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September 30, 1998

MEMORANDUM

TO: Wm. Gerald Hardy, Chief 9/30/98
Hazardous Waste Branch
Land Division

THROUGH: Stephen A. Cobb, Chief SAC 9/30/98
Industrial Facilities Section
Hazardous Waste Branch
Land Division

FROM: Sonja M. Bazemore
Industrial Facilities Section
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RE: Evaluation of Seaman Timber, Montevallo, Alabama, facility's status under the RCRIS Corrective Action Environmental Indicator Event Codes (CA725 and CA750)
EPA I.D. Number: ALD 034 046 730

I. PURPOSE OF MEMO

This memo is written to formalize an evaluation of Seaman Timber, Montevallo, Alabama, status in relation to the following corrective action event codes defined in the Resource Conservation and Recovery Information System (RCRIS):

1) Human Exposures Controlled Determination (CA725),

2) Groundwater Releases Controlled Determination (CA750).

The application of these event codes at Seaman Timber adheres to the event code definitions found in the Data Element Dictionary for RCRIS.

Concurrence by the Hazardous Waste Branch Chief is required prior to entering these event codes into RCRIS. Your concurrence with the interpretations provided in the following paragraphs and the subsequent recommendations is satisfied by dating and signing above.

II. HUMAN EXPOSURES CONTROLLED DETERMINATION (CA725)

There are five (5) national status codes under CA725. These status codes are:

1) YE Yes, applicable as of this date.

2) NA Previous determination no longer applicable as of this date.

3) NC No control measures necessary.

4) NO Facility does not meet definition.

5) IN More information needed.

The first three (3) status codes listed above were defined in January 1995 Data Element Dictionary for RCRIS. The last two (2) status codes were defined in June 1997 Data Element Dictionary.

Note that CA725 is designed to measure human exposures over the entire facility (i.e., the code does not track SWMU specific actions or success). Every area at the facility must meet the definition before a YE or NC status code can be entered for CA725. The NO status code should be entered if there are current unacceptable risks to humans due to releases of hazardous wastes or hazardous constituents from any SWMU(s) or AOC(s). The IN status code is designed to cover those cases where insufficient information is available to make an informed decision on whether or not human exposures are controlled. If an evaluation determines that there are both unacceptable and uncontrolled current risks to humans at the facility (NO) along with insufficient information on contamination or exposures at the facility (IN), then the priority for the EI recommendation is the NO status code.

In Region 4's opinion, the previous relevance of NA as a meaningful status code is eliminated by the June 1997 Data Element Dictionary's inclusion of NO and IN to the existing YE and NC status codes. In other words, YE, NC, NO and IN cover all of the scenarios possible in an evaluation or reevaluation of a facility for CA725. Therefore, it is Region 4's opinion that only YE, NC, NO and IN should be utilized to categorize a facility for CA725. No facility in Region 4 should carry a NA status code.

This particular CA725 evaluation is the ***first evaluation*** performed by the Alabama Department of Environmental Management for Seaman Timber Facility. Because assumptions have to be made as to whether or not human exposures to current media contamination are plausible and, if plausible, whether or not controls are in place to address these plausible exposures. This memo first examines each environmental media (i.e., soil, groundwater, surface water, and air) at the entire facility including any offsite contamination emanating from the facility rather than from individual areas or releases. After this independent media by media examination is presented, a final recommendation is offered as to the proper CA725 status code for Seaman Timber.

The following discussions, interpretations and conclusions on contamination and exposures at the facility are based on the following reference documents:

- Sampling Work Plan for SWMUs 3, 21, & 33, November 1989
- RCRA Facility Assessment, July 1988
- Post Closure Permit Application, January 1988
- Annual Groundwater Monitoring Report, March 1992
- RCRA Facility Assessment Report, April 1998

III. FACILITY SUMMARY

In 1963, Seaman Timber Company began operation of the 65 acre sawmill facility. Since 1971, the facility has been performed a wood-treating operation utilizing both Creosote and Copper Chromated Arsenicals(CCA). The Department has classified two surface impoundments at the Seaman Timber site as regulated units: the former evaporation ponds, No. 1 and No. 2. The company also owns approximately 640 contiguous acres to the west and northwest of the facility which houses the company's permitted solid waste landfill.

