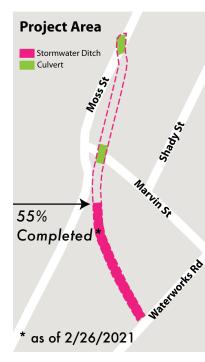
# 5

## Kerr-McGee Chemical Corp – Columbus Superfund Site Columbus, Mississippi

March 2021

## Stormwater Ditch Improvements Begin

Greenfield Environmental Multistate Trust LLC, trustee of the Multistate Environmental Response Trust (Multistate Trust), began work in the summer of 2020 on stormwater ditch improvements between Waterworks Road and Moss Street southeast of the Kerr-McGee Chemical Corp - Columbus Superfund Site (the Site) in accordance with the U.S. Environmental Protection Agency's (EPA) December 2019 Time Critical Action Memorandum. The Multistate Trust started excavation of potentially contaminated soil and sediment from the City of Columbus drainage ditches, and began widening the ditches and installing concrete liners that meet the EPA's cleanup goals and the City's specifications.







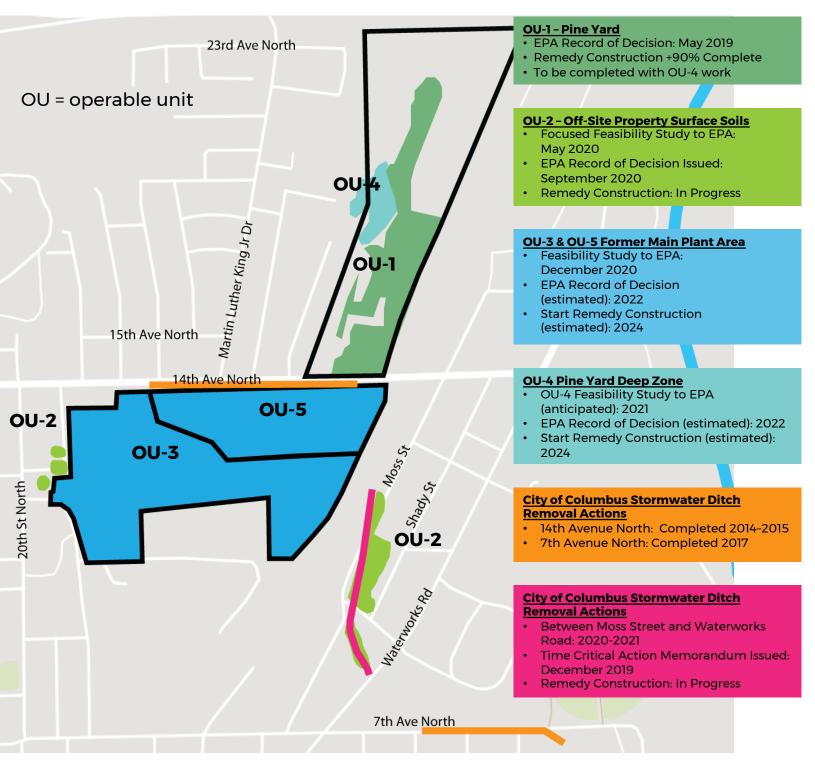
Stormwater drainage ditch looking northwest towards Moss Street

Stormwater drainage ditch looking southeast towards Waterworks Road

Total tonnage removed from the ditch:

Contaminated soils disposed of at Golden Triangle Regional Landfill: 1,577 tons Soil meeting EPA cleanup criteria is being stockpiled in Operable Unit 3 (OU-3): 1.849 tons

## **Our Cleanup Plans and Progress**



#### Our Activities During the COVID-19 Pandemic

The Multistate Trust team is completing Site activities in accordance with federal, state, and local COVID-19 restrictions and guidance. We will continue to follow protocols designed to prevent spread of the virus, including social distancing requirements, use of face masks and gloves, and reporting if workers experience symptoms.

#### **Our 24-Hour Hotline for Reporting Concerns**

Please call 662-228-0642 anytime to report any Site-related odors, dust, or other concerns, or to ask questions about Site activities.

# Key 2020 Accomplishments

#### **City Stormwater Ditch Removal Actions**

- Submitted a Removal Action Work Plan Addendum and received EPA approval in April.
- Started construction work preparation in May; field work began with tree removal in July (see page 1).

### OU-2 Off-Site Property Surface Soils

- Completed sampling of 3 additional properties around the Site to confirm areas that required cleanup as part of OU-2.
- Submitted Focused Feasibility Study and received EPA approval in May.
- Prepared the OU-2 Removal Action Work Plan and received EPA approval in May.
- Contacted OU-2 property owners to discuss proposed cleanup plans and property owner questions.
- EPA issued the OU-2 Record of Decision (ROD) in September.
- Started cleanup actions in August.

