

# COMMUNITY UPDATE

The mission of DTSC is to protect California's people and environment from harmful effects of toxic substances by restoring contaminated resources, enforcing hazardous waste laws, reducing hazardous waste generation, and encouraging the manufacture of chemically safer products.

## Former Georgia-Pacific Mill Site Updates on Cleanup Progress and Feasibility Study

The California Department of Toxic Substances Control (DTSC) wants to update you on the cleanup progress at the former Georgia-Pacific Mill Site. The Mill Site is located west of Highway 1 in the City of Fort Bragg, Mendocino County.

To help organize investigation and cleanup, DTSC divided the Mill Site into five geographic areas (A, B, C, D, E) called operable units (OUs). The OUs are shown on the figure located on the last page. This update focuses on recent cleanup actions (in OUs C, D, and E) and on the revised draft OU-E Feasibility Study (FS).

DTSC's oversight of the Georgia-Pacific Mill Site cleanup began in 2006, with cleanup efforts initially focused on the removal of contaminated soil and fly ash. In 2007, fuel pipelines and soil contaminated with petroleum from OU-E were removed, as was the pile of fly ash located near the South Ponds (Ponds 1-4). In 2009, over 14,000 cubic yards of soil [contaminated with polychlorinated biphenyls (PCBs), lead, and dioxin] were removed from OU-A, prior to the development of Noyo Headlands Park and Coastal Trail. In 2008 and 2009, over 1,000 cubic yards of soil contaminated with lead and PCBs were removed from OUs C and E. This work included bioremediation (using microbes for cleanup) of approximately 40,000 cubic yards of soil contaminated with petroleum. This cleanup achieved residential cleanup goals.

### 2017 Cleanup Summary

In 2017, Georgia-Pacific implemented two DTSC approved cleanup plans, a Remedial Action Plan (RAP) for OUs C and D and a Removal Action Workplan (RAW) for OU-E. These cleanup actions disposed of approximately 3,218 combined cubic yards of contaminated soil and sediment to a permitted disposal facility. OUs C and D achieved residential cleanup standards for pentachlorophenol (a wood preservative), dioxin, petroleum, and benzo(a)pyrene. The OU-E soil excavation also met residential standards for dioxin, lead and benzo(a)pyrene. The draft Completion Report for the 2017 work is available at the Information Repositories listed at the end of this document and on DTSC's EnviroStor website.

### Public Comment Period



**Community Meeting:**  
**Thursday May 24, 2018**  
**6:30 pm - 8:30 pm**

Town Hall  
363 N. Main Street  
Fort Bragg, CA 95437

Format will be half hour presentation by DTSC, followed by opportunity for questions and discussion.



Following the 2017 cleanup, soil contaminant levels are now below residential cleanup goals for nearly 95 percent of OUs C, D, and E. Currently, over 100 acres are in use as the Noyo Headlands Park, and more than 215 additional acres are suitable for unrestricted reuse (see figure on last page). Because of soil cleanup in 2017, an additional 82 acres are under consideration for no further action. Approximately two acres in OUs C and D meet industrial cleanup goals for soil and require land use restrictions.

### Changes to OU-E Feasibility Study Based on Community Feedback

DTSC received over 200 comments about the draft OU-E FS, some of which are addressed in the following sections. Soliciting these comments was not a legally required step in the cleanup process, but due to community interest, DTSC asked for the public's input. Public comments helped DTSC understand general community concerns and guided our review of the draft OU-E FS. DTSC is now reviewing the revised OU-E FS. To address concerns about potential earthquakes, tsunamis, and sea-level rise, DTSC revised the FS to include:

- **Pond 8 Dam**

The revised FS adds the Pond 8 dam as a containment structure for pond sediment. DTSC is coordinating with the Division of Safety of Dams (California Department of Water Resources) on the design for the repair of the Pond 8 dam. In addition, a new feature would consist of a concrete structure installed in the center of Pond 8 to create two smaller containment areas. The Pond 8 dam would be maintained for the long-term, including annual inspections, repairs, and review of the protectiveness of the remedy every five years.

- **Beach Berm**

The revised draft Feasibility Study adds the beach berm as a containment and protective structure for Ponds 6, 7, and the North Pond. The beach berm

would be maintained for the long-term, including annual inspections, repairs, and review of the protectiveness of the remedy every five years.

### Do the Ponds/Wetlands Pose a Risk to Humans?

Because the trail is used recreationally, DTSC has determined that the risk to a visitor would be negligible for two reasons:

- **Low concentrations of contaminants**

The levels of contaminants in pond sediment are below recreational cleanup goals. Dioxin and arsenic are the primary contaminants in sediment in the ponds/wetland areas (South Ponds 1-4, Ponds 6, 7, 8 & North Pond). Because dioxin is highly toxic, DTSC established a very low residential cleanup goal for dioxin [50 parts per trillion (ppt)] at the Mill Site. The arsenic goal is the background level [10 parts per million (ppm)], which is the naturally occurring concentration present within proximity to the Mill Site. Because pond sediments have dioxin and arsenic above residential or no action levels, DTSC is required to act to further protect public health and the environment.