The evaporation ponds were used as storage, treatment, and disposal units for the creosote wastewater and sludge from the wood-treating process. The units were determined to be regulated units based on their handling of K061 constituents while in service. On December 8, 1987 the surface impoundments were closed and are currently under post-closure care. In 1988, an RFA was conducted at the facility. As a result of this assessment 33 SWMUs and 4 AOCs were identified. Of these, 14 were identified as high potential for release requiring sampling to determine if hazardous constituents were present. Two of the SWMUs required integrity evaluations to determine release potential. The remaining SWMUs and AOC were identified as having moderate and low potential for release.

In October 1991, Seaman Timber submitted an RFI Work Plan to EPA Region 4. EPA approved the plan in March 1992. The RFI Phase II Sampling Report was submitted in October 1994 to EPA. The Alabama Department of Environmental Management (ADEM) received this document in February 1998 and is currently reviewing the report. On December 15, 1989, the Alabama Department of Environmental Management (ADEM) issued a RCRA post closure permit, for the two surface impoundments. This RCRA permit is effective until December 15, 1999.

IV. MEDIA BY MEDIA DISCUSSION OF CONTAMINATION AND THE STATUS OF PLAUSIBLE HUMAN EXPOSURES

Groundwater

In accordance with the Post-Closure Care permit for this facility, there is an ongoing groundwater monitoring program. There are 4 point of compliance(POC) wells that make up the detection monitoring system. There are also 14 additional wells located on site. However, they are not included in the detection monitoring system.

According to the 1998 RFA, the groundwater could have been impacted from a potential release from SWMU #45(Drip Pad #2) and AOC #1(Creosote Line Break). Groundwater may have been impacted due to the noted F034 contamination to the soil in these areas. There are no monitoring wells located in these areas.

Surface Water

The nearest bodies of water are Shoal Creek and Mahan Creek located about one & one-quarter (1.25) miles north and three-quarters(.75)mile south of the facility, respectively. An intermittent drainage is located northwest of the facility and flows north to Shoal Creek. Seaman Timber is currently operating under a NPDES permit(AL0054682) that was issued on May 25, 1993.The permit covers the wastewater treatment system and the boiler-blow down and non-contact cooling water designated as DSN001 and DSN002, respectively. There are also six(6) stormwater and one solid waste landfill outfalls associated with this facility.

There is a high potential for release to surface water from SWMU 45(Drip Pad #2) and AOC #2(North Boundary Berm) according to the 1998 RFA. AOC #2, the North Boundary Berm was constructed from the boiler ash pile and yard scrapings to divert storm water from an adjacent landowner. The boilers at one time burned creosote treated cross-ties. The process is no longer practiced at the facility. The yard scrapings are the products of treated wood seepage onto the ground.

Soil

There are three (3) Solid Waste Management Units (SWMUs) and two (2) Area's of Concern (AOC) where potential soil contamination requires further investigation.

1. SWMU 47 – Wastewater Evaporation Unit
2. SWMU 45 – Drip Pad #2
3. SWMU 50 – Scrap Yard #3
4. AOC 1 – Creosote Line Break
5. AOC 2 – North Boundary Berm

During the 1988 RFA, several SWMUs and two AOCs were stated to have possible releases to the soil. It was recommended that these be addressed through confirmatory sampling and a RCRA Facility Investigation. The facility in turn suggested that natural bioremediation be their form of corrective action for these areas. During the 1998 RFA, the above mentioned SWMUs were identified as units requiring confirmatory sampling to determine the contamination in those area. This work as yet to be completed. Therefore, there is no information available at the present time.

