STATE OF CALIFORNIA
Budget Change Proposal - Cover Sheet
DF-46 (REV 08/16)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Business Unit</th>
<th>Department</th>
<th>Priority No.</th>
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<tbody>
<tr>
<td>2017-18</td>
<td>3960</td>
<td>Toxic Substances Control</td>
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<table>
<thead>
<tr>
<th>Budget Request Name</th>
<th>Program</th>
<th>Subprogram</th>
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<tr>
<td>3960-007-BCP-2017-GB</td>
<td>3620 Site Mitigation and Brownfields Reuse</td>
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Budget Request Description
Stringfellow Superfund Removal and Remedial Action

Budget Request Summary
The Department of Toxic Substances Control requests an augmentation of $2.46 million in FY 2017-18, $2.99 million in FY 2018-19, and $2.6 million in FY 2019-20 from the General Fund for removal and remedial action to complete characterization of the Stringfellow Hazardous Waste Site (Site). Failure to perform this work could subject the State to regulatory enforcement action by the U.S. EPA.

Requires Legislation
☑ Yes  ☐ No

Code Section(s) to be Added/Amended/Repealed

Does this BCP contain information technology (IT) components?
☑ Yes  ☐ No

If yes, departmental Chief Information Officer must sign.

For IT requests, specify the project number, the most recent project approval document (FSR, SPR, S1BA, S2AA, S3SD, S4PRA), and the approval date.

Project No.  Project Approval Document: Approval Date:

If proposal affects another department, does other department concur with proposal?
☑ Yes  ☐ No

Attach comments of affected department, signed and dated by the department director or designee.

Prepared By Thuong Pham  Date

Reviewed By Sara Murillo  Date

Department Director Barbara Lee  Date

Agency Secretary Matthew Rodriguez  Date

Department of Finance Use Only

Additional Review: ☐ Capital Outlay  ☐ ITCU  ☐ FSCU  ☐ OSAE  ☐ CALSTARS  ☐ Dept. of Technology

BCP Type:
☐ Policy  ☑ Workload Budget per Government Code 13308.05

PPBA Original Signed by Ellen Moratti PPBA  Date submitted to the Legislature
A. Budget Request Summary

The Department of Toxic Substances Control (DTSC) requests an augmentation of $2.46 million in FY 2017-18, $2.99 in FY 2018-19, and $2.6 million in 2019-20 from the General Fund for Removal and Remedial Action funding for the Stringfellow Hazardous Waste Site (Site). The augmentation will provide for the continuation of soil and groundwater characterization activities and remedy evaluation that will result in a Remedial Investigation and Feasibility Study (RI/FS).

The funding requested in this proposal will enable DTSC to collect environmental data to support the selection of a protective, technically viable, and efficient final remedy for the site which addresses all contaminants including emerging contaminants such as hexavalent chromium and perchlorate for all areas of the plume. Should the U.S. EPA determine the work is not consistent with the National Contingency Plan (NCP) the State could be subject to regulatory enforcement action by U.S. EPA.

B. Background/History

The Stringfellow site is located in Riverside County in Pyrite Canyon, in the City of Jurupa Valley (formerly the community of Glen Avon). In 1983, the Site was listed on the final National Priorities List (NPL or Superfund list). After a protracted court case, the Federal District Court issued a final judgment against the State on September 17, 1998 and assigned the State 100% liability under State law and 65% liability under federal law. Pursuant to this judgment, the State became 100% liable when the State dismissed its appeal of this judgment in April 2002.

DTSC, on behalf of the State of California, has been remediating, operating, maintaining, and monitoring the Site to protect human health and the environment. In response to the ruling, U.S. EPA assumed the role of lead regulatory agency for the Site. In a 2002 Consent Decree, U.S. EPA required that the subsequent response actions would be completed under an agreement between U.S. EPA and the State. U.S. EPA and DTSC executed the Agreement in April of 2014 which establishes the requirement that DTSC complete an RI/FS as part of the Statement of Work for the site.

