

**From:** [Bigelow, Morgan@DTSC](mailto:Bigelow,Morgan@DTSC)  
**To:** [Kraemer, Melissa@Coastal](mailto:Kraemer,Melissa@Coastal)  
**Cc:** [mikebuck@radian-advisors.com](mailto:mikebuck@radian-advisors.com); [JeremieMaehr@kennedyjenks.com](mailto:JeremieMaehr@kennedyjenks.com); [RachelMorgan@kennedyjenks.com](mailto:RachelMorgan@kennedyjenks.com); [dgmassen@gapac.com](mailto:dgmassen@gapac.com); [Walsh, Kimberly@DTSC](mailto:Walsh,Kimberly@DTSC); [Hughes, Marikka@DTSC](mailto:Hughes,Marikka@DTSC)  
**Subject:** RE: Former Georgia-Pacific Mill Site - ARAR Solicitation Letter - CA Coastal Commission  
**Date:** Thursday, July 25, 2024 10:11:00 AM  
**Attachments:** [image001.png](#)  
[image006.png](#)  
[image007.png](#)  
[image008.png](#)  
[image009.png](#)  
[image011.png](#)

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Melissa,

Sorry, I had a typo in the closing paragraph. Please provide your review of and additions or deletions to the draft ARARs in the en-closed matrix to DTSC by August 24, 2024. If you have questions regarding this request for information, please contact me at 510-540-2732 or [Morgan.Bigelow@dtsc.ca.gov](mailto:Morgan.Bigelow@dtsc.ca.gov).

Thanks,

Morgan

**Morgan Bigelow** (*she/her/hers*)

Environmental Scientist  
DTSC

510-540-2732

[morgan.bigelow@dtsc.ca.gov](mailto:morgan.bigelow@dtsc.ca.gov)

Department of Toxic Substances Control  
700 Heinz Avenue, Berkeley, California 94710-2721  
California Environmental Protection Agency



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**From:** CabreraPaz, Marlene@DTSC <Marlene.CabreraPaz@dtsc.ca.gov>

**Sent:** Wednesday, July 24, 2024 4:21 PM

**To:** Kraemer, Melissa@Coastal <Melissa.Kraemer@coastal.ca.gov>

**Cc:** [mikebuck@radian-advisors.com](mailto:mikebuck@radian-advisors.com); [JeremieMaehr@kennedyjenks.com](mailto:JeremieMaehr@kennedyjenks.com); [RachelMorgan@kennedyjenks.com](mailto:RachelMorgan@kennedyjenks.com); [dgmassen@gapac.com](mailto:dgmassen@gapac.com); [Walsh, Kimberly@DTSC](mailto:Walsh,Kimberly@DTSC) <Kimberly.Walsh@dtsc.ca.gov>; [Hughes, Marikka@DTSC](mailto:Hughes,Marikka@DTSC) <Marikka.Hughes@dtsc.ca.gov>; [Bigelow, Morgan@DTSC](mailto:Bigelow,Morgan@DTSC) <Morgan.Bigelow@dtsc.ca.gov>

**Subject:** Former Georgia-Pacific Mill Site - ARAR Solicitation Letter - CA Coastal Commission

Good afternoon,

Please see the attached Former Georgia-Pacific Mill Site - ARAR Solicitation Letter - CA Coastal Commission and ARAR Matrix. You may contact your Project Manager Morgan Bigelow if you have any questions.

Thank you.

**Marlene Cabrera Paz**

Office Technician

Site Mitigation and Restoration Program

510-529-7051

[marlene.cabrera@dtsc.ca.gov](mailto:marlene.cabrera@dtsc.ca.gov)

Department of Toxic Substances Control

700 Heinz Avenue, Berkeley, California 94710-2721

California Environmental Protection Agency





**Yana Garcia**  
Secretary for  
Environmental Protection



## Department of Toxic Substances Control

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Meredith Williams, Ph.D., Director  
700 Heinz Avenue  
Berkeley, California 94710-2721



**Gavin Newsom**  
Governor

July 24, 2024

Ms. Melissa Kraemer  
District Manager  
California Coastal Commission  
1385 8th Street  
Arcata, California 95521  
[Melissa.Kraemer@coastal.ca.gov](mailto:Melissa.Kraemer@coastal.ca.gov)

