, with the majority of uranium ore being recovered by surface mining methods. From the early 1970s through the mid-1980s, companies such as Bear Creek Uranium, Kerr-McGee Nuclear, Rio Algom Mining Corp. (RAMC), TVA and Exxon Minerals produced uranium from the sandstone deposits within or near the current permit boundary. Most of these mines were shut down and/or reclaimed by 1985 because of poor uranium market conditions (BILL-001, p. 4).

By approximately 1974, Kerr-McGee Nuclear Corp. had shifted its focus of Wyoming uranium mining from the Shirley Basin area to the Powder River Basin area. It began drilling the mine shaft at the Bill Smith Mine and was near completion at a depth of 950 feet by the end of that year.<sup>3</sup> The company anticipated ore production to begin by end of 1975 or early 1976 (CRGP-015, p. 17; BILL-009, p. 5).

The 1976 Minerals Yearbook stated Kerr-McGee Nuclear Corp. announced a large sales contract with the Public Service Electric & Gas Co. of New Jersey to deliver 20 million pounds of yellow cake between the years of 1980 and 1995. This contract could exceed \$1 billion. The uranium

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<sup>3</sup> The Bill Smith Mine is Tronox legacy Site No. 2373.

was to be mined from the South Powder River Basin where Kerr-McGee Nuclear Corp. had 125,000 acres of uranium mining rights. The project anticipated opening three underground and several open pit mines and the construction of a uranium ore processing facility. Initial production would come from the Bill Smith Mine, which was in the process of being constructed (TEA-009, p. 14).

Kerr-McGee's 1976 Annual Report also noted underground development at the Bill Smith Mine in the South Powder River Basin was underway. Kerr-McGee anticipated initial uranium mining production to begin in early 1977 (KRMC-1976, p. 14).

The Smith Ranch processing facilities are located at the original site of the Bill Smith Mine shaft and underground mine.<sup>4</sup> The mine was operational from 1976 through the early 1980s. The ore removed from the underground mine was transferred by truck to the Exxon mill for processing; as a result there are no mill tailings associated with the mining at Smith Ranch (GRCC-002, p. 6).

The Nuclear Regulatory Commission (NRC) first authorized Kerr-McGee to conduct Research & Development (R&D) ISL operations at the Smith Ranch site in June 1981. This work was documented under the Smith Ranch Permit (Revised April 2011), the Wyoming Department of Environmental Quality (DEQ) Permit to Mine 304-C, and Source Material License SUA-1387 (GRCC-002, pp. 4-5). In February 1984, SUA-1387 was amended to reflect that Sequoyah Fuels Corporation, a wholly-owned subsidiary of Kerr-McGee, was the NRC licensee for the Smith Ranch R&D operations. The NRC renewed Sequoyah Fuels Corporation's NRC license for continued R&D operations by letter dated January 29, 1988 (GRCC-002, p. 5).

In support of the license renewal, the NRC staff published a Finding of No Significant Impact in the Federal Register on January 7, 1988 (53 FR 459). RAMC acquired the Smith Ranch ISR site in December 1988 (GRCC-002, p. 5). Concurrently, on December 20, 1988, Quivira Mining Company, a subsidiary of Kerr-McGee, contacted the NRC indicating that the Smith Ranch Project license should be transferred to the custody of Rio Algom Ltd. (GRCC-020; GRCC-026). On June 18, 1991, DEQ issued Permit to Mine 633 to RAMC. On March 12, 1992, the NRC issued Source Material License SUA-1548 to RAMC, which authorized expansion of the Smith Ranch R&D operations into a commercial scale production (GRCC-002, p. 5).

According to RAMC's 1997 Annual Report, this company began commercial production at the Smith Ranch Mine in December 1997 after investing \$44 million. This mine used innovative in situ leaching extraction techniques, and it was scheduled to reach design production rate of two million pounds of uranium annually in 1999. Uranium was extracted from permeable uranium-bearing sandstones located about 200 meters below surface. RAMC described the ISR extraction process as having a lesser environmental impact with generally lower capital and operating costs than traditional mining methods (BILL-010, pp. 10, 24, 25, 81). RAMC stated it owned 100 percent of the mine interest, and it projected producing 65,000 pounds of uranium in 1997 with 23 million pounds of uranium in reserves (BILL-010, p.13). RAMC referred to a processing plant and second ion exchange plant at the Smith Ranch Mine site (BILL-010, p. 25).