The Stringfellow site remediation work is being conducted pursuant to Section 25351.8 of the Health and Safety Code. This section states that “Notwithstanding any other provision of law, including, but not limited to, sections 25334.5 and 25356, the department shall place the highest priority on taking removal and remedial actions at the Stringfellow Quarry Class I Hazardous Waste Disposal Site and shall devote sufficient resources to accomplish the tasks required by this Section.”

Since 1983, U.S. EPA has issued four Interim Record of Decision documents (RODs) for the Site and prepared subsequent 5-Year Reviews of the remedy. These Interim RODs and 5-Year Reviews require support ongoing O&M and additional remedial activities including: 1) lowering the water table of the Site to bedrock; 2) operation and maintenance of a Pretreatment Plant (PTP); and 3) containment and prevention of contaminated groundwater migration. As the 100 percent liable responsible party, the State is responsible for complying with requirements set forth in the Interim RODs and 5-Year Reviews. Additional objectives and requirements may be imposed by the U.S. EPA. DTSC has completed the following response actions on behalf of the State:

- Developed our operation and maintenance of groundwater extraction and treatment facilities for three distinct areas of the plume that emanates from the site,
- Designed and installed 2 air strippers with vapor-phase granulated activated carbon (GAC) systems,
- Designed, constructed and operated of a supervisory control and data acquisition (SCADA) system for the PTP, effluent tanks and the discharge line,
- Segregated pesticide and metals waste to decrease the amount of Class 1 hazardous waste generated at the PTP requiring incineration,
- Installed 11 new extraction wells and 35 new monitoring wells,
- Monitored and maintained the Site’s existing remedy,
- Upgraded electrical systems,
Analysis of Problem

• Designed and constructed a well telemetry systems to more reliably and effectively monitor and manage off-site wells,
• Completed the Zones 1-3 Final Supplemental Feasibility Study,
• Completed studies in support of the construction of the Pyrite Canyon Treatment Facility (PCTF), to replace the aging PTP,
• Completed the PCTF design,
• Conducted Zone 1-3 remedy evaluation,
• Completed a Zone 4 in-situ bioremediation pilot study,
• Completed a Zone 4 perchlorate risk assessment,
• Completed Zone 4 final RI for perchlorate in groundwater, and
• Completed a draft Zone 4 FS for perchlorate in groundwater.

Under a separate FY 2012-13 Capital Outlay Budget Change Proposal the State has completed, construction is currently commissioning the new Pyrite Canyon Treatment Facility (PCTF) to replace the existing PTP, built as a temporary facility in 1984, to comply with ROD 2. The full-scale operation and testing is currently being performed to determine if the plant operates as designed. The PCTF is expected to be fully operational by 2017. The PTP will be replaced by the PCTF and the equipment will be salvaged.

<table>
<thead>
<tr>
<th>Program Budget</th>
<th>FY - 4</th>
<th>FY - 3</th>
<th>FY - 2</th>
<th>FY - 1</th>
<th>FY</th>
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<td>5.4</td>
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</table>

C. State Level Considerations

The State is the sole responsible party for the hazardous substances contained in and emanating from the Site. The absence of adequate resources for DTSC as the agent for the State to complete the characterization may result in violation of the State’s Agreement with U.S. EPA. The Governor and the Legislature affirmed the commitment to fulfilling its responsibilities at this site by enacting Section 25351.8 of the Health & Safety Code.

The proposed funding is consistent with the goals and objectives of DTSC’s 2014-2018 Strategic Plan. Goal 1 of that plan is to ensure that cleanup efforts protect communities and hold responsible parties accountable. Objective 1.8 of that plan is to achieve significant milestones in specific high-profile and complex site cleanup projects including Stringfellow. Completion of the RI/FS is a significant milestone.
Analysis of Problem

which will support selection of the most effective remedy that when implemented will protect the surrounding community.