### SOLICITATION OF APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS, FORMER GEORGIA-PACIFIC MILL SITE, FORT BRAGG, CALIFORNIA (SITE CODE 202276)

Dear Ms. Kraemer,

The Department of Toxic Substances Control (DTSC) as lead agency for the investigation and remediation of the former Georgia-Pacific Mill Site (Site) in Fort Bragg California is soliciting Applicable Relevant and Appropriate Requirements (ARARs) for the Operable Unit E of the former Georgia-Pacific Mill Site (Site).<sup>1</sup> The Site is now managed by Mendocino Railway and owned by Sierra Northern Railway. DTSC previously granted approval on October 24, 2019 for the Operable Unit E Feasibility Study (OU-E FS)

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<sup>1</sup> The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and its regulations (40 [Code of Federal Regulations] CFR 300 et seq., referred to as the National Contingency Plan or NCP) provide an established, and generally accepted, framework for evaluating and remediating industrial sites. Under the NCP, remedial actions must attain (or justify the waiver of) any federal or more stringent state environmental standards and facility citing laws that are “applicable or relevant and appropriate.” These regulatory requirements are called ARARs. The ARARs are used to develop quantitative Remedial Action Objectives, determine the extent of site cleanup, and govern the implementation and operation of the selected alternatives. ARARs are needed to verify that the remedial action is in line with promulgated regulations and statutory provisions.

Ms. Melissa Kraemer

July 24, 2024

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submitted by Georgia Pacific dated September 12, 2019. Since that approval, scoping exercises for the Operable Unit E Remedial Action Plan (OU-E RAP) and Coastal Development Permit (CDP) Environmental Impact Report (EIR) identified the need for the evaluation of alternatives not included in the OU-E FS. In addition, DTSC received information from the California Coastal Commission (CCC), the City of Fort Bragg (City), and community members regarding the need to evaluate remedial alternatives that could avoid armoring, and other potential unmitigable significant environmental impacts.

DTSC has determined that an addendum to the OU-E FS is needed. DTSC has recommended to Mendocino Railway the OU-E FS Addendum reevaluate the on-site terrestrial containment and on-site terrestrial treatment process options. DTSC also recommended that the OU-E FS Addendum include variations on the containment alternative such as hybrid alternatives that include removal/containment/treatment technologies. The potential for on-site terrestrial consolidation/treatment of sediments could affect the feasibility of the removal of the contaminated sediments from Ponds 1, 2, 3, 4, 6, 7, 8 and the North Pond.

ARARs were identified in the OU-E FS (See Feasibility Study Table 3-1 PDF pages 174–175 [https://www.envirostor.dtsc.ca.gov/getfile?file-name=/esi%2Fuploads%2Fgeo\\_report%2F5695249259%2F19\\_FortBragg\\_doc-out\\_OU-E\\_FS\\_DTSC\\_09132019.pdf](https://www.envirostor.dtsc.ca.gov/getfile?file-name=/esi%2Fuploads%2Fgeo_report%2F5695249259%2F19_FortBragg_doc-out_OU-E_FS_DTSC_09132019.pdf)). In recent correspondence with DTSC, Mendocino Railway has requested further clarity from agencies regarding the ARARs. Mendocino Railway has worked with Kennedy Jenks, their consultant, to develop the enclosed matrix of ARARs. Please review the enclosed matrix and enter any comments or recommended revisions in the “Agency Comments” column. Please expand or contract the list of ARARs as necessary.

Federal, state, and local ARARs can be divided into the following categories:

Chemical-specific ARARs: Chemical-specific ARARs are usually health- or risk-based numerical values or methodologies used to determine the acceptable amount or concentrations of chemicals that may remain in, or be discharged to, the ambient environment. If, in a specific situation, a chemical is subject to more than one discharge or exposure limit, the more stringent of the requirements should generally be applied.

Performance, design, or action-specific ARARs: Action-specific ARARs are usually technology- or activity-based requirements or limitations on actions taken with respect to hazardous wastes, or requirements to conduct certain actions to address

particular circumstances at a site. Action-specific ARARs consist of requirements that define acceptable handling, treatment, and disposal procedures for hazardous substances. These ARARs generally set performance, design, or other similar action-specific controls or restrictions on certain activities related to management of hazardous substances or pollutants. These requirements are triggered by the remedial activities that are selected to accomplish the remedy. Action-specific requirements do not in themselves determine the remedial alternative; rather, they indicate how a selected alternative must be achieved.