#### OU-3 & OU-5 Former Main Plant Area

- Prepared draft Feasibility Studies to identify and evaluate potential remedial technologies to address creosote-contaminated soil and groundwater. Remedial technologies currently under consideration are:
  - Soil Cover/Cap
  - Phytoremediation
  - Vertical Barrier Wall
  - Removal and Disposal
  - In-Situ Treatment
- EPA has selected the Columbus Site for a phytoremediation pilot study (see page 4).

#### OU-4 Pine Yard Deep Zone

- Began Feasibility Study.
- EPA has selected the Columbus Site for a phytoremediation pilot study (see page 4).

#### Site Operations and Maintenance

- Temporarily suspended pumping of groundwater recovery system to perform replacement of old pipelines.
- Performed semi-annual groundwater sampling and Site inspections.

## OU-2 Cleanup

In all, 96 off-Site nearby properties in the vicinity of the Site were sampled for chemicals related to wood-treating. Lab results found that 11 properties have dioxins and furans in surface soil at concentrations exceeding OU-2 Record of Decision (ROD) cleanup criteria. The chemical levels exceed EPA-approved, health-based standards established in the September 2020 ROD to protect residents and workers. No cleanup is required to ensure protection of human health and the environment at the other 85 sampled properties.

#### **Cleanup Overview**

To address the contamination at the OU-2 Off-Site Property Surface Soils, the Multistate Trust team will excavate soil to a depth of 1 foot below ground surface at most of the locations, and to a depth of 2 feet below ground surface at others.

Once the surface soil is excavated, it will be transported for disposal to an EPAapproved landfill or, if it meets cleanup criteria approved by the Mississippi Department of Environmental Quality (MDEQ) and EPA, for on-Site consolidation or potential beneficial reuse within the Site's Former Main Plant Area.

All excavated areas will be backfilled with imported material such as common borrow and topsoil that meets approved, health-based standards identified in the September 2020 ROD.

#### **Protecting Human Health and Safety**

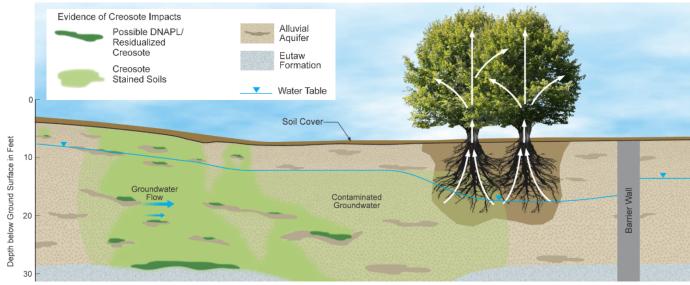
Erosion control measures, dust control measures (including covered trucks), and air and noise monitoring will be implemented.

The Multistate Trust team will continue to work closely with the City of Columbus and ensure that residents receive advance notice of street closures and that everyone can reach and leave their homes at all times.

Crews currently plan to work Monday through Friday, beginning no earlier than 7 a.m. and are expected to finish by 6 p.m.

## **Phytoremediation Technology**

The Multistate Trust is preparing feasibility studies for EPA review and approval, in consultation with MDEQ, to evaluate remedial alternatives for the soils and groundwater impacted by historic releases of creosote at the Site. Remedial alternatives are combinations of remediation technologies that act together to protect human health and the environment. Phytoremediation has been identified as one of the potential remediation technologies for the Site. Phytoremediation involves the use of trees, to capture and treat groundwater contaminated by historic releases of creosote from the former wood treatment facility. Phytoremediation is being considered for use in combination with other cleanup actions to achieve and maintain protective conditions. Trees with a capacity to consume large volumes of water are used to provide a natural and sustainable means for cleaning contaminated groundwater, while also enhancing the aesthetics of the Site.



**Phytoremediation Pilot Study** 

The EPA and United States Geological Survey (USGS), in collaboration with MDEQ and the Multistate Trust, are conducting a pilot study to evaluate the effectiveness of phytoremediation as a remediation technology for the Site. The Pilot Study has two primary goals:

- 1. To determine if phytoremediation can be a useful and protective part of the cleanup and restoration of the Site.
- 2. To develop data so that EPA, MDEQ, the Multistate Trust, and the community understand the process of phytoremediation and the advantages and limitations of the remediation technology.

## The Multistate Trust Team

The Multistate Trust is addressing contamination at the Site in Columbus under the oversight of the EPA in coordination with the MDEQ.

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The Multistate Trust issues this newsletter periodically to keep the community informed of our progress. To sign up for the next edition of this newsletter, contact: Christine Amrhine ca@g-etg.com 540-846-3163

For more information, visit https://Columbus.GreenfieldEnvironmental.com