



17326677.50001

September 26, 2014

Mr. Steve Ross
California Environmental Protection Agency
Department of Toxic Substances Control, Region 1
8800 Cal Center Drive
Sacramento, California 95826-3200

**SUBJECT: Contract Agreement 10-T1114
Cap Repair Summary Report
Brown and Bryant Inc., Site, Arvin, California**

Dear Mr. Ross:

Enclosed please find the *Cap Repair Summary Report* for the Brown & Bryant Arvin Facility Superfund Site in Arvin, California. This report summarizes repairs made to the asphalt cap and associated features located at the subject site. The repairs were identified in the *Cap Repair Work Plan* (URS, 2014), and were based on findings from the inspections performed on September 12, 2013, and May 20, 2014.

If you have any questions or comments, please call me at (916) 679-2000.

Sincerely,
URS Corporation

Ed Tarter, P.E.
Project Manager

ET/gng
Enclosure

c: Ed Tarter (1)
Project File (1)

Distribution List

Cap Repair Work Plan	Copies
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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

**2870 Gateway Oaks Drive, Suite 150
Sacramento, California 95833**

September 2014

IDENTIFICATION/APPROVAL FORM

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

Organization Title: URS Corporation
2870 Gateway Oaks Drive, Suite 150
Sacramento, CA 95833

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: Ed Tarter Date: 9/24/14
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 1-114-2.0-100025.

This *Cap Repair Summary Report* has been prepared by URS Group, Inc. (URS) under the review of registered professionals. Repair activities are based on conclusions and recommendations presented in the *Cap Repair Work Plan* dated June 27, 2014, 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, 2014) documents the findings of the September 12, 2013, and May 20, 2014, inspections of the remedial systems by and 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 August 13, 2014. Figure 2 shows the repair locations. Table 1 presents the table of findings from the *Operations and Maintenance Summary Report* (URS, 2014). Attachment A includes associated field notes, and Appendix B provides a summary of the repairs and associated photographs documenting the typical types of repairs performed.

2.1 Fence Repair

No identified deficiencies were noted during the inspections or during the repair activities. No repairs to the site fencing were performed.

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. Attachment C includes a product specification sheet for material used. 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 first 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 August 7 and 8, 2014, two URS biologists conducted a small mammal burrow survey to determine whether burrows were inhabited by any threatened or endangered animal species before they were collapsed or filled with concrete.

A total of 20 previously identified burrows to be surveyed were located in the RCRA area and around the site perimeter. Surveys were conducted in the southern section of the cap where four burrows were located. The other remaining 16 burrows were located around the site perimeter. Biologists visited each burrow and surveyed around the burrow entrance for signs of activity such as tracks, scat, or prey items. Each 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. In addition, small sticks were placed in front of the burrow entrance; disturbance of these sticks could indicate occupancy.

No tracks of any threatened or endangered animal species were observed. The only tracks present were of a side-blotched lizard (*Uta stansburiana*), seen running on the asphalt entering and exiting burrows throughout the survey period, one canid print at Burrow 13-11, ants, and one avian print at Burrow 13-4. None of the sticks at the burrow entrances were disturbed except Burrow 13-4 where the avian print was observed. Disturbance of the sticks at the entrance of Burrow 13-4 may have occurred due to pursuit of an insect. As a precaution, Burrow 13-4 was re-scoped and determined to be unoccupied. All of the burrows outside the perimeter fence were collapsed. Of the four burrows in the RCRA cap, one was filled with sand, two were covered with cardboard secured by duct tape, and one was covered with a bag of sand as the maintenance crews were not available to immediately backfill the burrows. The burrows in the RCRA cap were filled within 1 week of the completed survey.

Attachment B includes photo documentation of the biological survey.

3.0 SCHEDULED REMEDIAL ACTION OPERATIONS

The next inspection of the remedial systems will occur in 2015; a specific date will be determined later. The 2015 inspection will be coordinated between DTSC, the United States Environmental Protection Agency, and United States Army Corps of Engineers and their contractors, as appropriate.

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. 2014. *Brown and Bryant, Arvin Site, Arvin, California. Operations and Maintenance Cap Repair Work Plan*. March. Final.