D. Justification

DTSC and USEPA negotiated the Performance Agreement to reflect the studies and evaluations necessary to complete the characterization. The requirement is to perform soil gas sampling in targeted areas and additional containment of contaminants in Pyrite Canyon. All characterization work is directed towards preparation of the final ROD in 2021. Continued characterization will support remedy selection, groundwater resource, and public health protection. Additionally, the investigations may identify other responsible parties who are contributing to the plume from off-site areas. Evidence of contributing sources may lead to reduced remediation costs for the State. The requested funds are necessary to continue the characterization in a manner consistent with the NCP and DTSC’s Strategic Plan. The tasks described require personnel, equipment and resources not available to DTSC which have, as a matter of course, been performed by private contractors. The augmentation provides funding for DTSC procured private contractors. No additional State staff are requested.

<table>
<thead>
<tr>
<th>TASK AND SUBTASK DESCRIPTION</th>
<th>FISCAL YEAR</th>
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<tr>
<td></td>
<td>FY 17-18</td>
<td>FY 18-19</td>
<td>FY 19-20</td>
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<tr>
<td>Task 1: Workplans and Additional Field Investigations; including approximately 60 new/replacement wells and well abandonments</td>
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<tr>
<td>1. Data Gap Analysis DQOs, Workplans, H&amp;S Plan, SAP</td>
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<td>$38,000</td>
<td>$96,000</td>
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<td>2. Traffic Control, Encroachment &amp; Well Permits</td>
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<td>4. Oversight and Surveying Services</td>
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<td>5. Preparation of Construction and RI reports</td>
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<td>Task 2: Evaluate Background Perchlorate and Other Emerging Compounds</td>
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<td>1. Additional isotope Sampling and Reporting</td>
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<td>Subtotal Task 2</td>
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<td>Task 3: Revision of Human Health Risk Assessments (HRA) and Ecological Risk Assessments; Including Emerging Compounds, Soil Gas Analysis and Inhalation Risk Evaluation</td>
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<td>5. Stormwater Sampling and Reporting</td>
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<td>6. Zone 4 MNA Evaluation and Reporting</td>
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The State of California has been found to be 100 percent responsible for the past and future operation and remediation of the Stringfellow site. The work proposed to be funded by this BCP will allow DTSC, on behalf of the State, to continue to perform essential activities required by the Agreement and prescribed by the NCP at the Site. This will maintain protection from the environmental threats from the Site that the community of Jurupa Valley demands. The RRA and O&M activities are essential for the ongoing characterization and remediation of the Site and to prevent potential future release of hazardous substances. The scope of work attached to the Agreement contains numerous tasks such as: focused studies to address data gaps, completion of characterization and remedy selection in Zones 1-4, completion of a 5-Year Review to assess the efficacy of the interim remedies and identify opportunities for
optimization of existing hydraulic containment systems and modification and improvement to existing systems.

The proposed funding is consistent with the goals and objectives of DTSC’s 2014-2018 Strategic Plan. Goal 1 of that plan is to ensure that cleanup efforts protect communities and hold responsible parties accountable. Objective 1.8 of that plan is to achieve significant milestones in specific high-profile and complex site cleanup projects including Stringfellow. Completion of the RI/FS is a significant milestone which will support selection of the most effective remedy that when implemented will protect the surrounding community.

By fulfilling the implementation plan presented below, DTSC will fulfill Agreement requirements in a transparent manner while complying with State laws and regulations. Key milestones include the following work deliverables:

- Addendum to the Supplemental Feasibility Study for Zones 1, 2, and 3,
- Updates to site wide plans, continued reporting (weekly, monthly, quarterly, annual), of Site activities,
- Collection and analysis of Zone groundwater samples for perchlorate and other parameters
- Evaluation of remedial alternatives,
- Revision of draft Zone 4 feasibility study report for perchlorate in groundwater,
- Work plan, report, and data deliverables related to the data gap investigations for Zone 4 remedial investigations and remedial investigation reports and feasibility studies,

By continuing to operate the remedy in compliance with permit requirements, demonstrating attainment of remedy objectives and obtaining from U.S. EPA for the above described plans investigations and studies DTSC will demonstrate full implementation of the plan presented here.

