

CAP REPAIR SUMMARY REPORT

**BROWN & BRYANT, ARVIN FACILITY
SUPERFUND SITE, FIRST OPERABLE UNIT
REMEDIAL ACTION**

ARVIN, CALIFORNIA

Prepared for:

**CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXIC SUBSTANCES CONTROL**

Prepared by:

URS

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October 2015

IDENTIFICATION/APPROVAL FORM

Document Title: Cap Repair Work Plan
Brown & Bryant Superfund Site

Organization Title: URS Corporation
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This document was prepared for the California Environmental Protection Agency Department of Toxic Substances Control (DTSC) under Contract 10-T1114. The material contained herein is not to be disclosed to, discussed with, or made available to any person or persons for any reason without prior express approval of a responsible officer of DTSC.

Approved by:

Signature:  Date: 10/1/15
Ed Tarter, P.E.
Project Manager



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STATEMENT OF LIMITATIONS

This *Cap Repair Summary Report* was prepared for the California Environmental Protection Agency Department of Toxic Substances Control (DTSC) under Agreement Number 10-T1114, Work Order Number 1-114-1.0-100025 and Work Order Amendment Number 1-114-2.2-100025.

This *Cap Repair Summary Report* has been prepared by URS Corporation, Inc. (URS) under the review of registered professionals. Repair activities are based on conclusions and recommendations presented in the *Cap Repair Work Plan* dated July 17, 2015, and on URS' interpretation of available information. This summary report is intended for use solely by DTSC. The scope of service performed during this summary report development may not be appropriate for other users, and any use or re-use of this document, or the findings, repair activities presented herein, is of the sole risk of said users.

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ABBREVIATION AND ACRONYMS

B&B	Brown & Bryant Inc.
Caltrans	California Department of Transportation
DTSC	Department of Toxic Substances Control
OU	operable unit
remedial systems RCRA	OU 1 RCRA and non-RCRA caps Resource Conservation and Recovery Act
URS	URS Group, Inc.

1.0 INTRODUCTION

The former Brown & Bryant Inc., (B&B) Arvin Facility (CERLIS ID CAD052384021) occupies two parcels of land totaling approximately 5 acres at 600 Derby Road in Arvin, California. This site includes off-property areas underlain by contaminated groundwater, and is approximately 18 miles southeast of the City of Bakersfield and 2 miles west of the Tehachapi Mountains. The site includes a vacant metal-framed warehouse, and an open metal shed on a concrete foundation. The structures are adjoined by asphalt pavement, which extends out to the borders of the property. The asphalt is a Resource Conservation and Recovery Act (RCRA) cap in the site's southern portion and a non-RCRA cap in the site's northern portion. The RCRA cap is a 3-foot-thick cap consisting of several layers including a Geogrid sand layer, Geosynthetic clay liner, sand filter layer, aggregate base course and 3 inches of asphaltic concrete. The non-RCRA cap consists of compacted subgrade material overlaid with 3 inches of asphaltic concrete. The site is vacant and secured by a chain-link fence.

The site is bordered to the east by irrigated agriculture fields, to the north and south by food packing and shipping facilities, and to the west by residential dwellings. Two schools and a park are within 0.5 miles of the site. Water District Supply Well 1 is approximately 1,700 feet south-southwest of the site.

The B&B facility operated as an agricultural chemical reformulator and custom applicator facility from 1960 to 1989. The agricultural chemicals formulated at this facility included pesticides, herbicides, fumigants, and fertilizers. Contamination of soil and groundwater resulted from inadequate procedural control, poor housekeeping, chemical spills during operations, and leaks from a surface wastewater pond and sumps. Chemicals of concern include 1,2-dibromo-3-chloropropane, 1,2-dichloropropane, 1,3-dichloropropane, ethylene dibromide, 1,2,3-trichloropropane, and 2-sec-butyl-4,6-dinitrophenol. In October 1989, because of detected levels of contamination in soil and groundwater, the site was added to the National Priorities List. In November 1993, a Record of Decision for Operable Unit (OU) 1 was adopted for surface and subsurface soils, and A-zone groundwater. To maintain the integrity and protectiveness of the OU 1, RCRA and non-RCRA caps (remedial systems) were installed in 1998 at the B&B site. The caps and associated features are inspected annually (or in the event of a natural disaster) to identify signs of deterioration due to aging or weathering and signs of cap or subbase failure. Figure 1 is a site location map showing the relationship of the site to the surrounding community of Arvin, California.

Inspections include a visual examination of the caps, security fencing, signs, and warehouse exterior. Detailed inspection procedures are included in the *Revised Operations and Maintenance Manual* for the Brown and Bryant, Inc. Arvin Site (URS Group Inc. [URS], 2012).

The *Cap Repair Work Plan* (URS, 2015) documents the findings of the June 18 through 20, 2015, inspections of the remedial systems by URS on behalf of the California Environmental Protection Agency Department of Toxic Substances Control (DTSC).

2.0 REPAIR ACTIVITIES

The following maintenance activities were performed for the subject site and completed on September 21, 2015. Figure 2 shows the repair locations. Table 1 presents the table of findings from the *Operations and Maintenance Work Plan* (URS, 2015). Attachment A provides field notes from the cap inspection and repairs. Attachment B provides a summary of the repairs and associated photographs documenting the typical types of repairs performed. Attachment C includes a product specification sheet for the material used to fill pavement cracks.

2.1 Fence Repair

Areas of damaged fence fabric and bent poles were replaced and repaired, as recommended, and locations where more than 2 inches of clearance were noted were attempted to be mitigated. At the gate, due to the construction of the supports, the 2-inch clearance was not possible. To meet the maximum 2-inch clearance, a speed bump or overall reinstallation of the gate would need to occur. At this time, it has been noted and will be evaluated in future inspections.