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TABLE

Table 1. Inspection Findings and Recommendations

Finding Identifier	Description of Finding	Completed Repairs
1	Weeds growing through the separation between the concrete slab and asphalt, south of the building on the non-RCRA cap. Weeds along east-facing fence.	Removed weeds.
2	Crack approximately 15 feet long, 1/4 to 3/8 inch wide, and up to 2 inches deep in asphalt in the northwest area of the non-RCRA cap. Crack is along the edge of a previous patch repair.	Sealed crack with sealant that meets Caltrans specifications for crack treatment Section 37-5 (Caltrans, 2010), or equivalent.
3	Crack approximately 6 feet long and 3/8 to 1/2 inch wide in asphalt along the fence in the northern area of the non-RCRA cap.	Sealed crack with sealant that meets Caltrans specifications for crack treatment Section 37-5 (Caltrans, 2010), or equivalent.
4	Crack approximately 4 feet long, 1/4 to 3/8 inch wide, and 2 to 3 inches deep in asphalt near the northeast corner of the building on the non-RCRA cap. Crack is along the edge of a previous patch repair.	Sealed crack with sealant that meets Caltrans specifications for crack treatment Section 37-5 (Caltrans, 2010), or equivalent.
5	Crack approximately 20 feet long and 1/4 inch wide in the asphalt on a patch repair. Crack is near the gate at the northeast corner of the building on the non-RCRA cap.	Sealed crack with sealant that meets Caltrans specifications for crack treatment Section 37-5 (Caltrans, 2010), or equivalent.
6	Crack approximately 4 feet long, 1/2 inch wide, and 3 inches deep in asphalt, east of the building on the non-RCRA cap.	Sealed crack with sealant that meets Caltrans specifications for crack treatment Section 37-5 (Caltrans, 2010), or equivalent.
7	Crack approximately 25 feet long, 1/2 inch wide, and 3 inches deep in asphalt on the northeast area of the non-RCRA cap.	Sealed crack with sealant that meets Caltrans specifications for crack treatment Section 37-5 (Caltrans, 2010), or equivalent.
8	Crack approximately 30 feet long, 5/8 to 7/8 inch wide, and up to 3 inches deep in asphalt near the northeast area of the non-RCRA cap. Crack is along the edge of a previous patch repair.	Sealed crack with sealant that meets Caltrans specifications for crack treatment Section 37-5 (Caltrans, 2010), or equivalent.
9	Two cracks approximately 25 and 40 feet long and 3/8 to 1 inch wide in asphalt leading to the northeast corner of the non-RCRA cap. Crack is along the edge of a previous patch repair.	Sealed crack with sealant that meets Caltrans specifications for crack treatment Section 37-5 (Caltrans, 2010), or equivalent.
10	Crack approximately 40 feet long and 3/8 to 5/8 inch wide in asphalt east of the building on the non-RCRA cap.	Sealed crack with sealant that meets Caltrans specifications for crack treatment Section 37-5 (Caltrans, 2010), or equivalent.
11	Crack approximately 8 feet long, 5/8 inch wide, and 2 to 3 inches deep in asphalt along the fence near the southern border of the non-RCRA cap.	Sealed crack with sealant that meets Caltrans specifications for crack treatment Section 37-5 (Caltrans, 2010), or equivalent.

Finding Identifier	Description of Finding	Completed Repairs
12	Crack approximately 8 feet long and 1/2 inch wide in asphalt near the northeast corner of the RCRA cap.	Sealed crack with sealant that meets Caltrans specifications for crack treatment Section 37-5 (Caltrans, 2010), or equivalent.
13	Crack approximately 55 feet long and 1/4 inch wide in asphalt near the east-facing fence of the RCRA cap.	Sealed crack with sealant that meets Caltrans specifications for crack treatment Section 37-5 (Caltrans, 2010), or equivalent.
14	Burrow with a 3-inch-diameter hole, 45 feet north of the southeast corner of the RCRA cap and 8 feet from the east-facing fence.	Filled hole with a cement grout or equivalent.
15	Burrow with a 3-inch-diameter hole, 55 feet north of the southeast corner of the RCRA cap and 4 feet from the east-facing fence.	Filled hole with a cement grout or equivalent.
16	Crack approximately 35 feet long and 1/4 inch wide in asphalt near the south-facing fence of the RCRA cap.	Sealed crack with sealant that meets Caltrans specifications for crack treatment Section 37-5 (Caltrans, 2010), or equivalent.
17	Crack approximately 10 feet long and 1/4 inch wide in asphalt near the south-facing fence of the RCRA cap.	Sealed crack with sealant that meets Caltrans specifications for crack treatment Section 37-5 (Caltrans, 2010), or equivalent.
18	Two cracks approximately 25 and 40 feet long, and 1/8 to 3/8 inch wide in asphalt in the northwest area of the RCRA cap.	Sealed crack with sealant that meets Caltrans specifications for crack treatment Section 37-5 (Caltrans, 2010), or equivalent.
19	Crack approximately 20 feet long and 1/4 to 3/8 inch wide in asphalt in the southwest area of the non-RCRA cap. Crack is along the edge of a previous patch repair.	Sealed crack with sealant that meets Caltrans specifications for crack treatment Section 37-5 (Caltrans, 2010), or equivalent.
20	Crack approximately 55 feet long and 5/8 inch wide in the asphalt southwest of the building on the non-RCRA cap. Crack intersects a patch repair with a 1/4 inch crack on both edges approximately 50 feet long.	Sealed crack with sealant that meets Caltrans specifications for crack treatment Section 37-5 (Caltrans, 2010), or equivalent.
21	Crack approximately 15 feet long and 3/8 inch wide in the asphalt west of the building on the non-RCRA cap.	Sealed crack with sealant that meets Caltrans specifications for crack treatment Section 37-5 (Caltrans, 2010), or equivalent.
22	Crack approximately 20 feet long and 5/8 inch wide in the asphalt west of the building on the non-RCRA cap.	Sealed crack with sealant that meets Caltrans specifications for crack treatment Section 37-5 (Caltrans, 2010), or equivalent.
23	Two cracks approximately 70 feet long and 1/8 to 1/4 inch wide in the asphalt southwest of the building on the non-RCRA cap. Cracks are along the edge of a previous patch repair.	Sealed crack with sealant that meets Caltrans specifications for crack treatment Section 37-5 (Caltrans, 2010), or equivalent.

