UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
61 Forsyth Street, S.W.
Atlanta, Georgia 30303

HAZARDOUS AND SOLID WASTE AMENDMENTS

PERMIT RENEWAL FACT SHEET

CAVENHAM FOREST INDUSTRIES, LLC
GULFPORT, MISSISSIPPI
EPA ID NUMBER: MSD057226961

INTRODUCTION

This Hazardous and Solid Waste Amendments (HSWA) Permit Renewal Fact Sheet (Fact Sheet) is prepared for this HSWA Permit renewal developed by the U.S. Environmental Protection Agency for Cavenham Forest Industries, LLC (CFI), which owns and operates a facility located at 9502 Creosote Road, Gulfport, Mississippi 39503. The EPA ID number for this facility is MSD057226961.

This Fact Sheet sets forth the principal facts of the proposed ten (10) year HSWA Permit renewal.

PERMIT PUBLIC NOTICE

This Fact Sheet was developed by EPA Region 4 in order to invite the public to comment on the proposed HSWA Permit renewal. This proposed Permit would be a companion permit to the Post-Closure Permit issued by the Mississippi Department of Environmental Quality (MDEQ) (hereinafter, "MDEQ Post-Closure Permit") and, in conjunction with the MDEQ Post-Closure Permit, constitutes the full Resource Conservation and Recovery Act (RCRA) Permit for this facility. The draft HSWA Permit for the Cavenham facility, once finalized, will be renewed for a ten (10) year period. This draft permit renewal is consistent with the current HSWA Permit, issued on July 26, 1996, with the following deletions and additions: (1) a Corrective Action Management Unit (CAMU) was not carried over to the draft Permit; (2) four new Areas of Concern (AOCs) have been added to the draft Permit (AOC 1, AOC 2, AOC 3, and AOC 4); and (3) additional financial assurance requirements for corrective action activities are now included.

EPA Region 4 is soliciting all relevant information pertaining to this permit renewal, including public comment, to ensure that the draft HSWA Permit complies with all state and federal regulations. Public review and comment on the draft Permit and supporting documentation is an important element in the evaluation and resulting recommendation to the EPA Region 4 RCRA Division Director. The draft Permit is subject to change based on information received as a result of public participation. Any and all comments are encouraged by the public.

The public comment period for the draft Permit will begin on August 23, 2013, and end forty-five (45) days thereafter on October 7, 2013. Persons wishing to comment on the draft HSWA Permit are invited to submit comments in writing to Mr. James Smith at the address shown below no later than midnight on October 7, 2013.

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A public meeting will be held if EPA Region 4 finds a significant degree of public interest in the draft Permit, or if a public meeting is specifically requested. If a public meeting is held, the time and place of the meeting will be published at least thirty (30) days prior to the meeting.

After consideration of all written and oral comments received during the public comment period, EPA Region 4 will make a decision regarding HSWA Permit issuance. All persons submitting comments will be notified by the EPA of the final HSWA Permit status.

The draft HSWA Permit and other supporting technical documents can be viewed on EPA Region 4's website at: http://www.epa.gov/region4/foiapages/readingroom/rcra_community/cavenham.html.

The draft HSWA Permit will also be available for public review at the Orange Grove Public Library, 12135 Old Highway 49, Gulfport, Mississippi 39503, (228) 832-6924, and at the Mississippi Department of Environmental Quality, Office of Pollution Control, 515 East Amite Street, Jackson, Mississippi 39202, (601) 961-5171.

FACILITY BACKGROUND

Facility Description

The Cavenham facility, located in Gulfport, Mississippi, is a former wood-treating facility and is approximately 73.6 acres in size. The facility was initially constructed in 1906 by Captain J. T. Jones to manufacture treated poles, pilings, and timber for construction of a local port and railroad. After the port and railroad were built, the company was sold to Gulfport Creosoting Company, which operated the plant until January 6, 1972, when the newly-formed Crown- Zellerbach Corporation acquired Gulfport Creosoting Company. Cavenham Forest Industries (CFI) was formed in January 14, 1986, as part of a corporate restructuring of Crown-Zellerbach, and CFI acquired the facility along with numerous forest product assets. CFI operated the plant until November 1987, when operations ceased and the structures were demolished. Over time, operations at the plant evolved from the manufacture of treated wood products using creosote to the use of pentachlorophenol-based preservatives.