2.2 Cap Repair

For areas requiring asphalt crack fill and repair, the cracks were filled with material and methods in compliance with California Department of Transportation (Caltrans) Standard Specification Section 37-5 (Caltrans, 2010) or equivalent. As stated above, Attachment C includes a product specification sheet for the material used to fill pavement cracks. Cracks larger than approximately 0.25 inch wide were sealed following Caltrans specification (see Attachment C). Cracks smaller than 0.25 inch wide will be included in further monitoring inspections to determine if sealing is required.

2.3 Animal Burrow Mitigation

Animal burrows were inspected and cleared by a wildlife biologist to ensure that they were unoccupied, then immediately collapsed to prevent re-entry, and then filled or sealed in with fence post-quality concrete. The purpose of filling the burrows is to protect the integrity of the asphalt cap from collapsing along the edges where burrows are present.

On September 9 and 10, 2015, AECOM biologist Rachel Avila conducted small mammal burrow surveys at the former B&B Arvin Facility to determine whether burrows

were inhabited by any threatened or endangered animal species before the burrows were collapsed or filled with fence post-quality concrete.

The biologist visited each burrow and surveyed around the burrow entrances for signs of activity such as tracks, scat, or prey items. Five burrows were found to be collapsed from overgrown weeds, and one burrow not previously identified was found. Each open burrow was then scoped with a "Peeper System" scope to check for occupancy. At dusk, all burrow entrances were dusted with flour and left overnight in an effort to capture any tracks leading into or out of the burrows. Pictures of each burrow were taken before and after the flour were put in place.

No tracks of any threatened or endangered animal species were observed. The only tracks present were a canine print at PF-22 (seen immediately after a woman walking a dog off leash passed the site) and beetles at PF-18; also, ants were present at most burrows and left small holes when they removed flour. All of the burrows outside the perimeter fence were collapsed.

3.0 SCHEDULED REMEDIAL ACTION OPERATIONS

The next inspection of the remedial systems will occur in 2016; a specific date will be determined later. The 2016 inspection will be coordinated between DTSC, the United States Environmental Protection Agency, and United States Army Corps of Engineers and their contractors, as appropriate.

In addition, prior to the repair work this year, there was some standing water just to the south of the building on the Non-RCRA Cap. Alternatives should be evaluated to help reduce the buildup of standing water on the cap. Possible alternatives may include the addition of swales to assist the drainage of water, creation of shallow sump or sumps with submersible pumps to actively remove any accumulated water off of and away from cap, and even the potential to re-grade the entire surface.

4.0 REFERENCES

California Department of Transportation, 2010. *Standard Specifications*.

URS Group, Inc. (URS), 2012. *Brown and Bryant, Arvin Site, Arvin, California. Revised Operations and Maintenance Manual*. January. Final.

URS. 2015. *Brown and Bryant, Arvin Site, Arvin, California. Operations and Maintenance Cap Repair Work Plan*. July. Final.

TABLE

Table 1. Inspection Findings and Recommendations

Finding Identifier	Description of Finding	Completed Repairs
PF-1	Chain-link fence fabric is damaged.	Repaired chain-link fence fabric to eliminate holes.
PF-2	North gate panel fell off of the runner when opening the gate.	Realigned runner and repaired to ensure smooth operation of sliding gate.
PF-3	Greater than 2 inches of clearance below the north gate.	Repaired fabric and adjusted tension wire to ensure clearance is less than 2 inches below fence .
PF-4	Animal burrow at northeast corner of fence.	Filled hole with a cement grout.
PF-5	Fence posts on the northeast side of the north gate appear to be bent.	Adjust/replaced poles to plumb.
PF-6	Fence posts on the northwest side of the north gate appear to be bent.	Adjust/replaced poles to plumb.
PF-7	Greater than 2 inches of clearance below the west gate.	Repaired fabric and adjusted tension wire to ensure clearance is less than 2 inches below fence per City of Arvin specification or equivalent.
PF-8	Weeds along the perimeter of the fencing.	Removed weeds.
PF-9	Two burrows at the southwest fence corner.	Filled holes with a cement grout.
PF-10	Animal burrow and greater than 2 inches of clearance under the fence.	Filled hole with a cement grout. Repaired fabric and adjusted tension wire to ensure clearance is less than 2 inches below fence .
PF-11	Two animal burrows under the fence.	Filled holes with a cement grout.
PF-12	Three animal burrows under the fence.	Filled holes with a cement grout.
PF-13	Animal burrow underneath the fence.	Filled hole with a cement grout.
PF-14	Two animal burrows and greater than 2 inches of clearance below the north gate.	Repaired fabric and adjusted tension wire to ensure clearance is less than 2 inches below fence per City of Arvin specification. Filled holes with cement grout.
PF-15	Two burrow holes under fence at transformer pole.	Filled holes with cement grout.
PF-16	Animal burrow approximately 50 feet south of transformer pole.	Filled hole with a cement grout.
PF-17	Animal burrow approximately 70 feet north of the southern tip of the east side fence.	Filled hole with a cement grout.