Table 1. (cont'd)

Finding Identifier	Description of Finding	Completed Repairs
24	Crack approximately 5 feet long and 1/4 to 1/2 inch wide in the asphalt southwest of the building on the non-RCRA cap.	Sealed crack with sealant that meets Caltrans specifications for crack treatment Section 37-5 (Caltrans, 2010), or equivalent.
13-1	Tumble weed growing at center of western fence line.	Removed tumble weeds.
13-2	One shallow hole, approximately 6-inch diameter, identified in western edge of RCRA cap at center of western property-line.	Filled holes with cement grout, or equivalent.
13-3	Several small squirrel holes at center of western property line of the RCRA cap.	Filled holes with cement grout, or equivalent.
13-4	New squirrel hole in RCRA cap where concrete patch was placed several months ago at southern end of eastern property line.	Filled hole with cement grout, or equivalent.
13-5	Grass growing in RCRA cap at southern end of eastern property line.	Removed grass and sealed cracks. Sealed cracks with sealant that meets Caltrans specifications for crack treatment Section 37-5 (Caltrans, 2010), or equivalent.
13-6	Small crack, approximately 1/8-inch wide, noted in RCRA cap at center of eastern property line.	Cracking is considered low severity; recommend further monitoring.
13-7	Hairline crack, approximately 60 feet long, 1/8-inch wide, in RCRA cap beginning at previous patch and orientated eastwards at southern end of eastern property line.	Cracking is considered low severity; recommend further monitoring.
13-8	Hairline crack, approximately 30 feet long, 1/8-inch wide, in RCRA cap between previous patches in southern portion of site.	Cracking is considered low severity; recommend further monitoring.
13-9	Three small cracks, each less than 20 feet long and approximately 1/8-inch wide, in RCRA cap near bollards at center of site.	Cracking is considered low severity; recommend further monitoring.
13-10	Hairline crack, approximately 10 feet long, 1/8-inch wide, in RCRA cap at center of site.	Cracking is considered low severity; recommend further monitoring.
13-11	New rodent holes located outside cap at center of eastern property line and eastern end of northern property line.	Filled hole with a cement grout, or equivalent.

Caltrans = California Department of Transportation
 RCRA = Resource Conservation and Recovery Act

FIGURES



Legend

- Project Boundary
- Parcel Boundary



L:\Projects\DTSC\Brown, Bryant\ArcMaps\Site_Location_Map.mxd RK 11.15.2011 SAC



URS
 2870 Gateway Oaks Dr., Ste. 150
 Sacramento, CA 95833
 TEL: (916) 679-2000
 FAX: (916) 679-2900

Site Location Map

DTSC, Brown & Bryant

Figure
1

DRAWING: \\SACDATA01\Projects6\Calif--DTSC\10-T1114 Brown and Bryant Inc., Site\00-GENERAL\Site Figures\Landfill Cap Topo Map and Well Locat02 TOPO MAP_24JUN14_CSH.dwg
PLOT BY: CHRIS_HARGREAVES - Jun 25, 2014 - 12:37:53pm