RCRA Regulatory History

Business operations ceased in late 1987, and the facility was issued a RCRA Post-Closure Permit by MDEQ on April 28, 1988, in order to address the facility's surface impoundment and sand filtration beds. The surface impoundment had received wood preservative (K001) listed hazardous waste, triggering hazardous waste permitting obligations. The first HSWA Permit for corrective action was issued by EPA on August 8, 1988, and, together with the MDEQ Post-Closure Permit, made up the full RCRA Permit for

the facility. Specific areas of the facility which are subject to the corrective action requirements of the HSWA Permit are called solid waste management units (SWMUs) or areas of concern (AOCs). SWMUs are any units which have been used for the treatment, storage or disposal of solid waste, regardless of whether the unit is or was intended for the management of solid waste. RCRA-regulated units may also be SWMUs. AOCs are areas having a probable release to the environment of a hazardous waste or hazardous constituent which is not associated with a SWMU and is determined to pose a current or potential threat to human health or the environment.

The original Post-Closure Permit listed the surface impoundment and sand filtration beds, which have been designated as SWMU 1a, as the regulated unit. The initial 1988 HSWA Permit for the facility identified six SWMUs (including SWMU 1a) based on information obtained from the Permittee, State and EPA records, and an *Interim RCRA Facility Assessment (RFA) Report*, dated August 12, 1987. At the time of the HSWA Permit renewal on July 26, 1996, a total of 12 SWMUs had been identified at the facility.

The draft HSWA Permit that is the subject of this Fact Sheet will be the second renewal of the HSWA Permit. MDEQ's Post-Closure Permit was first renewed on July 26, 1996, and then again on October 5, 2007.

Summary of Investigations/Cleanup

The regulated unit (SWMU 1a) was certified closed on January 11, 1988. During its closure, soil from two areas (a storm water ditch that drained the impoundment (SWMU 1c), and the pole buggy storage area (SWMU 1d)) were removed and placed into the surface impoundment. The buried vacuum pond (SWMU 1b) that was located near the closed surface impoundment was determined to be the major source of groundwater contamination at the facility. Surface soils from the buried vacuum pond were removed and also placed into the surface impoundment; a cap was then placed over the old vacuum pond area. Ultimately, the surface impoundment was closed as a landfill, and capped with a liner and soils.

In January 1990, the surface impoundment, the buried vacuum pond, the storm water ditch, and the pole buggy storage area (SWMUs 1a, 1b, 1c, and 1d) were enclosed with a 3,055-foot slurry wall to contain contaminated groundwater around those SWMUs. Groundwater recovery and injection wells were installed and groundwater pumping began in January 1991. The facility submitted a revised Corrective Action Plan in May 1996 pursuant to which CFI proposed additional groundwater controls, the recovery of non-aqueous phase liquid, immobilization of contaminant sources, and accelerated source removal. Currently, ongoing corrective action activities at the facility include a 34- well groundwater recovery system, 6 infiltration trenches, 14 injection wells, 107 sparging wells, and a groundwater treatment system. The site groundwater recovery system also addresses releases from SWMUs outside of the slurry wall (e.g., SWMU 3-1 (Wood Waste Disposal Area 1), with 6 recovery wells; and SWMU 3-4 (Wood Waste Disposal Area 4), with 7 recovery wells).