Location-specific ARARs: Location-specific ARARs are those requirements that relate to the geographical or physical position of the site, rather than the nature of the contaminants or the proposed site remedial actions. These requirements may limit the type of remedial action that can be implemented and may impose additional constraints on the cleanup action.

A requirement may not meet the definition of an ARAR but may still be useful in determining whether to take action at a site or to what degree action is necessary. Some requirements are called to-be-considered (TBC) criteria. The TBC requirements are non-promulgated advisories or guidance issued by federal, state, or local government that are not legally binding, but may provide useful information or recommend procedures for remedial action. TBCs should only be included if they are necessary to interpret ARARs.

## **Site Background**

OU-E is one of five operable units on the site (see FS Figure 1-2) and consists of approximately 12 acres of man-made ponds and seasonal wetland areas and 45 terrestrial acres divided into eight areas of interest (AOIs) (see FS Figure 1-3). Aquatic areas evaluated in the FS include Ponds 1-4 (South Ponds), 6-8, and the North Pond. Ponds 5 and 9 were investigated and not contaminated; therefore, these ponds were not evaluated in the FS. A Removal Action, completed in 2017, for OU-E soils met unrestricted cleanup goals; therefore, soil is not included in the FS. OU-E groundwater contains barium and petroleum hydrocarbons. Groundwater remedies are evaluated in the FS. DTSC has determined that an addendum to the OU-E FS is needed and additional alternatives to address sediment contamination must be considered. Therefore, the list of alternatives below from the OU-E FS will be expanded in the OU-E FS Addendum

### Remedial Alternatives Evaluated for the Pond Sediments

The primary contaminants in pond sediment are dioxin and arsenic. The OU-E FS included several alternatives to address the risks to a recreational visitor to the ponds. The OU-E FS included a summary and comparison of Remedial Alternatives in Table 7-1 of the FS. The remedial alternatives in the OU-E FS for aquatic sediments for the South Ponds (1-4), Ponds 6, 7, 8, and the North Pond include:

- No action;
- Institutional controls: land use restrictions, sediment management, and containment (for Ponds 6, 7, 8 and North Pond);
- Vegetative soil cover (dry) and institutional controls;
- Excavation and disposal;
- Vegetative sediment covers over contaminated sediment and institutional controls;
- For Pond 8 sediment only, in-situ stabilization sediment.

### Remedial Alternatives Evaluated for the Groundwater

Table 7-1 of the OU-E FS contains a comparison of groundwater alternatives (attached). Groundwater in the Interim Remedial Measure (IRM) AOI and the West of IRM AOI contains fuel related constituents. Groundwater in the OU-E Lowlands AOI contains barium and petroleum hydrocarbons are present in IRM AOI and West of IRM AOI. The remedial alternatives for groundwater include;

- No action;
- Restricted use: land use controls (restricted use of groundwater) and long-term operations and management;
- Monitored natural attenuation and institutional controls (restricted use of groundwater);
- Enhanced aerobic bioremediation, monitored natural attenuation, and institutional controls;
- Enhanced anaerobic bioremediation, monitored natural attenuation, and institutional controls;

Ms. Melissa Kraemer

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Please provide your review of and additions or deletions to the draft ARARs in the enclosed matrix to DTSC by August 2, 2024. If you have questions regarding this request for information, please contact me at 510-540-2732 or [Morgan.Bigelow@dtsc.ca.gov](mailto:Morgan.Bigelow@dtsc.ca.gov).

Sincerely,

A handwritten signature in black ink that reads "M Bigelow". The signature is written in a cursive style with a large, looped "M" and a clear "Bigelow".

Morgan Bigelow

Project Manager

Site Mitigation and Restoration Program – Berkeley Office

Department of Toxic Substances Control

Enclosures: *Kennedy Jenks 2024. Applicable or Relevant and Appropriate Requirements Matrix. July 18. Provided electronically via e-mail.*

cc: (See next page.)

Ms. Melissa Kraemer

July 24, 2024

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cc: Mike Buck  
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