INSPECTION FINDINGS ON 20 MAY 2014

1. WEEDS GROWING THROUGH THE SEPARATION BETWEEN THE CONCRETE SLAB AND ASPHALT, SOUTH OF THE BUILDING ON THE NON-RCRA CAP. WEEDS ALONG EAST FACING FENCE.
2. CRACK APPROXIMATELY 15 FEET LONG, 1/4- TO 3/8-INCH WIDE, AND UP TO 2 INCHES DEEP IN ASPHALT IN THE NORTHWEST AREA OF THE NON-RCRA CAP. THE CRACK IS ALONG THE EDGE OF A PREVIOUS PATCH REPAIR.
3. CRACK APPROXIMATELY 6 FEET LONG AND 3/8- TO 1/2-INCH WIDE IN ASPHALT ALONG THE FENCE IN THE NORTHERN AREA OF THE NON-RCRA CAP.
4. CRACK APPROXIMATELY 4 FEET LONG, 1/4- TO 3/8-INCH WIDE, AND 2 TO 3 INCHES DEEP IN ASPHALT NEAR THE NORTHEAST CORNER OF THE BUILDING ON THE NON-RCRA CAP. THE CRACK IS ALONG THE EDGE OF A PREVIOUS PATCH REPAIR.
5. CRACK APPROXIMATELY 20 FEET LONG AND 1/4-INCH WIDE IN THE ASPHALT ON A PATCH REPAIR. THE CRACK IS NEAR THE GATE AT THE NORTHEAST CORNER OF THE BUILDING ON THE NON-RCRA CAP.
6. CRACK APPROXIMATELY 4 FEET LONG, 1/2-INCH WIDE, AND 3 INCHES DEEP IN ASPHALT, EAST OF THE BUILDING ON THE NON-RCRA CAP.
7. CRACK APPROXIMATELY 25 FEET LONG, 1/2-INCH WIDE, AND 3 INCHES DEEP IN ASPHALT ON THE NORTHEAST AREA OF THE NON-RCRA CAP.
8. CRACK APPROXIMATELY 30 FEET LONG, 5/8- TO 7/8-INCH WIDE, AND UP TO 3 INCHES DEEP IN ASPHALT NEAR THE NORTHEAST AREA OF THE NON-RCRA CAP. THE CRACK IS ALONG THE EDGE OF A PREVIOUS PATCH REPAIR.
9. TWO CRACKS APPROXIMATELY 25 AND 40 FEET LONG AND 3/8- TO 1-INCH WIDE IN ASPHALT LEADING TO THE NORTHEAST CORNER OF THE NON-RCRA CAP. THE CRACK IS ALONG THE EDGE OF A PREVIOUS PATCH REPAIR.
10. CRACK APPROXIMATELY 40 FEET LONG AND 3/8- TO 5/8-INCH WIDE IN ASPHALT EAST OF THE BUILDING ON THE NON-RCRA CAP.
11. CRACK APPROXIMATELY 8 FEET LONG, 5/8-INCH WIDE, AND 2 TO 3 INCHES DEEP IN ASPHALT ALONG THE FENCE NEAR THE SOUTHERN BORDER OF THE NON-RCRA CAP.
12. CRACK APPROXIMATELY 8 FEET LONG AND 1/2-INCH WIDE IN ASPHALT NEAR THE NORTHEAST CORNER OF THE RCRA CAP.
13. CRACK APPROXIMATELY 55 FEET LONG AND 1/4-INCH WIDE IN ASPHALT NEAR THE EAST FACING FENCE OF THE RCRA CAP.
14. BURROW HOLE WITH A 3-INCH DIAMETER, 45 FEET NORTH OF THE SOUTHEAST CORNER OF THE RCRA CAP AND 8 FEET FROM THE EAST FACING FENCE.
15. BURROW HOLE WITH A 3-INCH DIAMETER, 55 FEET NORTH OF THE SOUTHEAST CORNER OF THE RCRA CAP AND 4 FEET FROM THE EAST FACING FENCE.
16. CRACK APPROXIMATELY 35 FEET LONG AND 1/4-INCH WIDE IN ASPHALT NEAR THE SOUTH FACING FENCE OF THE RCRA CAP.
17. CRACK APPROXIMATELY 10 FEET LONG AND 1/4-INCH WIDE IN ASPHALT NEAR THE SOUTH FACING FENCE OF THE RCRA CAP.
18. TWO CRACKS APPROXIMATELY 25 AND 40 FEET LONG, AND 1/8- TO 3/8-INCH WIDE IN ASPHALT IN THE NORTHWEST AREA OF THE RCRA CAP.
19. CRACK APPROXIMATELY 20 FEET LONG AND 1/4- TO 3/8-INCH WIDE IN ASPHALT IN THE SOUTHWEST AREA OF THE NON-RCRA CAP. THE CRACK IS ALONG THE EDGE OF A PREVIOUS PATCH REPAIR.
20. CRACK APPROXIMATELY 55 FEET LONG AND 5/8-INCH WIDE IN THE ASPHALT SOUTHWEST OF THE BUILDING ON THE NON-RCRA CAP. THE CRACK INTERSECTS A PATCH REPAIR WITH A 1/4-INCH CRACK ON BOTH EDGES APPROXIMATELY 50 FEET LONG.
21. CRACK APPROXIMATELY 15 FEET LONG AND 3/8-INCH WIDE IN THE ASPHALT WEST OF THE BUILDING ON THE NON-RCRA CAP.
22. CRACK APPROXIMATELY 20 FEET LONG AND 5/8-INCH WIDE IN THE ASPHALT WEST OF THE BUILDING ON THE NON-RCRA CAP.
23. TWO CRACKS APPROXIMATELY 70 FEET LONG AND 1/8 TO 1/4 INCH WIDE IN THE ASPHALT SOUTHWEST OF THE BUILDING ON THE NON-RCRA CAP. CRACKS ARE ALONG THE EDGE OF A PREVIOUS PATCH REPAIR.
24. CRACK APPROXIMATELY 5 FEET LONG AND 1/4 TO 1/2 INCH WIDE IN THE ASPHALT SOUTHWEST OF THE BUILDING ON THE NON-RCRA CAP.

INSPECTION FINDINGS ON 12 SEPTEMBER 2013

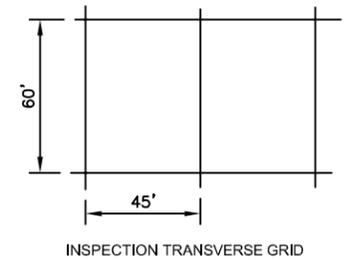
- 13-1. TUMBLE WEED GROWING AT CENTER OF WESTERN FENCE LINE.
- 13-2. ONE SHALLOW HOLE, APPROXIMATELY 6-INCH DIAMETER, IDENTIFIED IN WESTERN EDGE OF RCRA CAP AT CENTER OF WESTERN PROPERTY LINE.
- 13-3. SEVERAL SMALL SQUIRREL HOLES AT CENTER OF WESTERN PROPERTY LINE OF THE RCRA CAP.
- 13-4. NEW SQUIRREL HOLE IN RCRA CAP WHERE CONCRETE PATCH WAS PLACED SEVERAL MONTHS AGO AT SOUTHERN END OF EASTERN PROPERTY LINE.
- 13-5. GRASS GROWING IN RCRA CAP AT SOUTHERN END OF EASTERN PROPERTY LINE.
- 13-6. SMALL CRACK, APPROXIMATELY 1/8-INCH WIDE, NOTED IN RCRA CAP AT CENTER OF EASTERN PROPERTY LINE.
- 13-7. HAIRLINE CRACK, APPROXIMATELY 60 FEET LONG, 1/8-INCH WIDE, IN RCRA CAP BEGINNING AT PREVIOUS PATCH AND ORIENTATED EASTWARDS AT SOUTHERN END OF EASTERN PROPERTY LINE.
- 13-8. HAIRLINE CRACK, APPROXIMATELY 30 FEET LONG, 1/8-INCH WIDE, IN RCRA CAP BETWEEN PREVIOUS PATCHES IN SOUTHERN PORTION OF SITE.
- 13-9. THREE SMALL CRACKS, EACH LESS THAN 20 FEET LONG AND APPROXIMATELY 1/8-INCH WIDE, IN RCRA CAP NEAR BOLLARDS AT CENTER OF SITE.
- 13-10. HAIRLINE CRACK, APPROXIMATELY 10 FEET LONG, 1/8-INCH WIDE, IN RCRA CAP AT CENTER OF SITE.
- 13-11. NEW RODENT HOLES LOCATED OUTSIDE CAP AT CENTER OF EASTERN PROPERTY LINE AND EASTERN END OF NORTHERN PROPERTY LINE