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<sup>4</sup> Smith Ranch is listed as Tronox legacy Site No. 2415.

Power Resources Inc. acquired RAMC's Smith Ranch properties in July 2002 and, by letter dated August 18, 2003, the NRC approved the integration of the Highland Uranium Project (HUP) license into the Smith Ranch license. With that integration, combined operations at Smith Ranch were authorized under Source Material License SUA-1548 (GRCC-002, p. 5).

Results of core studies confirmed the two pilot R&D projects at the Smith Ranch site could successfully utilize a leaching solution of bicarbonate/carbonate with hydrogen peroxide and oxygen. The pilots were authorized by DEQ, Land Quality Division with Permits 5RD and 13RD and by the NRC under license SUA-1387. These tests, conducted in uranium deposits at depths of 500 feet and 750 feet, have demonstrated the feasibility of mining the uranium reserves in the project area using ISR methods (GRCC-002, p. 5).

Exxon completed two pilot R&D projects at the HUP site during the period 1972 to 1981. These projects were operated under DEQ Permit No. 218-C and NRC License SUA- 1064. The first pilot R&D project, known as the "Original R&D" was operated from 1972 to 1976. This project investigated the technical feasibility of in situ uranium mining utilizing different concentrations of sodium bicarbonate and hydrogen peroxide within the leach fluid (GRCC-002, p. 52).

The second pilot R&D project (known as the "Expanded R&D"), which was operated from December 16, 1978 to September 1981, demonstrated the technical feasibility of in situ mining utilizing gaseous oxygen, sodium bicarbonate and gaseous carbon dioxide within the leach fluid, the ability to control leach fluids within the mining zone, and the restorability of the affected groundwater to its original use suitability. Reports concerning the results of the pilot activities, including restoration of affected ground water, were previously submitted to NRC and DEQ (GRCC-002, p. 52).

Exxon operated an underground mine and open pit mines on the eastern portion of the Highland permit area from 1971 to 1984. The underground mine was shut down in 1985. Also in 1985, Exxon sold their remaining uranium reserves to Everest Minerals Corp., which developed the HUP and ISR project. HUP began commercial uranium production in 1988 (GRCC-002, p. 14).

Also during this time period, Silver King Mines, Inc. operated an underground uranium mine for TVA in the Section 14 area of the HUP property (North Morton Ranch Mine) during the late 1970s and early 1980s. The mine was shut down and the shaft sealed in the mid-1980s. Everest Minerals Corp. acquired the reclaimed property from TVA, which allowed expansion of the HUP operation to the west in 1993. Between 1989 and 2000, HUP produced approximately one million pounds of uranium per year. Cameco acquired Power Resources Inc. and the HUP in 1997.

### Reynolds Ranch

The proposed Reynolds Ranch Amendment Area was previously owned by Solution Mining Corporation. From 1980 to 1990, Solution Mining Corporation installed wells, collected water quality data and performed two aquifer tests within the Reynolds Ranch area. Solution Mining Corporation never obtained a mine permit for the property, which was subsequently purchased by RAMC and then by Power Resources Inc. (GRCC-002, pp. 2-6).

Because of the cost of conventional mining and the comparative low grade uranium resources in the area, it was considered unlikely for any company to use surface or underground mining methods to recover uranium in this area. Any additional uranium recovery in the area would likely be conducted utilizing ISR methods similar to those employed at the Smith Ranch Project. Cameco had no plans to develop conventional mines at the Project site (GRCC-002, p. 7).

### Bear Creek Mine

Open pit uranium mining also occurred from the mid-1970s through 1986 at Union Pacific Resources' Bear Creek site, which is approximately 15 miles northeast of the Smith Ranch license area (GRCC-002, p. 7).

Another source indicates that the Bear Creek Site was operated by the Bear Creek Uranium Company (BCUC), originally a partnership of Rocky Mountain Energy (RME) and Mono Power Company. BCUC is now operated by RME's successor, Anadarko Petroleum Corporation. The tailings basin/mill operation began in August 1977 under NRC Source Materials License No. SUA-1310. The milling process consisted of sulfuric acid leach, sodium chlorate oxidant, and liquid ion exchange extraction and concentration. Approximately 4.7 million tons of tailings were discharged into the tailings basin as a slurry. This above grade disposal was done in compliance with 10 Code of Federal Regulations Part 40 Criterion 3 requirements and approved by the NRC. The mill and solvent extraction buildings were decommissioned in 1988 (GRCC-016, p. 5). In February 1992, the NRC approved the BCUC tailings reclamation plan (GRCC-016, p. 6).