REQUIREMENTS OF THE DRAFT HSWA PERMIT

The required corrective action work under the draft HSWA Permit is outlined below:

RCRA Facility Investigation (RFI): The following newly-identified AOCs require a RCRA Facility Investigation to characterize the nature and extent of hazardous waste or hazardous constituent releases to soil, groundwater, surface water, and air:

AOC 3 (Creosote Tank and Barge Slip Area in Bernard Bayou): An RFI is required for AOC 3 for the purpose of characterizing soils, sediments, surface water and groundwater contamination in and around Bernard Bayou from the creosote tank and barge slip area of the facility. Investigations conducted outside the SWMU 1a slurry wall have identified a release of creosote to Bernard Bayou. The RFI is currently ongoing pursuant to the *Bernard Bayou Sediment and Pore Water Sampling Plan*, approved in December 2012.

AOC 4 (Groundwater outside of SWMU 6 Slurry Wall): An RFI is required for AOC 4 to characterize groundwater located outside the slurry wall around the Old Pond (SWMU 6). Groundwater monitoring outside the SWMU 6 slurry wall indicates that the groundwater plume may not have been adequately delineated.

Several phases of RCRA Facility Investigations (RFIs) have been previously conducted at the facility to characterize the nature and extent of hazardous waste or hazardous constituent releases to various media. In December 1989, the first RFI was conducted to investigate soil and groundwater at SWMU 3-1 (Wood Waste Disposal Area 1), SWMU 3-3 (Wood Waste Disposal Area 3), SWMU 4 (Boiler Bottom Ash Waste Pile), SWMU 5 (Container Storage Area), and SWMU 6 (Old Pond). A second-phase *RFI Work Plan Addendum,* dated September 9, 1991, was conditionally approved for the investigation of SWMU 1d (Pole Buggy Storage Area) and SWMU 3-4 (Wood Waste Disposal Area 4). The constituents of concern at the facility are polycyclic aromatic hydrocarbons (PAHs), dioxin/furans, and pentachlorophenol in soil and groundwater.

The most recent RFI, documented in the *RFI Phase III Site-Wide Dioxin Soil Sampling Report* for surficial soils (AOC 1), was completed on December 19, 2008, and revealed contamination of dioxins in soils, with the highest levels recorded at the northwest end of the facility (identified as Areas 1 and 2). RFI- related investigations also include the *Turkey Creek Sediment and Pore Water Sampling Plan* for AOC 2, submitted on October 21, 2009, which provided for the investigation of releases of PAHs and dioxins from SWMU 3-1 (Wood Waste Disposal Area 1) and SWMU 1c (Storm Drain) to Turkey Creek sediments and the associated discharge of groundwater to surface water.

Interim Measures (IM): The following SWMUs and AOC require interim measures to be taken to prevent imminent or potential hazards from harming human health and the environment:

SWMU 3-1 (Wood Waste Disposal Area 1) and **SWMU 3-4 (Wood Waste Disposal Area 4)**: Based on the *IM Investigation Report*, dated March 2, 2009, sampling results showed PAH and dioxin/furan contamination in soils and sediments at SWMUs 3-1 and 3-4. IM at SWMUs 3-1 and 3-4 are being undertaken pursuant to the *SWMU 3-1 and SWMU 3-4 Control and Containment Design Report*, originally approved in September 2011. The IM include placing caps over impacted soils at SWMUs 3-1 and 3-4; containing groundwater within a 2,000-foot slurry wall anchored into the underlying marine clay; and constructing an 80-foot wide diversion structure from Turkey Creek to Bernard Bayou to prevent erosion. To date, approximately 900 feet of sheet piling has been installed and a 2,000-foot long work pad for the installation of the slurry wall has been constructed. Approximately 1,400 feet of the slurry wall is currently in place.

AOC 2 (Turkey Creek): IM for AOC 2 include carbon sequestration with Sedimite™ to bind PAHs in sediments, along with a dense non-aqueous phase liquid (DNAPL) recovery system to mitigate releases from SWMUs 3-1 and 3-4. A *Pilot Study Work Plan – Insitu Treatment of PAH Impacted Sediment at Turkey Creek* was approved on March 25, 2011. Three recovery wells were also installed on the peninsula

across Turkey Creek from SWMU 3-4 to remove DNAPL and dissolved phase contaminants originating from SWMU 3-4.