Finding Identifier	Description of Finding	Completed Repairs
PF-18	Animal burrow approximately 120 feet north of the southern tip of the east side fence.	Filled hole with a cement grout.
PF-19	Fence fabric is damaged midway along eastern fence.	Replaced fabric per City of Arvin specification.
PF-20	Animal burrow at swale along eastern fence.	Filled hole with a cement grout.
PF-21	Animal burrow at eastern fence at approximately 190 feet south of northeast corner of site fencing.	Filled hole with a cement grout.
PF-22	Animal burrow at eastern fence at approximately 170 feet south of northeast corner of site fencing.	Filled holes with a cement grout.
PF-23	Animal burrow and greater than 2 inches of clearance approximately 130 feet south of northeast corner of site fencing.	Filled holes with a cement grout. Adjusted tension wire to ensure clearance is less than 2 inches below fence per City of Arvin specification.
PF-24	Animal burrow approximately 120 feet south of northeast corner of site fencing.	Filled hole with a cement grout.
NRC-1	Cracks 3/8 to 1/2 inch wide around well WA-04 and west of well WA-04.	Sealed crack with sealant that meets Caltrans Specifications for Crack Treatment Section 37-5 (Caltrans, 2010).
NRC-2	Cracks around WA-03.	Sealed crack with sealant that meets Caltrans Specifications for Crack Treatment Section 37-5 (Caltrans, 2010).
NRC-3	Cracks 1/4 to 1/2 inch wide around and between trench cuts.	Sealed crack with sealant that meets Caltrans Specifications for Crack Treatment Section 37-5 (Caltrans, 2010).
NRC-4	Failure of surface completion at EB-7.	Sealed surface completion.
NRC-5	Failure of surface completion at EB-1 and I-83.	Sealed surface completion.
NRC-6	Cracking and weeds along trench south of concrete pad.	Removed weeds and sealed crack with sealant that meets Caltrans Specifications for Crack Treatment Section 37-5 (Caltrans, 2010).
NRC-7	Weeds growing at drain along the east side north of PWB-1.	Removed weeds and sealed cracks with sealant that meets Caltrans Specifications for Crack Treatment Section 37-5 (Caltrans, 2010).
NRC-8	Cracks 1/4 to 1/2 inch wide along previous trench cut approximately 150 feet long.	Sealed crack with sealant that meets Caltrans Specifications for Crack Treatment Section 37-5 (Caltrans, 2010).
NRC-9	Cracks 1/4 to 1/2 inch wide along previous trench cut approximately 60 feet long.	Sealed crack with sealant that meets Caltrans Specifications for Crack Treatment Section 37-5 (Caltrans, 2010).

Finding Identifier	Description of Finding	Completed Repairs
NRC-10	Cracks 1/4 to 1/2 inch wide along previous trench cut approximately 20 feet long.	Sealed crack with sealant that meets Caltrans Specifications for Crack Treatment Section 37-5 (Caltrans, 2010).
NRC-11	Weeds growing in cracks.	Removed weeds.
NRC-12	Cracks 1/4 to 1/2 inch wide along previous trench cut approximately 20 feet long.	Sealed crack with sealant that meets Caltrans Specifications for Crack Treatment Section 37-5 (Caltrans, 2010).
NRC-13	Cracks 1/4 to 1/2 inch wide along previous trench from north gate to RCRA Cap.	Sealed crack with sealant that meets Caltrans Specifications for Crack Treatment Section 37-5 (Caltrans, 2010).
NRC-14	Cracks 1/4 to 3/8 inch wide, approximately 80 feet long.	Sealed crack with sealant that meets Caltrans Specifications for Crack Treatment Section 37-5 (Caltrans, 2010).
RC-1	Cracks approximately 1/4 to 3/8 inch wide around well monument and bollards, extending approximately 8 feet northwest and northeast.	Sealed crack with sealant that meets Caltrans Specifications for Crack Treatment Section 37-5 (Caltrans, 2010).
RC-2	Cracks 1/4 to 3/8 inch wide extending south of well to end of cap.	Sealed crack with sealant that meets Caltrans Specifications for Crack Treatment Section 37-5 (Caltrans, 2010).
RC-3	Cracks 1/4 to 3/8 inch wide extending west to approximately mid-point of cap.	Sealed crack with sealant that meets Caltrans Specifications for Crack Treatment Section 37-5 (Caltrans, 2010).
RC-4	Failure of surface completion at CP-3.	Sealed completion sealant that meets Caltrans Specifications for Crack Treatment Section 37-5 (Caltrans, 2010).
RC-5	Cracks 1/4 to 1/2 inch wide extending from northwest tank pad to fence, approximately 80 feet along perimeter trench cuts.	Sealed crack with sealant that meets Caltrans Specifications for Crack Treatment Section 37-5 (Caltrans, 2010).
RC-6	Cracks 1/4 to 1/2 inch wide extending west, approximately 80 feet.	Sealed crack with sealant that meets Caltrans Specifications for Crack Treatment Section 37-5 (Caltrans, 2010).
RC-7	Cracks 1/4 to 1/2 inch wide extending south to MW-3.	Sealed crack with sealant that meets Caltrans Specifications for Crack Treatment Section 37-5 (Caltrans, 2010).
RC-8	Cracks 1/4 to 3/8 inch wide from EW-2 extending toward MW-2 and approximately 50 feet beyond.	Sealed crack with sealant that meets Caltrans Specifications for Crack Treatment Section 37-5 (Caltrans, 2010).
RC-9	Cracks 1/4 to 3/8 inch wide extending north along trench cuts.	Sealed crack with sealant that meets Caltrans Specifications for Crack Treatment Section 37-5 (Caltrans, 2010).
RC-10	Cracks 1/4 to 3/8 inch wide extending north along the east side of the cap and down slope along trench cuts.	Sealed crack with sealant that meets Caltrans Specifications for Crack Treatment Section 37-5 (Caltrans, 2010).

Finding Identifier	Description of Finding	Completed Repairs
RC-11	Cracks 1/2 to 1 inch wide in the northeast corner of the RCRA cap, approximately 25 feet long.	Sealed crack with sealant that meets Caltrans Specifications for Crack Treatment Section 37-5 (Caltrans, 2010).
RC-12	Cracks 3/8 to 1/2 inch wide along well IW-2 and bollards.	Sealed crack with sealant that meets Caltrans Specifications for Crack Treatment Section 37-5 (Caltrans, 2010).