Allocation of the funds as requested will ensure the following:

- The State will continue to maintain compliance with the requirements of CERCLA and NCP
- The State would comply with and fulfill requirements of the enforceable agreement with U.S. EPA, thereby precluding enforcement
- The State will maintain compliance with Section 25351.8 of the Health and Safety Code
- The State would continue to operate and maintain the Site in a safe, protective manner
- The State would be a proactive responsible party that can work with stakeholders in the formulation of the final ROD that is protective of the human health and the environment while minimizing State’s long-term obligations
- The potential for releases of contamination from the site will be minimized
- The potential for the State being subject to new, or re-opened third-party damage lawsuits will be diminished
- The State would continue to maintain overall responsibility for the site and retain support from the community, the Legislature, and environmental groups
- The State would maintain its stewardship and leadership role in protecting the public and the environment
E. Outcomes and Accountability

In three years DTSC will fulfill many of the Agreement requirements in a transparent manner while complying with State laws and regulations and maintaining a judicious conservation of State expenditures. Key outcomes and accountability include the following work deliverables:

- Addendum to the Supplemental Feasibility Study for Zones 1, 2, and 3,
- Updates to site wide plans, continued reporting (weekly, monthly, quarterly, annual), of Site activities,
- Collection and analysis of Zone groundwater samples for perchlorate and other parameters
- Evaluation of remedial alternatives,
- Revision of draft Zone 4 feasibility study report for perchlorate in groundwater,
- Work plan, report, and data deliverables related to the data gap investigations for Zone 4 remedial investigations and remedial investigation reports and feasibility studies,
- Adherence to a Project Management Plan which includes:
  - Role definitions for contractors, DTSC staff and management
  - Method of accountability
  - Scope of work
  - Deliverables and schedule

Attainment of project objectives will be gauged utilizing two primary metrics: 1) receipt of document approval from U.S. EPA for the above described plans investigations and studies and 2) continued compliance with permit requirements and remedy objectives for the operation of the current remedy.

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<td>Revised Risk Assessment for Zones 1-3</td>
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<td>1</td>
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F. Analysis of All Feasible Alternatives

**Alternative 1:** Allocate Requested Funds to Comply with Agreement Requirements and Perform Essential Investigation and Critical O&M Activities

Pros:
- The State will continue to maintain compliance with the requirements of CERCLA and NCP
- The State would comply with and fulfill requirements of the enforceable agreement with U.S. EPA
- The State will maintain compliance with Section 25351.8 of the Health and Safety Code
- The State would continue to operate and maintain the Site in a safe, protective manner
- The State would be able to complete the Zone 4 FS for the Site in accordance with the Agreement.
- The State would be a proactive responsible party with other stakeholders in the formulation of the final ROD and protect its interest to minimize State's long-term obligations
- The potential for releases of contamination from the site will be minimized
- The potential for the State being subject to new, or re-opened third-party damage lawsuits will be minimized
Analysis of Problem

• U.S. EPA would have no basis for initiating further enforcement action against the State
• The State would continue to maintain overall responsibility for the site and retain support from the community, the Legislature, and environmental groups
• The State would maintain its leadership role for protecting the public and environment

Cons:
• The State allocates additional requested funds from the General Fund.