LEGEND

- (5) INSPECTION FINDINGS NUMBER
- 435.00 — TOPOGRAPHIC CONTOUR
- + GROUND WATER MONITORING WELL
- x-x- FENCE LINE SEPARATING RCRA AND NON-RCRA CAPS



SCALE= 1" = 70'-0"



NO.	BY.	DATE

REVISIONS

DESCRIPTION

DRAWING SCALE

DESIGNED BY:
DRAWN BY:
CHECKED BY:
APPROVED BY:

DATE

**BROWN & BRYANT
SUPERFUND SITE**

**LANDFILL CAP TOPOGRAPHIC MAP
AND ADJACENT LOCATIONS**

URS
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JOB NO.

TASK ORDER NO.

FIG 2

ATTACHMENTS

ATTACHMENT A
Field Notes from Repair Activities

Daily Field Data Sheet

Date: 8/13/14

Time Onsite: 07:25 Time Offsite: 16:40

Project: BROWN & BRYANT Project Number: 17326677.50001

Address: 600 SO. DERBY STREET

URS Field Staff: TED VANDERVERT

Weather: HOT, CLEAR WITH SOME HIGH CLOUDS.

07:25 URS ON SITE.
KERN ASPHALT CREW WAS WAITING AT ADJACENT PROPERTY.
FRANK ULI AND ANGEL MENDOZA ON SITE.

07:35 MAKING JSA FOR TODAY'S ACTIVITY.

07:45 HNSP REVIEW & JSA REVIEW.

07:50 CJ WATSON OF KERN ASPHALT ON SITE.

08:15 CJ WATSON OFF SITE.

08:20 CREW IS MIXING CEMENT FOR BARROWS.

08:40 PATCHING BARROWS AND HOLES AT RCRA SITE.

09:10 CREWS ARE PATCHING BARROWS AT THE PERIMETER.
URS OFF SITE

10:50 URS RETURN - KERN CREW IS SEALING CRACKS
ON THE WEST SIDE OF THE NON-RCRA AREA.

12:00 MOVE TO THE RCRA SIDE

12:30 KERN ASPHALT OFF SITE FOR LUNCH.

13:00 RETURN TO WORK.

13:50 FINNISHING UP ON RCRA SITE. MOVING BACK TO
NON-RCRA - REQUESTED A COUPLE OF SPOTS TO BE
REDONE BEFORE MOVING. THE SEALER HAD SUNKIN A BIT
IN A COUPLE OF LOCATIONS.

14:00 MOVING ALONG EAST FENCE

15:20 AGAIN REQUEST TO FILL IN A COUPLE OF SPOTS
OVER ALL THE CRACK FILLING IS GOING WELL.

16:20 CREW APPEARS TO HAVE COMPLETED ALL SEALING
IDENTIFIED. FINAL WALK AROUND TO VERIFY.

16:30 KERN ASPHALT OFF SITE.

16:40 URS LOCKED ALL GATES AND SECURED THE SITE.
OFF SITE.

Signature: 

ATTACHMENT B
Summary of Repairs and Photographs

Project Name Brown & Bryant Superfund Site	Inspection Date 13 August 2014	Sheet 1 of 21
City Arvin	County Kern	State California
		PHOTO: B&B-2014-22 LOCATION: Non-RCRA Cap Area Map Location Number: 1 DESCRIPTION: Removal of weeds growing in asphalt to concrete interface and minor cracks in concrete.
		PHOTO: B&B-2014-23 LOCATION: Non-RCRA Cap Area Map Location Number: 1 DESCRIPTION: Removal of weeds growing along fence line.

Project Name Brown & Bryant Superfund Site	Inspection Date 13 August 2014	Sheet 2 of 21
City Arvin	County Kern	State California
		PHOTO: B&B-2014-24 LOCATION: Non-RCRA Cap Area Map Location Number: 2 DESCRIPTION: Repair of asphalt cap cracking; approximately 15 feet long and 1/4 to 3/8 inch wide.
		PHOTO: B&B-2014-25 LOCATION: Non-RCRA Cap Area Map Location Number: 3 DESCRIPTION: Repair of asphalt cap cracking; approximately 6 feet long and 3/8 inch wide towards tie-down.

Project Name Brown & Bryant Superfund Site	Inspection Date 13 August 2014	Sheet 3 of 21
City Arvin	County Kern	State California
		PHOTO: B&B-2014-26 LOCATION: Non-RCRA Cap Area Map Location Number: 4 DESCRIPTION: Repair of asphalt cap cracking; approximately 4 feet long and 1/4 to 3/8 inch wide.
		PHOTO: B&B-2014-27 LOCATION: Non-RCRA Cap Area Map Location Number: 5 DESCRIPTION: Repair of asphalt cap cracking; approximately 20 feet long and 1/4 inch wide in the asphalt on a patch repair. Crack is near the northeast corner of the building on the non-RCRA cap.