In 2011, Anadarko Petroleum Corporation was working with the NRC to decommission the Bear Creek uranium facility (GRCC-016, p. 1). A Final Environmental Assessment of Anadarko Petroleum Corporation's Bear Creek Uranium Mill Site was prepared in 2013 (GRCC-007).

### Section 3-10 Mine

In 1979, Kerr-McGee Nuclear Corp. began stripping overburden at its new Section 3-10 pit near Glenrock, Wyoming. The new mine was located five miles northeast of Section 28-33 surface Mine, which was producing 1,000 tons per day of ore from a deposit about 120 feet below the surface (GRCC-011; GRCC-012, p. 2).

Kerr-McGee Nuclear reportedly continued to operate the Section 3-10 Mine into 1986 (GRCC-011).

### Anomaly Nos. 12, 38, 41 and 74 and Pat Mining Claim

The Mindat.org website lists Kerr-McGee as being associated with the Anomaly Nos. 12, 38, 41, and 74 and the Pat Claim (GRCC-012, pp. 1, 3, 4, 5, 6). Limited information, including specific operational activities and dates of operation, was identified regarding these mine sites.

It was noted in Smith Ranch Permit (Revised April 2011) that there were two open pit mines located north of Smith Ranch Permit to Mine 633. These mines were in Sections 3 and 28/33, Township 37 North, and Range 73 West and were mined under Permit to Mine 304C (GRCC-002, p. 52). It should be noted that the Kerr-McGee Pat Claim is located in Section 3, Township

37 North, Range 73 West, and the Anomaly No. 12 (Kerr-McGee) is located in Section 28 in the same township and range (see Figure 2). These mined areas were reclaimed and revegetation was completed and verified. A release request for the reclaimed mined areas was included in the March 25, 1994 annual report/bond submittal for Permit 304-C (GRCC-002, p. 52).

The removal of the head frame was completed in 1991, disposed of in 1993, and removed from surety during the annual report/surety update. The 2003 annual report states the plugging of the shaft was completed in 1994 and removed from the surety. Two of the three settling ponds were reclaimed as described in the 1997 annual report. The vent hole has been plugged and is located under the south end of the office (GRCC-002, p. 52). It remains unclear based on the limited research findings if this reclaimed area is the area referenced above as Permit to Mine 304C or to another of the Anomaly mine areas.

### Other Activities

Oil operations have been prominent in the southern portion of Converse County around the town of Glenrock, and included the Big Muddy Oilfield and the Cole Creek Oilfield. As the commodity of interest for the Glenrock/Cole Creek Site is uranium, additional research into local oil operations was not pursued.

### **C. Ownership Information**

Property ownership records are not available online with the Converse County Assessor's and County Clerk's offices. Upon contacting the County Assessor to inquire further about the availability of records, Toeroek was informed research must be conducted in person at the county's office. The County Assessor does not conduct research on behalf of a public inquiry; this office does, however, maintain a list of local abstractors available to perform this type of research. The Converse County Assessor's website stated various records, including land records, were maintained on the Wyoming State Archives website; however, after viewing this website and speaking with the County Assessor, Toeroek found that the website was not searchable by keywords; rather a book and page number of a recorded instrument is needed to execute a search. Other sources indicate the Bill Smith Mine, also known as Smith Ranch Mine, appears to be located on private property with various parcels and owners, among which include: the Smith Sheep Company, Smith Land Company and Box Creek Minerals LP (GRCC-008; GCR-010).

Toeroek also searched for mining interests using two U.S. Bureau of Land Management (BLM) websites. Searches were conducted using the search parameters of Converse County and "Kerr." The first website, identified as the BLM General Land Office (GLO) website, contains federal land conveyance records for the Public Land States, dating between 1820 to the present. Two patents, identified as Serial Patent Nos. 49760082 and 49770021, were granted to Kerr-McGee Nuclear Corp. in 1976 and 1977 with the approximate acreage of 710 and 657 acres, respectively. These patents include property in Township 36 North, Range 74 West, and appear to be active (BILL-004, pp. 1, 2, 5). It appears that these patents include land associated with the Bill Smith Mine and the Smith Ranch permitted area.