- **Limited exposure**

The public will not have direct access to the ponds because they are ecologically sensitive habitat areas.

### Do the Ponds/Wetlands Pose a Risk to Wildlife?

DTSC has determined the dioxin and arsenic in the pond sediments are not a risk to wildlife. The cleanup goals for wildlife are higher than those for human exposure. For example, levels of dioxin measured in Pond 8 are ten times lower than the ecological cleanup goal. Before the implementation of the OU-E RAW, Pond 7 was the only pond at the Mill Site with an unacceptable risk to wildlife. During the cleanup, 708 cubic yards of dioxin and arsenic contaminated sediment were excavated from Pond 7. Except for Pond 7, the ponds have little or no standing water. The



ponds at the Mill Site were designated as wetlands by the U.S. Army Corps of Engineers in 2010.

### **Pond/Wetland 8 Meets Recreational Cleanup Goals**

Pond 8 has the lowest dioxin contamination remaining in any of the ponds/wetlands (118 ppt). In fact, dioxin levels in Pond 8 are below recreational cleanup goals (120 ppt). Current site conditions and planned actions are protective of public health and the environment. Some additional topics we received community feedback on are listed below:

- ***Land use designation***

Pond 8 (and the other ponds/wetlands) are in areas designated by the City of Fort Bragg as open space/recreational. DTSC does not have authority to require the property owner to clean up beyond what is protective of the intended use. If the intended use changes, the property owner would be required to work with DTSC to clean up to appropriate levels protective of human health and the environment.

- ***Limiting exposure***

A fence protecting sensitive habitat will also create a barrier for human contact with the sediment.

- ***Wetland status***

Because Pond 8 (and the other ponds/wetlands) are designated wetlands, they are regulated by the U.S. Army Corps of Engineers, the Regional Water Quality Control Board, and the California Coastal Commission. Policies and regulations discourage the filling of wetlands. Destroying wetlands require mitigation measures, such as the creation of wetlands at another location.

- ***Excavation and disposal***

Due to the large quantity of sediment, factors such as cost, landfill capacity, and short-term impacts (such as diesel and greenhouse gas emissions from trucking) do not make this a feasible option.

- ***Other technologies***

DTSC has considered bioremediation (using microorganisms for cleanup), phytoremediation (using plants for cleanup), and mycoremediation (using mushrooms for cleanup). These are not feasible for Pond 8 because of the type of contaminants and their low concentrations.

### **OU-E Groundwater Meets State Drinking Water Standards**

Groundwater contaminant levels (petroleum and the metal barium) in OU-E currently meet state drinking water standards (Regional Water Quality Control Board's Water Quality Objectives). Groundwater data collected over the last several years shows a decline in contaminants in OU-E monitoring wells through natural processes. The proposed remedy is to monitor the groundwater, allowing natural processes to reduce contaminants. However, if contaminants remain below drinking standards, no further action would be proposed. The groundwater contamination does not threaten the ocean due to low levels of contamination.

### **Future Opportunities for Involvement**

The draft OU-E FS is now available for public review in the information repositories and online on DTSC's EnviroStor website. After DTSC's approval of a Final FS, we will prepare a draft OU-E RAP for public review and comment. There will be a public meeting associated with the draft RAP comment period as well. This is part of the formal process, so we will be responding to comments received during the public comment period in written form. DTSC will review and consider all public comments before making a final decision on the RAP. At the end of the public comment period, we will evaluate comments received and make any necessary changes to the RAP.



### Where to Find Documents

Fort Bragg Library  
499 East Laurel Street  
Fort Bragg, CA 95437  
(707) 964-2020; call for hours

Fort Bragg City Hall, Planning Counter  
416 N. Franklin St  
Fort Bragg, CA 95437  
(707) 961-2823; call for hours

Department of Toxic Substances Control  
700 Heinz Ave.  
Berkeley, California 94710  
(510) 540-3800; call for appointment

You may review information on DTSC's EnviroStor website: <https://envirostor.dtsc.ca.gov/public> (select "Site/Facility Search" link, enter "200402" in the "Site Code" field, and click on "Report"). To find the OU-E FS, select the "Community Involvement" link. Scroll down to the Project Related Documents heading and click on the first link for "Operable Unit E Feasibility Study - Draft Final April 2018". You can also go directly to this link:

[https://www.envirostor.dtsc.ca.gov/public/community\\_involvement/6955204606/2018-04\\_OU-E\\_FS\\_Draft\\_Final%20April%202018.pdf](https://www.envirostor.dtsc.ca.gov/public/community_involvement/6955204606/2018-04_OU-E_FS_Draft_Final%20April%202018.pdf)

Sign up for DTSC email alerts notifying you when new documents are available by clicking at the top right link on the EnviroStor report page for this Site. To learn more about DTSC, please visit our website at [www.dtsc.ca.gov](http://www.dtsc.ca.gov).

### Contact Information

If you have any questions or would like to discuss the project, please contact:

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