Project Name Brown & Bryant Superfund Site	Inspection Date 13 August 2014	Sheet 4 of 21
City Arvin	County Kern	State California
		PHOTO: B&B-2014-28 LOCATION: Non-RCRA Cap Area Map Location Number: 6 DESCRIPTION: Repair of asphalt cap cracking; approximately 4 feet long and 1/2 inch wide.
		PHOTO: B&B-2014-29 LOCATION: Non-RCRA Cap Area Map Location Number: 7 DESCRIPTION: Repair of asphalt cap cracking; approximately 25 feet long, 1/2 inch wide, and 3 inches deep in asphalt on the northeast area of the non- RCRA cap.

Project Name Brown & Bryant Superfund Site	Inspection Date 13 August 2014	Sheet 5 of 21
City Arvin	County Kern	State California
 A photograph showing a close-up view of a dark blue repair material applied to a crack in asphalt. The crack runs diagonally across the frame, and the repair material is visible along its length. The surrounding asphalt is light gray and shows some wear and other cracks.		PHOTO: B&B-2014-30 LOCATION: Non-RCRA Cap Area Map Location Number: 8 DESCRIPTION: Repair of asphalt cap cracking; approximately 30 feet long, 5/8 to 7/8 inch wide, and up to 3 inches deep in asphalt on the northeast area of the non-RCRA cap. Crack is along the edge of a previous repair.
 A photograph showing a wider view of an asphalt surface. A dark blue repair material is applied to a crack that runs vertically through the center of the frame. The asphalt surface is light gray and shows some tire tracks and other cracks. The background shows a fence and some vegetation.		PHOTO: B&B-2014-31 LOCATION: Non-RCRA Cap Area Map Location Number: 9 DESCRIPTION: Repair of asphalt cap cracking; two cracks approximately 25 and 40 feet long and 3/8 to 1 inch wide in asphalt leading to the northeast corner of the non-RCRA cap. Crack is along the edge of a previous patch repair.

Project Name Brown & Bryant Superfund Site	Inspection Date 13 August 2014	Sheet 6 of 21
City Arvin	County Kern	State California
		PHOTO: B&B-2014-32 LOCATION: Non-RCRA Cap Area Map Location Number: 10 DESCRIPTION: Repair of asphalt cap cracking; approximately 40 feet long and 3/8 to 5/8 inch wide in asphalt east of the building on the non-RCRA cap.
		PHOTO: B&B-2014-33 LOCATION: RCRA Cap Area Map Location Number: 11 DESCRIPTION: Repair of asphalt cap cracking; approximately 8 feet long, 5/8 inch wide, and 2 to 3 inches deep in asphalt along the fence near the southern border of the non-RCRA cap.

Project Name Brown & Bryant Superfund Site	Inspection Date 13 August 2014	Sheet 7 of 21
City Arvin	County Kern	State California
		PHOTO: B&B-2014-34 LOCATION: RCRA Cap Area Map Location Number: 12 DESCRIPTION: Repair of asphalt cap cracking; approximately 8 feet long and 1/2 inch wide in asphalt near the northeast corner of the RCRA cap.
		PHOTO: B&B-2014-35 LOCATION: RCRA Cap Area Map Location Number: 13 DESCRIPTION: Repair of asphalt cap cracking; approximately 55 feet long and 1/4 inch wide.

Project Name Brown & Bryant Superfund Site	Inspection Date 13 August 2014	Sheet 8 of 21
City Arvin	County Kern	State California
		PHOTO: B&B-2014-36 LOCATION: RCRA Cap Area Map Location Number: 14 DESCRIPTION: Repair of burrow hole, filled with cement grout.
		PHOTO: B&B-2014-37 LOCATION: RCRA Cap Area Map Location Number: 15 DESCRIPTION: Repair of burrow hole, filled with cement grout.

Project Name Brown & Bryant Superfund Site	Inspection Date 13 August 2014	Sheet 9 of 21
City Arvin	County Kern	State California
		PHOTO: B&B-2014-38 LOCATION: RCRA Cap Area Map Location Number: 16 DESCRIPTION: Repair of asphalt cap cracking; approximately 35 feet long and 1/4 inch wide in asphalt near south-facing fence of the RCRA cap.
		PHOTO: B&B-2014-39 LOCATION: RCRA Cap Area Map Location Number: 17 DESCRIPTION: Repair of asphalt cap cracking; approximately 10 feet long and 1/4 inch wide in asphalt near the south-facing fence of the RCRA cap.

Project Name Brown & Bryant Superfund Site	Inspection Date 13 August 2014	Sheet 10 of 21
City Arvin	County Kern	State California
		PHOTO: B&B-2014-40 LOCATION: RCRA Cap Area Map Location Number: 18 DESCRIPTION: Repair of asphalt cap cracking; approximately 25 and 40 feet long, 1/8 and 3/8 inch wide in asphalt.
		PHOTO: B&B-2014-41 LOCATION: Non-RCRA Cap Area Map Location Number: 19 DESCRIPTION: Repair of asphalt cap cracking; approximately 20 feet long and 1/4 to 3/8 inch wide in asphalt near the southwest corner of the non- RCRA cap.