The second BLM website is identified as the Land & Mineral Legacy Rehost 2000 System, referred to as LR2000. Toerok used the following three categories of searches available through the LR2000: Mining Claims, Case Recordations, and Status using the search terms “Kerr” and Converse County.<sup>5</sup> Kerr-McGee Corporation has various unpatented claims within Converse County: 1,781 closed claims and 2 active claims (GRCC-001).

#### D. PRPs for the Glenrock/Cole Creek Site

Table 2 identifies PRPs for the Glenrock/Cole Creek area along with a brief description and estimated dates of their involvement. Additional information regarding these parties is provided in the Operations section above.

**Table 2. PRP Summary Table for the Glenrock Cole Creek Area**

<b>PRP</b>	<b>Year(s)</b>	<b>Involvement at Site</b>	<b>Kerr-McGee Entity</b>
Bear Creek Uranium Company	1977 – Present	BCUC was originally a partnership of RME and Mono Power Company. BCUC is now operated by RMEs successor, Anadarko Petroleum Corporation. Operated the Bear Creek Uranium Facility from 1977 to 1988. Anadarko Petroleum Corporation has been working with the NRC to reclaim and decommission the facility.	Yes*
Box Creek Minerals LP	Unknown – Present	Owns property within the Bill Smith/Smith Ranch area.	No
Cameco	1997 – Present	The Smith Ranch/Highland Uranium Project that is operated by Power Resources Inc. and Crow Butte Resources Inc., d/b/a Cameco .	No
Everest Minerals Corp.	Mid-1980s	Operated at the Highland Site (conducted ISL commercial scale).	No
Exxon Minerals	1971 – 1985	Operated underground and open pit mines in the Highland permit area.	No
Kerr-McGee Corporation	1976 – 1984	Conducted research and development in the area.	Yes
Kerr-McGee Nuclear Corp.	1974 – 1976, 1979	Operated the Bill Smith, Smith Ranch, and Section 3-10 Mine.	Yes
Power Resources Inc.	2002 – Present	Acquired Smith Ranch properties. Operated the in situ leaching process on site.	No
Quivira Mining Company	1988	Kerr-McGee Nuclear Corp. changed its name to Quivira Mining Co., which contacted the NRC indicating that the Smith Ranch Project license should be transferred to the custody of Rio Algom Ltd.	Yes
Rio Algom Mining Corp.	1988 – 2002	Conducted ISL operations at the site.	No

<sup>5</sup> In the BLM LR 2000, Case Recordations contain information on leases, permits, contracts, grants, agreements, mineral patents, etc. issued by the BLM on federal actions affecting public lands. The Mining Claims contains information on unpatented mining claims. The Status option includes information on land and mineral title transfers, withdrawal, and classifications issued before 1984.

PRP	Year(s)	Involvement at Site	Kerr-McGee Entity
Sequoyah Fuels Corporation	1984 – 1988	Licensed to conduct ISR at the Smith Ranch site.	Yes
Silver King Mines, Inc.	Late 1970s/ Early 1980s	Operated an underground uranium mine for the TVA in the Section 14 area of the HUP property (North Morton Ranch Mine).	No
Smith Land Company	Unknown – Present	Owns property within the Bill Smith/Smith Ranch area.	No
Solutions Mining Corporation	1980-1990	Installed wells, collected water quality data and performed two aquifer tests within the Reynolds Ranch area.	No
The Smith Sheep Company	Unknown – Present	Owns property within the Bill Smith/Smith Ranch area.	No
TVA	Circa 1969 – 1994	Conducted initial mining activities in the area.	No
Union Pacific Resources	Unknown	Associated with the Bear Creek site; however, specific ownership or operations data was not identified.	Yes*

\*Although a corporate relationship exists between BCUC, RME, Union Pacific Resources, Anadarko Petroleum Corporation, and Kerr-McGee, neither BCUC, RMC, Union Pacific Resources, nor Anadarko Petroleum Corporation are listed as one of the “Kerr-McGee Entities” in Appendix A-1 of the 2011 *Environmental Liability Evaluation of Tronox Legacy Site* report.