Caltrans = California Department of Transportation
 PF = Perimeter fence area
 NRC = Non-RCRA Cap Area
 RC = RCRA Cap Area
 RCRA = Resource Conservation and Recovery Act

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FIGURES

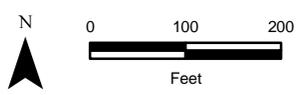


Legend

- Project Boundary
- Parcel Boundary



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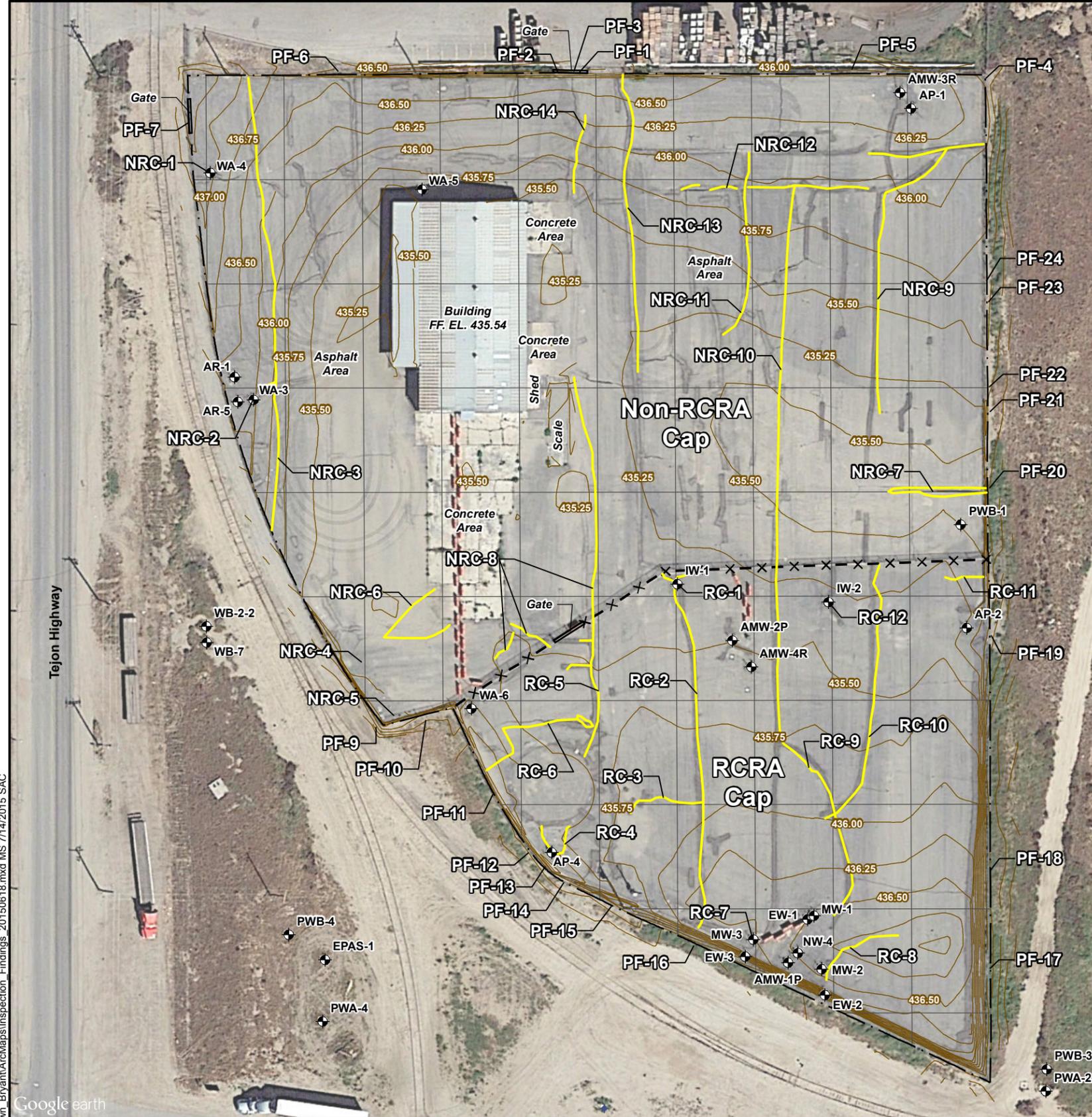


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Site Location Map

DTSC, Brown & Bryant

Figure
1



INSPECTION FINDINGS ON 18 JUNE 2015

FENCE AND BURROWS

- PF-1. NORTH GATE EAST PANEL HAS HOLE IN CHAIN LINK FABRIC.
- PF-2. NORTH GATE WEST PANEL FELL OFF RUNNER WHEN OPENING.
- PF-3. NORTH GATE MORE THAN 2" CLEARANCE UNDER GATE.
- PF-4. BURROW AT NORTHEAST CORNER OF FENCE.
- PF-5. BENT FENCE POSTS ON NORTHEAST SIDE OF GATE.
- PF-6. BENT FENCE POSTS ON NORTHWEST SIDE OF GATE.
- PF-7. WEST GATE MORE THAN 2" CLEARANCE UNDER GATE.
- PF-8. WEEDS ALONG FENCE PERIMETER.
- PF-9. 2 BURROWS AT SOUTHWEST FENCE CORNER.
- PF-10. BURROW AT SOUTH JOG CORNER, MORE THAN 2" CLEARANCE UNDER FENCE.
- PF-11. 2 BURROWS UNDER FENCE APPROXIMATELY 50' SOUTH OF JOG.
- PF-12. 3 BURROWS UNDER FENCE APPROXIMATELY 90' SOUTH OF JOG.
- PF-13. BURROW UNDER FENCE APPROXIMATELY 100' SOUTH OF JOG.
- PF-14. 2 BURROWS UNDER FENCE AT BEND APPROXIMATELY 120' SOUTH OF JOG.
- PF-15. 2 BURROWS UNDER FENCE AT TRANSFORMER POLE.
- PF-16. BURROW APPROXIMATELY 50' SOUTHEAST OF TRANSFORMER POLE.
- PF-17. BURROW UNDER CAP APPROXIMATELY 70' NORTH OF SOUTH POINT OF EAST FENCE.
- PF-18. BURROW NEAR EAST FENCE APPROXIMATELY 120' NORTH OF SOUTH POINT OF EAST FENCE.
- PF-19. FENCE PATCHED ON EAST FENCE.
- PF-20. BURROW AT SWALE ALONG EASTERN FENCE.
- PF-21. BURROW UNDER EAST FENCE APPROXIMATELY 190' SOUTH.
- PF-22. BURROW UNDER EAST FENCE APPROXIMATELY 170' SOUTH.
- PF-23. BURROW UNDER EAST FENCE. FENCE PATCHED. MORE THAN 2" CLEARANCE. APPROXIMATELY 130' SOUTH.
- PF-24. BURROW UNDER EAST FENCE APPROXIMATELY 120' SOUTH.