**Alternative 2:** Perform O&M Activities and Let U.S. EPA Fulfill Agreement Requirements.

Pros:
• It will delay the expenditure of the requested funds until future years

Cons:
• Critical investigations will be delayed, potentially delaying the completion of Zone 4 FS and the final ROD the U.S. EPA wants to issue
• The State will be subject to a highly publicized enforcement action(s) by the U.S. EPA for non-compliance with CERCLA, NCP, and the enforceable agreement. U.S. EPA could perform the RRA activities required under the Agreement and then recover all its expenditures from the State, including interest.
• Alternatively, the U.S. EPA may elect to issue a unilateral order directing the State to perform the work and to reimburse the U.S. EPA for its costs, including oversight costs.
• The State will incur significant legal fees in response to the U.S. EPA vigorous enforcement action(s)
• DTSC will not be able to comply with Section 25351.8 of the Health and Safety Code
• The State will not be able to maintain the level of protectiveness from the adverse impact of the toxic waste at Stringfellow Site to the community of Jurupa Valley and the environment
• The State and DTSC would lose the leadership role that it has rightfully earned over the last several years to protect the public and environment
• The State would not be able to complete the Zones 1-3 Supplemental FS
• The State will lose the trust of the community that it has built over the last several years by effectively managing the Site
• The State will receive significant criticism from the community, local representatives the Legislature, and the press
• The U.S. EPA may undertake the Zone 4 FS activities and may select a more-costly remedy for the Site in the Final ROD. The State will have minimal influence to minimize its long-term obligations. The State would likely be required to compensate U.S. EPA for this work with interest plus as well as its oversight cost as the State has been found to be 100 percent liable for the Stringfellow Site
• The State would most likely be compelled to perform the work by a unilateral order, but under a highly adversarial relationship with the U.S. EPA and the community. This will increase the transaction costs.
**Analysis of Problem**

**Alternative 3:** Cease Current O&M of PTP i.e. walk away from the Site and let the U.S. EPA take enforcement action or perform all response actions.

Pros:
- It will delay expenditure of the State's funds, including the currently established budget, until future years

Cons:
- The U.S. EPA would likely take enforcement action against the State to meet its obligation under CERCLA, the NCP, and the Agreement, to remediate the Site for which the State is 100 percent liable
- The State will spend millions of dollars to defend itself in response to the U.S. EPA's vigorous enforcement action(s)
- DTSC will not be able to comply with Section 25351.8 of the Health and Safety Code
- The State likely would receive significant criticism from the community, local representatives, the Legislature and the press
- The U.S. EPA at its option may take a lead role to remediate the Site by performing all activities and then recover all its expenditures from the State, including interest. Alternatively, the U.S. EPA may elect to issue a unilateral order directing the State to perform the work and to reimburse the U.S. EPA for its costs, including oversight costs. The State will expend funds to defend itself in addition to paying the U.S. EPA
- If a hazardous waste release from the Site occurs, it could trigger reopening the Newman v. Stringfellow lawsuit since the State has been found to be 100 percent liable for the remediation of the Stringfellow Hazardous Waste Site. The State would spend millions of dollars in legal costs
- The State would not be able to maintain the level of protectiveness from the adverse impact of the toxic waste at the Site to the community of Jurupa Valley and the environment
- The State would lose a significant amount of public confidence in the management of the Stringfellow Hazardous Waste Site

**G. Implementation Plan**

- **August 2017** - Complete evaluation of background perchlorate levels using isotopic analysis, report findings.
- **June 2019** - Update the Human Health and Ecological Risk Assessment for Zones 1 – 3 including evaluation of emerging compounds report findings.
- **July 2018** - Update Zone 4 Groundwater Fate and Transport Model July 2018.
- **October 2018** - Complete Monitored Natural Attenuation Evaluation for Zone 4 and report of findings.
Analysis of Problem


March 2019 - Evaluate hydraulic containment and report findings.

June 2020 - Complete technical Impracticability Waiver Evaluation for Zone 4 and report of findings.

June 2020 - Prepare and release Feasibility Study Addendum for Zone 4.

H. Supplemental Information

N/A

I. Recommendation

Adopt Alternative I. This option allocates funds based on the critical need to remediate one of the most-contaminated hazardous waste sites in California, for which the State has been found 100% liable. The recommended alternative will comply with the Agreement and will meet the requirements of Section 25351.8 of the Health and Safety Code. This alternative is also consistent with DTSC’s mission to protect California’s people and environment from harmful effects of toxic substances through the restoration of contaminated resources, enforcement, regulation, and pollution prevention.