### E. Kerr-McGee Regional Activities

Kerr-McGee entities have been involved with several sites within the Powder River Basin, Shirley Basin and Pumpkin Buttes mining areas of Wyoming and Montana. Specific Kerr-McGee related operations have been identified in Carbon, Fremont and Natrona Counties in Wyoming. Additional information on these Sites can be found in the following Toeroek PRP reports: Gas Hills, Bill Smith Mines, etc. (GRCC-007; GRCC-008; GRCC-011). Below is a chronological listing of Kerr-McGee’s regional activities.

In the mid-1950s, Kerr-McGee Industries mined the Blowout (or Anomaly 119) Deposit located in Section 11 of Township 45 North, Range 75 West (near Savageton, Wyoming about 70 miles north of Glenrock, Wyoming). The area was drilled in 1953 by Kerr-McGee Industries of Oklahoma City and ore-grade material was blocked out. Open pit mining began in the summer of 1954 and continued into 1955 (GRCC-014, pp. 595-596).

During the same period, Kerr-McGee Industries mined the Jeannette 1 Deposit located in a nearby section, Section 22, of the same township and range as the Blowout Deposit. The area was drilled in 1952 by Kerr-McGee Industries of Oklahoma City and mined in 1954 (GRCC-0014, p. 590).

Kerr-McGee Industries also mined the Channel Deposit and the Moe 14 Deposit located in Johnson County, Wyoming in 1953 and 1954 (GRCC-014, pp. 598).

In 1964, it was reported that Kerr-McGee mined the Pat No. 8 Mine and explored land located in Section 27, Township 38 North, Range 73 West for uranium. Both areas are located in the

southern portion of the Powder River Basin in Wyoming (GRCC-013, pp. 30-31). Specially, the Pat No. 8 Mine is located approximately 35 miles north of Douglas, Wyoming and produced a total of about 9,000 tons of ore (GRCC-013, p. 56).

In 1977, Kerr-McGee Nuclear Corp. published the “Environmental Report, South River Basin Mill, Converse County, Wyoming” (GRCC-009). No additional information regarding this facility or this entity’s involvement was located.

A 1976 Minerals Yearbook notes that Kerr-McGee Nuclear Corp. held 125,000 acres of uranium mining rights in the South Powder River Basin (TEA-009, p. 14). Finally, Kerr-McGee’s 1985 Annual Report stated Sequoyah Fuels Corporation, a corporately related entity, owned extensive uranium reserves in Wyoming (GAS-004, pp. 7, 10).

#### **IV. Conclusion**

Kerr-McGee related entities are known to have operated various mine sites within the Glenrock/Cole Creek area. These operations included the following: Kerr-McGee Nuclear Corp./Kerr-McGee Corporation operated the Bill Smith/Smith Ranch Mine (1974-mid 1980s); Sequoyah Fuels Corporation, a subsidiary of Kerr-McGee, operated the Smith Ranch Mine (1984-1988); Kerr-McGee Nuclear Corp. operated the Section 3-10 Mine (1979-1986); and Kerr-McGee was associated with the Anomaly Nos. 12, 38, 41, and 74 and the Pat mining claim. Limited information is available, however, regarding Kerr-McGee’s involvement with Anomaly mining areas and Pat mining claim.

Additionally Bear Creek Uranium Company, originally a partnership of Rocky Mountain Energy (RME) and Mono Power Company, operated the Bear Creek Uranium Facility from 1977 to 1988. BCUC is now operated by RMEs successor, Anadarko Petroleum Corporation. Anadarko Petroleum Corporation is currently working with the NRC to reclaim and decommission the Bear Creek uranium facility.

If EPA desires, additional research could be conducted at Converse County Clerk’s and Assessor’s offices to obtain property ownership information as these records are not readily available online. Further research of local archives and libraries and review of the U.S. Nuclear Regulatory Commission and National Archives and Record Administration’s records may produce additional details about activities at the site that may create a stronger nexus to Kerr-McGee related entities. Finally, more in-depth research into the mining interests of Kerr-McGee entities identified through the BLM websites may be beneficial in understanding the magnitude of Kerr-McGee’s involvement in mining activities in the vicinity of the Site.

Toeroek has limited access to the Tronox case files in DOJ’s Relativity Database; a credentialed user with full access could run additional keyword searches through the database to identify pertinent information. Specifically, an expanded search may assist in ascertaining the specific location or site boundary for the Glenrock/Cole Creek Site and the nature of the connection to a Kerr-McGee related entity.