NON-RCRA CAP

- NRC-1. CRACK 3/8" TO 1/2" AROUND WELL WA-04 AND WEST OF WELL WA-04 APPROXIMATELY 3'.
- NRC-2. CRACKS AROUND WA-03.
- NRC-3. CRACKS 1/4" TO 1/2" AROUND AND BETWEEN TRENCH CUTS FROM NORTH FENCE TO 60' NORTH OF JOG.
- NRC-4. FAILURE OF SURFACE COMPLETION AT EB-7.
- NRC-5. FAILURE OF SURFACE COMPLETION AT EB-1 AND I-83.
- NRC-6. CRACK ALONG TRENCH CUT SOUTH OF CONCRETE PAD, WEEDS.
- NRC-7. WEED GROWING AT DRAIN ON EAST SIDE OF NORTH OF PWB-1.
- NRC-8. CRACKS 1/4" TO 1/2" ALONG TRENCH CUT 150' AND EXTENDING WEST 10'.
- NRC-9. CRACKS 1/4" TO 1/2" ALONG TRENCH CUT APPROXIMATELY 60' NORTHEAST.
- NRC-10. CRACKS 1/4" TO 1/2" ALONG TRENCH CUT APPROXIMATELY 20' APPROXIMATELY 90' WEST OF EAST FENCE.
- NRC-11. WEEDS GROWING IN CRACKS.
- NRC-12. CRACKS 1/4" TO 1/2" ALONG TRENCH CUT APPROXIMATELY 20'.
- NRC-13. CRACKS 1/4" TO 1/2" ALONG TRENCH CUT FROM NORTH GATE TO RCRA CAP.
- NRC-14. CRACK 1/4" TO 3/8" APPROXIMATELY 80' LONG.

RCRA CAP

- RC-1. CRACKS APPROXIMATELY 1/4" TO 1/2" AROUND WELL MONUMENT AND BALLARDS EXTENDING APPROXIMATELY 8' NORTHWEST AND NORTHEAST.
- RC-2. CRACKS 1/4" TO 3/8" EXTENDING SOUTH OF WELL TO END OF CAP.
- RC-3. CRACKS 1/4" TO 3/8" EXTENDING WEST APPROXIMATELY MID POINT OF CAP.
- RC-4. FAILURE OF SURFACE COMPLETION AT CP-3
- RC-5. CRACKS 1/4" TO 1/2" EXTENDING FROM NORTHWEST TANK PAD TO FENCE APPROXIMATELY 80' ALONG PERIMETER OF TRENCH CUTS.
- RC-6. CRACKS 1/4" TO 1/2" EXTENDING WEST APPROXIMATELY 80'.
- RC-7. CRACKS 1/4" TO 3/8" EXTENDING SOUTH TO MW-3.
- RC-8. CRACKS 1/4" TO 3/8" FROM EW-2 TO MW-2 EXTENDING NORTHEAST.
- RC-9. CRACKS 1/4" TO 3/8" EXTENDING NORTH ALONG TRENCH CUTS.
- RC-10. CRACKS 1/4" TO 3/8" EXTENDING NORTH ALONG EAST SIDE OF CAP AND DOWN SLOPE AND ALONG TRENCH CUTS.
- RC-11. CRACKS 1/2" TO 1" IN NORTH EAST CORNER APPROXIMATELY 25'.
- RC-12. CRACKS 3/8" TO 1/2" AROUND WELL IW-2 AND BOLLARDS.

LEGEND

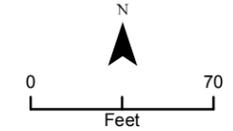
- Groundwater Monitoring Well
- Inspection Finding Number
- Identified Crack (repair as noted or monitor)
- Fence Line Separating RCRA and Non-RCRA Caps
- Topographic Contour
- Fence Line
- Inspection Transverse Grid (60'x45')

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Google earth



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Landfill Cap Topographic Map and Adjacent Locations
 Brown & Bryant Superfund Site

Figure 2

ATTACHMENTS

ATTACHMENT A

Field Notes

FIELD REPORT

PROJECT NO. 60427815, 70000

DATE OF WORK 9/16/15

REPORT NO. _____

PROJECT BROWN + BRYANT ARVIN CAP REPAIR PAGE 1 OF 1

0745- ON SITE, TAILGATE MEETING WITH FENCE CREW

0830 - TAILGATE MEETING WITH CRACK REPAIR CREW

0900 - NOTIFY PM THAT KERN ASPHALT HAS PLANNED
2 DAYS FOR REPAIR.

1430 - FENCE CREW OFF SITE.