IM have been previously performed at SWMU 6 (Old Pond) and AOC 1 (Dioxin Contaminated Soil). In May 1990, the facility submitted an *IM Work Plan* for the Old Pond (SWMU 6). Closure of the Old Pond had begun in 1988 and concluded in1992. Historically, this eight-acre pond had collected contaminated storm water runoff from the treatment area and spillage of creosote liquids, with wastewater transferred to the pond by pipe. Roughly 13 acres of the pond and adjacent areas were closed. Creosote and wood waste was capped in place using a geotextile liner, High Density Polyethylene liner, two feet of clay, and a vegetative layer. A 2,790-foot long slurry wall was also installed around the Old Pond. The groundwater within the slurry wall enclosure is being recovered by extraction wells and treated.

Closure of the pole storage area (Area 1) within AOC 1 (Dioxin Contaminated Soil) was certified on December 22, 2010, with construction of a concrete cap over soils impacted with dioxin/furans exceeding the residential cleanup standard of one part per billion.

A Corrective Action Management Unit (CAMU) was previously used to treat 20 cubic yards of soil removed from the terra cotta pipeline within the SWMU 1a slurry wall and to treat 280 cubic yards of remediation waste recovered from excavating infiltration galleries, as well as investigation derived waste. Pursuant to a March 6, 2000, *IM Work Plan*, additional soils from the terra cotta pipe trench, wooden sump and wooden box culvert (assigned to SWMU 3-4), were to be treated on-site in a CAMU (curbed concrete pad). Due to public concerns, the soils were never removed or treated in the CAMU.

Corrective Measures Study (CMS): The following SWMUs and AOCs require a Corrective Measures Study for a final remedy evaluation:

SWMU 1d (Pole Buggy Storage Area)
SWMU 3-1 (Wood Waste Disposal Area 1)
SWMU 3-4 (Wood Waste Disposal Area 4)
SWMU 6 (Old Pond)
AOC 1 (Dioxin Contaminated Soil)
AOC 2 (Turkey Creek)
AOC 3 (Creosote Tank and Barge Slip Area)
AOC 4 (Groundwater outside of SWMU 6 (Old Pond) Slurry Wall)

A Corrective Measures Study (CMS) is required for all SWMUs and AOCs that require a final remedy evaluation. During this phase of the corrective action process, specific alternatives for remedial action will be identified, studied, and recommended, including a "no further action" alternative. The public will be given an opportunity to comment on the proposed remedial alternatives prior to the selection of the final remedy. This draft HSWA Permit requires the submittal of a CMS Work Plan and CMS Report for the above-listed SWMUs and AOCs to evaluate the proposed or ongoing interim measures' suitability as final remedies.

The RFI for AOC 3 and AOC 4 will be conducted concurrently with the CMS evaluation. In addition, the IMs for SWMU 3-1, SWMU 3-4, and AOC 2 will be evaluated in the CMS.

Final corrective action remedies were previously selected for SWMU 1b (Buried Vacuum Pond) and SWMU 1c (Storm Drain) in a 1996 *Statement of Basis* issued by EPA. Corrective action at these units occurred in conjunction with the closure of SWMU 1a (Closed Surface Impoundment) under the MDEQ

Post-Closure Permit.

Based on current information, corrective action is not warranted for six (6) SWMUs. Therefore, a "no further action" decision has been made for the following SWMUs:

SWMU 2 (Wastewater Pretreatment System)
SWMU 3-2 (Wood Waste Disposal Area 2)
SWMU 3-3 (Wood Waste Disposal Area 3)
SWMU 4 (Boiler Bottom Ash Waste Pile)
SWMU 5 (Container Storage Area)

In addition to the requirements outlined above, this draft HSWA Permit also includes provisions for notifying EPA of newly identified releases from previously identified SWMUs or AOCs, newly identified SWMUs, and newly identified AOCs which are discovered after Permit issuance. It also requires financial assurance for the completion of all corrective action activities required by the draft Permit.