Air

There are no known or expected releases to the air from the soil, surface water or ground water at this facility. However, there are several SWMUs which are permitted by the Department to release to the air. According to the 1988 RFA, there were 4 SWMUs(SWMUs 6, 7, 8, 10) that could have a potential release to the Air. The RFA, recommended that no further action was suggested other than to consider a design change(cover) to reduce releases to the air. Two of these SWMUs(SWMUs 7 & 10) have been taken out of service as recorded in the 1998 RFA.

V. STATUS CODE RECOMMENDATION FOR CA725:

Human Exposures Controlled Determination (CA725)

The routes of human exposure at the Seaman Timber facility include groundwater, and surface water through storm water and process wastewater discharge. Surface water discharges are controlled and regulated by the NPDES program. Exposures to groundwater could occur by direct access to the aquifer through monitoring wells or private water wells. All monitoring wells maintained by Seaman Timber are required to be locked at all times except when being sampled. Currently, an RFI Report has been submitted by the Seaman Timber facility to EPA. The document is currently being reviewed by the Department.

The Human Exposure Controlled RCRIS code applies to the entire site, not specific SWMUs. There are five (5) status codes listed under CA750:

1) YE Yes, applicable as of this date (indicating human exposures controlled).
2) NO No, Facility does not meet definition
3) NA Previous determination no longer applicable as of this date.
4) NC No control measures necessary.
5) IN More information needed.

There is limited information available on soil contamination and groundwater contamination, as noted during the 1998 RFA VSI. As explained in Section III, offsite human exposures to contamination can not be determined at this time. Soil and groundwater corrective action proposals for SWMUs will be developed as a result of the Confirmatory Sampling requirements. Therefore, it is recommended that the appropriate status code for RCRIS code **CA725** would be **IN**, indicating more information is needed at this time.

VI. GROUNDWATER RELEASES CONTROLLED DETERMINATION (CA750)

A Groundwater Quality Assessment has been completed at Seaman Timber facility in accordance with the post-closure permit. The assessment document has completely defined the vertical and horizontal extent of the site-related constituents as they are related to the two regulated units on site. Two separate zones are being monitored at the facility. The tasks performed during this investigations indicate that the principal groundwater flow and storage, lay in varying layers of residual material and the limestone bedrock. Groundwater in the residuum occurs in varying saturated zones that are not always laterally continuous but which are interconnected in various places. The limestone bedrock produces a productive quantity of groundwater that is utilized as process water on-site.

During the last Comprehensive Monitoring Evaluation (CME), the constituents of concern present in the groundwater monitoring well system were found to be less than the detectable range, which meets the Groundwater Protection Standards for this facility. However during the 1998 RFA, SWMU 37 and AOC #2 were noted to have a potential release to the groundwater. Confirmatory sampling was recommended on these areas. Therefore groundwater releases can not be determined at this time.

VII. STATUS CODE RECOMMENDATION FOR CA750:

The Groundwater Releases Controlled RCRIS code applies to the entire site, not specific SWMUs. There are five (5) status codes listed under CA750:

1) YE Yes, applicable as of this date .
2) NO No, Facility does not meet definition.
3) NA Previous determination no longer applicable as of this date.
4) NR No releases to groundwater.
5) IN More information needed.

Based on data contained in the documents referenced in Section II and summarized in the background information, releases from solid waste management units and/or areas of concern may have contaminated groundwater at concentrations above relevant action levels. Groundwater Corrective Action for the regulated unit has been addressed in the permit, and is currently underway. Therefore, because the possible releases to groundwater indicated in the 1998 RFA have not been addressed at this time, the first evaluation of the Seaman Timber facility, recommends that **CA750 IN** be entered into RCRIS.

VIII. SUMMARY OF FOLLOW-UP ACTIONS

Soil and groundwater corrective action proposals for the newly listed SWMUs(1998 RFA) will be developed as a result of the Confirmatory Sampling. The Confirmatory Sampling will determine if the soil and groundwater have been affected by any of the 1998 SWMUs. When that determination is completed, the facility status will be re-evaluated.