1515 - ALL OFF SITE

THIS FIELD REPORT ONLY PROVIDES THE RESULTS OF OBSERVATION AND TESTS BY URS CORPORATION PERSONNEL. THIS REPORT SHOULD NO BE CONSTRUED AS SUPERVISION, DIRECTION, OR A RECOMMENDATION.

TIME _____

CC _____

CC _____

CC _____

BY: *Roger Haines*

RECEIVED _____ DATE _____

AECOM

FIELD REPORT

PROJECT NO. 60427815170000
DATE OF WORK 9-17-15
REPORT NO. _____

PROJECT BROWN + BRYANT ARVIN CAP REPAIR PAGE 1 OF 1

0745 - ARRIVE ON SITE, CONDUCT TAILGATE WITH
KERN ASPHALT. 2 MAN CREW - WEED
ABATEMENT, BURROWS HOLE ABATEMENT.
FENCE CREW NOT ON SITE, CONTACTED
B. WATSON (K.A). LEFT MESSAGE

0930 - FENCE CREW ON SITE.

1100 - FENCE CREW COMPLETED REPAIRS.
NW GATE UNCHANGED - NEEDS SPEED
BUMP INSTALLED OR GATE FABRICATION
TO MEET 2" MINIMUM

1600 - ALL OFF SITE, RETURN 9-18-15

THIS FIELD REPORT ONLY PROVIDES THE RESULTS OF OBSERVATION AND TESTS BY URS CORPORATION PERSONNEL. THIS REPORT SHOULD NO BE CONSTRUED AS SUPERVISION, DIRECTION, OR A RECOMMENDATION.

TIME _____

CC _____
CC _____
CC _____

BY: Ry Haines

RECEIVED _____ DATE _____



FIELD REPORT

PROJECT NO. 60427815, 70000
DATE OF WORK 9/18/15
REPORT NO. _____

PROJECT Brown + Bryant Arvin Cap Repair PAGE 1 OF 1

0745 - ARRIVE on site, CONDUCTED TAILGATE meeting
WITH KERN ASPHALT 2 MAN CREW -
WEED ABATEMENT

1500 - WEED ABATEMENT COMPLETED
BORROW HOLES FILLED WITH CONCRETE
EXCEPT FOR BORROW #20 + #21
CRACK REPAIR AND REMAINING
BORROW HOLE FILL SCHEDULED 9/21/15
ALL OFF SITE

THIS FIELD REPORT ONLY PROVIDES THE RESULTS OF OBSERVATION AND TESTS BY URS CORPORATION PERSONNEL. THIS REPORT SHOULD NO BE CONSTRUED AS SUPERVISION, DIRECTION, OR A RECOMMENDATION.

TIME _____

CC _____
CC _____
CC _____

BY: Ry Hamilton

RECEIVED _____ DATE _____



FIELD REPORT

PROJECT NO.

6042 7815.70000

DATE OF WORK

9/21/15

REPORT NO.

PROJECT Brown + BRYANT ARVIN CAP REPAIR PAGE 1 OF 1

0745- ARRIVE ON SITE, CONDUCT TAILGATE MEETING WITH KERN ASPHALT. 2-MAN CREW FOR CAP REPAIR + BURROW FILL

1430 - ALL BURROW HOLES FILLED WITH CONCRETE.

ALL IDENTIFIED CRACKS FILLED ON RCRA AND NONRCRA CAP
ALL OFF SITE

THIS FIELD REPORT ONLY PROVIDES THE RESULTS OF OBSERVATION AND TESTS BY URS CORPORATION PERSONNEL. THIS REPORT SHOULD NOT BE CONSTRUED AS SUPERVISION, DIRECTION, OR A RECOMMENDATION.

TIME _____

CC _____

CC _____

CC _____

BY: Roye Hinds

RECEIVED _____

DATE _____

AECOM

ATTACHMENT B
Repairs: Summary of Repairs and Photographs

Project Name Brown & Bryant Superfund Site	Inspection Date 16 - 21 September 2015	Sheet Of 1 of 26
City Arvin	County Kern	State California
		PHOTO NO: PF-1 LOCATION: Perimeter Fence Map Location Number: PF-1 DESCRIPTION: Repaired chain-link fence fabric to eliminate holes.
		PHOTO NO: PF-2 LOCATION: Perimeter Fence Map Location Number: PF-2 DESCRIPTION: Realigned runner and repaired to ensure smooth operation of sliding gate.

Project Name Brown & Bryant Superfund Site	Inspection Date 16 - 21 September 2015	Sheet Of 2 of 26
City Arvin	County Kern	State California
		PHOTO NO: PF-3 LOCATION: Perimeter Fence Map Location Number: PF-3 DESCRIPTION: Repaired fabric and adjusted tension wire to ensure clearance is less than 2 inches below fence.
		PHOTO NO: PF-4 LOCATION: Perimeter Fence Map Location Number: PF-4 DESCRIPTION: Filled hole with a cement grout.

Project Name Brown & Bryant Superfund Site	Inspection Date 16 - 21 September 2015	Sheet Of 3 of 26
City Arvin	County Kern	State California
		PHOTO NO: PF-5 LOCATION: Perimeter Fence Map Location Number: PF-5 DESCRIPTION: Adjust/replaced poles to plumb.
		PHOTO NO: PF-6 LOCATION: Perimeter Fence Map Location Number: PF-6 DESCRIPTION: Adjust/replaced poles to plumb.

Project Name Brown & Bryant Superfund Site	Inspection Date 16 - 21 September 2015	Sheet Of 4 of 26
City Arvin	County Kern	State California
		PHOTO NO: PF-7 LOCATION: Perimeter Fence Map Location Number: PF-7 DESCRIPTION: Repaired fabric and adjusted tension wire to ensure clearance is less than 2 inches below fence per City of Arvin specification or equivalent.
		PHOTO NO: PF-8 LOCATION: Perimeter Fence Map Location Number: PF-8 DESCRIPTION: Removed weeds.