Project Name Brown & Bryant Superfund Site	Inspection Date 13 August 2014	Sheet 11 of 21
City Arvin	County Kern	State California
		PHOTO: B&B-2014-42 LOCATION: Non-RCRA Cap Area Map Location Number: 20 DESCRIPTION: Repair of asphalt cap cracking; approximately 25 and 40 feet long, 1/8 and 3/8 inch wide in asphalt.
		PHOTO: B&B-2014-43 LOCATION: Non-RCRA Cap Area Map Location Number: 22 DESCRIPTION: Repair of asphalt cap cracking; approximately 20 feet long and 5/8 inch wide in the asphalt west of the building on the non-RCRA cap.

Project Name Brown & Bryant Superfund Site	Inspection Date 13 August 2014	Sheet 12 of 21
City Arvin	County Kern	State California
		PHOTO: B&B-2014-44 LOCATION: Non-RCRA Cap Area Map Location Number: 23 DESCRIPTION: Repair of asphalt cap cracking; two cracks approximately 70 feet long and 1/8 to 1/4 inch wide in the asphalt southwest of the building on the non-RCRA cap. Cracks are along the edge of a previous patch repair.
		PHOTO: B&B-2014-44 LOCATION: Non-RCRA Cap Area Map Location Number: 13-1 DESCRIPTION: Remove weeds.

Project Name Brown & Bryant Superfund Site	Inspection Date 13 August 2014	Sheet 13 of 21
City Arvin	County Kern	State California
		<p>PHOTO: B&B-2014-45</p> <p>LOCATION: RCRA Cap Area Map Location Number: 13-02</p> <p>DESCRIPTION: Repair of hole in asphalt, a shallow hole, approximately 6 inches in diameter, identified in western edge of RCRA cap at center of western property line.</p>
		<p>PHOTO: B&B-2014-46</p> <p>LOCATION: RCRA Cap Area Map Location Number: 13-3</p> <p>DESCRIPTION: Grouting of several small squirrel holes at center of western property line of the RCRA cap.</p>

Project Name Brown & Bryant Superfund Site	Inspection Date 13 August 2014	Sheet 14 of 21
City Arvin	County Kern	State California
		<p>PHOTO: B&B-2014-47</p> <p>LOCATION: RCRA Cap Area Map Location Number: 13-5</p> <p>DESCRIPTION: Mowed weeds growing on cap.</p>
		<p>PHOTO: B&B-2014-48</p> <p>LOCATION: RCRA Cap Area Map Location Number: 13-6</p> <p>DESCRIPTION: Continue to monitor crack, approximately 1/8-inch wide.</p>

Project Name Brown & Bryant Superfund Site	Inspection Date 13 August 2014	Sheet 15 of 21
City Arvin	County Kern	State California
		<p>PHOTO: B&B-2014-49</p> <p>LOCATION: RCRA Cap Area Map Location Number: 13-7</p> <p>DESCRIPTION: Continue to monitor crack, approximately 1/8-inch wide.</p>
		<p>PHOTO: B&B-2014-50</p> <p>LOCATION: RCRA Cap Area Map Location Number: 13-8</p> <p>DESCRIPTION: Continue to monitor crack, approximately 1/8-inch wide.</p>

Project Name Brown & Bryant Superfund Site	Inspection Date 13 August 2014	Sheet 16 of 21
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City Arvin	County Kern	State California
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PHOTO: B&B-2014-51

LOCATION:
 RCRA Cap Area
 Map Location Number: 13-9

DESCRIPTION:
 Continue to monitor crack,
 approximately 1/8-inch wide.



PHOTO: B&B-2014-52

LOCATION:
 RCRA Cap Area
 Map Location Number: 13-10

DESCRIPTION:
 Continue to monitor crack,
 approximately 1/8-inch wide.

Project Name Brown & Bryant Superfund Site	Inspection Date 13 August 2014	Sheet 17 of 21
City Arvin	County Kern	State California



PHOTO: B&B-2014-53

LOCATION:
 Non-RCRA Cap Area
 Map Location Number: 13-11

DESCRIPTION:
 Grout hole on the outside of the
 Non-RCRA cap.

Project Name Brown & Bryant Superfund Site	Inspection Date 7 through 8 August 2014	Sheet 18 of 21
City Arvin	County Kern	State California



PHOTO: B&B-2014-54

LOCATION:

Map Location Number:

DESCRIPTION:

Burrow with sticks and flour dust at entrance. Ant tracks in flour.



PHOTO: B&B-2014-55

LOCATION:

RCRA Cap Area

Map Location Number: 13-4

DESCRIPTION:

Burrow with disturbed sticks and bird print on left side of entrance (see arrows).

Project Name Brown & Bryant Superfund Site	Inspection Date 7 through 8 August 2014	Sheet 19 of 21
City Arvin	County Kern	State California



PHOTO: B&B-2014-56

LOCATION:
 RCRA Cap Area
 Map Location Number: 13-4

DESCRIPTION:
 Biologist scoping burrow.