Project Name Brown & Bryant Superfund Site	Inspection Date 16 - 21 September 2015	Sheet Of 5 of 26
City Arvin	County Kern	State California
		PHOTO NO: PF-9 LOCATION: Perimeter Fence Map Location Number: PF-9 DESCRIPTION: Filled holes with a cement grout.
		PHOTO NO: PF-10 LOCATION: Perimeter Fence Map Location Number: PF-10 DESCRIPTION: Filled hole with a cement grout. Repaired fabric and adjusted tension wire to ensure clearance is less than 2 inches below fence.

Project Name Brown & Bryant Superfund Site	Inspection Date 16 - 21 September 2015	Sheet Of 6 of 26
City Arvin	County Kern	State California
		PHOTO NO: PF-11 LOCATION: Perimeter Fence Map Location Number: PF-11 DESCRIPTION: Filled holes with a cement grout.
		PHOTO NO: PF-12 LOCATION: Perimeter Fence Map Location Number: 12 DESCRIPTION: Three animal burrows under the fence.

Project Name Brown & Bryant Superfund Site	Inspection Date 16 - 21 September 2015	Sheet Of 7 of 26
City Arvin	County Kern	State California
		PHOTO NO: PF-13 LOCATION: Perimeter Fence Map Location Number: 13 DESCRIPTION: Filled hole with a cement grout.
		PHOTO NO: PF-14 LOCATION: Perimeter Fence Map Location Number: 14 DESCRIPTION: Repaired fabric and adjusted tension wire to ensure clearance is less than 2 inches below fence per City of Arvin specification. Filled holes with cement grout.

Project Name Brown & Bryant Superfund Site	Inspection Date 16 - 21 September 2015	Sheet Of 8 of 26
City Arvin	County Kern	State California
		PHOTO NO: PF-15 LOCATION: Perimeter Fence Map Location Number: PF15 DESCRIPTION: Filled holes with cement grout.
		PHOTO NO: PF-16 LOCATION: Perimeter Fence Map Location Number: PF-16 DESCRIPTION: Filled hole with a cement grout.

Project Name Brown & Bryant Superfund Site	Inspection Date 16 - 21 September 2015	Sheet Of 9 of 26
City Arvin	County Kern	State California
		PHOTO NO: PF-17
		LOCATION: Perimeter Fence Map Location Number: PF-17
		DESCRIPTION: Filled hole with a cement grout.
		PHOTO NO: PF-18
		LOCATION: Perimeter Fence Map Location Number: PF-18
		DESCRIPTION: Filled hole with a cement grout.

Project Name Brown & Bryant Superfund Site	Inspection Date 16 - 21 September 2015	Sheet Of 10 of 26
City Arvin	County Kern	State California
		PHOTO NO: PF-19 LOCATION: Perimeter Fence Map Location Number: PF-19 DESCRIPTION: Replaced fabric per City of Arvin specification.
		PHOTO NO: PF-20 LOCATION: Perimeter Fence Map Location Number: PF-20 DESCRIPTION: Filled hole with a cement grout.

Project Name Brown & Bryant Superfund Site	Inspection Date 16 - 21 September 2015	Sheet Of 11 of 26
City Arvin	County Kern	State California
		PHOTO NO: PF-21 LOCATION: Perimeter Fence Map Location Number: PF-21 DESCRIPTION: Filled hole with a cement grout.
		PHOTO NO: PF-22 LOCATION: Perimeter Fence Map Location Number: PF-22 DESCRIPTION: Filled hole with a cement grout.

Project Name Brown & Bryant Superfund Site	Inspection Date 16 - 21 September 2015	Sheet Of 12 of 26
City Arvin	County Kern	State California
		PHOTO NO: PF-23 LOCATION: Perimeter Fence Map Location Number: PF-23 DESCRIPTION: Filled hole with a cement grout.
		PHOTO NO: PF-24 LOCATION: Perimeter Fence Map Location Number: PF-24 DESCRIPTION: Filled hole with a cement grout.

Project Name Brown & Bryant Superfund Site	Inspection Date 16 - 21 September 2015	Sheet Of 13 of 26
City Arvin	County Kern	State California
		PHOTO NO: NRC-1
		LOCATION: Non-RCRA Cap Map Location Number: NRC-1
		DESCRIPTION: Sealed crack.
		PHOTO NO: NRC-2
		LOCATION: Non-RCRA Cap Map Location Number: NRC-2
		DESCRIPTION: Sealed cracks.

Project Name Brown & Bryant Superfund Site	Inspection Date 16 - 21 September 2015	Sheet Of 14 of 26
City Arvin	County Kern	State California
		PHOTO NO: NRC-3 LOCATION: Non-RCRA Cap Map Location Number: NRC-3 DESCRIPTION: Sealed crack.
		PHOTO NO: NRC-4 LOCATION: Non-RCRA Cap Map Location Number: NRC-4 DESCRIPTION: Sealed surface completion.

Project Name Brown & Bryant Superfund Site	Inspection Date 16 - 21 September 2015	Sheet Of 15 of 26
City Arvin	County Kern	State California
<div style="display: flex;"> <div style="flex: 1;">  </div> <div style="flex: 2; padding-left: 10px;"> <p>PHOTO NO: NRC-5</p> <p>LOCATION: Non-RCRA Cap Map Location Number: NRC-5</p> <p>DESCRIPTION: Sealed surface completion.</p> </div> </div>		
<div style="display: flex;"> <div style="flex: 1;">  </div> <div style="flex: 2; padding-left: 10px;"> <p>PHOTO NO: NRC-6</p> <p>LOCATION: Non-RCRA Cap Map Location Number: NRC-6</p> <p>DESCRIPTION: Removed weeds and sealed cracks.</p> </div> </div>		

Project Name Brown & Bryant Superfund Site	Inspection Date 16 - 21 September 2015	Sheet Of 16 of 26
City Arvin	County Kern	State California
		PHOTO NO: NRC-7 LOCATION: Non-RCRA Cap Map Location Number: NRC-7 DESCRIPTION: Removed weeds and sealed cracks.
		PHOTO NO: NRC-8 LOCATION: Non-RCRA Cap Map Location Number: NRC-8 DESCRIPTION: Removed weeds and sealed cracks.