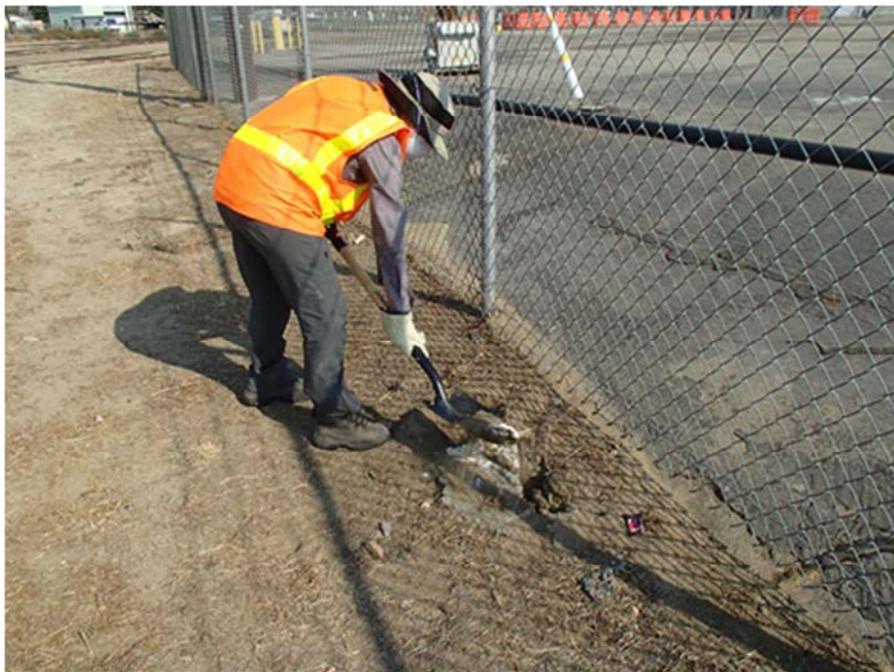


PHOTO: B&B-2014-57

LOCATION:
 RCRA Cap Area
 Map Location Number: 13-4

DESCRIPTION:
 Biologist collapsing burrow outside perimeter fence of RCRA cap.

Project Name Brown & Bryant Superfund Site	Inspection Date 7 through 8 August 2014	Sheet 20 of 21
City Arvin	County Kern	State California



PHOTO: B&B-2014-58

LOCATION:
 RCRA Cap Area
 Map Location Number: 13-2

DESCRIPTION:
 Covered burrow with cardboard and secured with duct tape in northwest portion of RCRA cap until grouting was performed.



PHOTO: B&B-2014-59

LOCATION:
 RCRA Cap Area
 Map Location Number: 14 and 15

DESCRIPTION:
 Survey of three burrows in southeast portion of RCRA cap.

Project Name Brown & Bryant Superfund Site	Inspection Date 7 through 8 August 2014	Sheet 21 of 21
City Arvin	County Kern	State California



PHOTO: B&B-2014-60

LOCATION:
 RCRA Cap Area
 Map Location Number: Near 13-2

DESCRIPTION:
 Side-blotched lizard prints and tail drag at burrow near 13-2.



PHOTO: B&B-2014-61

LOCATION:
 RCRA Cap Area
 Map Location Number: Near 13-2

DESCRIPTION:
 Side-blotched lizard on asphalt cap.

ATTACHMENT C
Crack Fill Material Specification Sheet

ELASTO FLEX 670

JOINT AND CRACK SEALANT, FOR ASPHALT AND CONCRETE PAVEMENTS



Elastoflex 670 is a hot applied, polymer modified asphalt crack sealant. This product applies and sets up best in up to hot temperatures, and is highly durable in moderate to very hot climates. Elastoflex 670 is self leveling, fast setting and quick melting. Formulated with a medium viscosity for all-round ease of application, it is ideal for highways, county roads, municipal streets, parking lots and pathways. Elastoflex 670 delivers high performance at a moderate cost.

SPECIFICATION

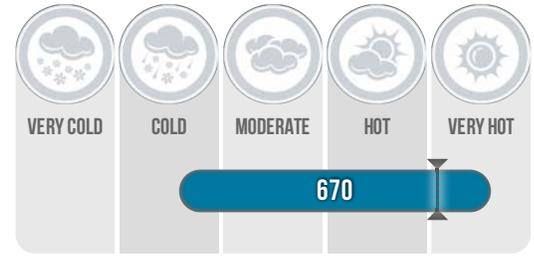
CONE PENETRATION : 77°F (25°C), 150g, 5s : ASTM D5329	30 dmm max
SOFTENING POINT : ASTM D36	210°F (99°C) min
FLEXIBILITY : 1 in (25mm) mandrel, 90 deg bend, 2s : ASTM D3111	Pass 30°F (-1°C)
DUCTILITY : 77°F (25°C) : ASTM D113	25 cm min
RESILIENCE : 77°F (25°C) : ASTM D5329	30% min
ASPHALT COMPATIBILITY : 140°F (60°C), 72 hr : ASTM D5329	Pass

APPLICATION

Read and follow application instructions before use. This product must be heated using indirect heating methods, either a double boiler or hot oil circulating kettle. Equipment must have means of maintaining constant agitation to the material. Maximum safe heating temperature: 400°F (204°C). Recommended application temperature: 380°F (193°C).

WARRANTY

Warranty: Maxwell Products, Inc. warrants that our products meet the applicable specifications at the time of shipment. Due to the many differing procedures used in preparing and installing materials, Maxwell Products assumes no liability for material failure due to improper installation, equipment failure or operator errors. Any remedies are limited, at Maxwell Products' option, to replacement of materials or refund (full or partial) of the purchase price from Maxwell Products. Claims must be made within three (3) months of the date of purchase. There is no other warranty either expressed or implied.



- Performance Range
- ⏸ Suggested Max. Application Temp

Available in:

PolySkin
Inclusive packaging

Maxwell
PRODUCTS INCORPORATED

Salt Lake City, UT
Toll Free - 800.266.2090
Fax - 800.266.2090

Generated August 5, 2014.

Please visit <http://maxwellproducts.com> for an updated version.



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

Jared Pringle
Lab Manager



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