Project Name Brown & Bryant Superfund Site	Inspection Date 16 - 21 September 2015	Sheet Of 17 of 26
City Arvin	County Kern	State California
		PHOTO NO: NRC-9 LOCATION: Non-RCRA Cap Map Location Number: NRC-9 DESCRIPTION: Sealed cracks.
		PHOTO NO: NRC-10 LOCATION: Non-RCRA Cap Map Location Number: NRC-10 DESCRIPTION: Sealed cracks.

Project Name Brown & Bryant Superfund Site	Inspection Date 16 - 21 September 2015	Sheet Of 18 of 26
City Arvin	County Kern	State California
		PHOTO NO: NRC-11 LOCATION: Non-RCRA Cap Map Location Number: NRC-11 DESCRIPTION: Removed weeds and sealed cracks.
		PHOTO NO: NRC-12 LOCATION: Non-RCRA Cap Map Location Number: NRC-12 DESCRIPTION: Sealed cracks.

Project Name Brown & Bryant Superfund Site	Inspection Date 16 - 21 September 2015	Sheet Of 19 of 26
City Arvin	County Kern	State California
		PHOTO NO: NRC-13
		LOCATION: Non-RCRA Cap Map Location Number: NRC-13
		DESCRIPTION: Sealed cracks.
		PHOTO NO: NRC-14
		LOCATION: Non-RCRA Cap Map Location Number: NRC-14
		DESCRIPTION: Sealed cracks.

Project Name Brown & Bryant Superfund Site	Inspection Date 16 - 21 September 2015	Sheet Of 20 of 26
City Arvin	County Kern	State California
		PHOTO NO: RC-1 LOCATION: RCRA Cap Map Location Number: RC-1 DESCRIPTION: Sealed cracks.
		PHOTO NO: RC-2 LOCATION: RCRA Cap Map Location Number: RC-2 DESCRIPTION: Sealed cracks.

Project Name Brown & Bryant Superfund Site	Inspection Date 16 - 21 September 2015	Sheet Of 21 of 26
City Arvin	County Kern	State California
		PHOTO NO: RC-3 LOCATION: RCRA Cap Map Location Number: RC-3 DESCRIPTION: Sealed cracks.
		PHOTO NO: RC-4 LOCATION: RCRA Cap Map Location Number: RC-4 DESCRIPTION: Sealed surface completions.

Project Name Brown & Bryant Superfund Site	Inspection Date 16 - 21 September 2015	Sheet Of 22 of 26
City Arvin	County Kern	State California
		PHOTO NO: RC-5
		LOCATION: RCRA Cap Map Location Number: RC-5
		DESCRIPTION: Sealed cracks.
		PHOTO NO: RC-6
		LOCATION: RCRA Cap Map Location Number: RC-6
		DESCRIPTION: Sealed cracks.

Project Name Brown & Bryant Superfund Site	Inspection Date 16 - 21 September 2015	Sheet Of 23 of 26
City Arvin	County Kern	State California
		PHOTO NO: RC-7
		LOCATION: RCRA Cap Map Location Number: RC-7
		DESCRIPTION: Sealed cracks.
		PHOTO NO: RC-8
		LOCATION: RCRA Cap Map Location Number: RC-8
		DESCRIPTION: Sealed cracks.

Project Name Brown & Bryant Superfund Site	Inspection Date 16 - 21 September 2015	Sheet Of 24 of 26
City Arvin	County Kern	State California
		PHOTO NO: RC-9 LOCATION: RCRA Cap Map Location Number: RC-9 DESCRIPTION: Sealed cracks.
		PHOTO NO: RC-10 LOCATION: RCRA Cap Map Location Number: RC-10 DESCRIPTION: Sealed cracks.

Project Name Brown & Bryant Superfund Site	Inspection Date 16 - 21 September 2015	Sheet Of 25 of 26
City Arvin	County Kern	State California
		PHOTO NO: RC-11 LOCATION: RCRA Cap Map Location Number: RC-11 DESCRIPTION: Sealed cracks.
		PHOTO NO: RC-12 LOCATION: RCRA Cap Map Location Number: RC-12 DESCRIPTION: Sealed cracks.

ATTACHMENT C
Crack Fill Material Specification Sheet



Certificate of Compliance

9/18/2014

Product: **Elastoflex 670**
Specification: Caltrans Type 1

This document certifies that the above referenced material conforms to the following crack sealant specification requirements as indicated below.

Test	Method	Specification
Softening Point	ASTM D 36	216°F (102°C) min
Cone Penetration 77°F (25°C)	ASTM D 5329	35 dmm max
Resilience	ASTM D 5329	20-60%
Flexibility: ¼" mandrel, 180 deg. bend, 2s	ASTM D 3111 Mod	Pass 32°F (0°C)
Tensile Adhesion	ASTM D 5329	300% min
Asphalt Compatibility	ASTM D 5329	Pass

Elastoflex 670 is made with components that pass a No. 16 sieve.

For questions or additional information call (801) 972-2090.

Sincerely

A handwritten signature in blue ink that reads "Jared Pringle". The signature is written in a cursive style with a large, looped "P" and "R".

Jared Pringle
Lab Manager

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