



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029

July 8, 2014

Mr. Brian E. Jones, P.E.  
Program Manager  
Remediation EHS&S  
International Paper  
6400 Poplar Avenue  
Memphis, Tennessee 38197

**VIA Electronic Mail**

Re: International Paper, Richmond Gravure Facility  
*Engineering Control/Institutional Control Assessment, EPA ID No. VAD046979498*

Dear Brian:

The Environmental Protection Agency's Land and Chemicals Division, Office of Remediation (EPA or Agency) has completed its assessment of the International Paper Richmond Gravure Facility (Facility) Engineering Controls/Institutional Controls (EC/IC) Final Remedy. The assessment is part of a pilot program begun by the Agency to assess RCRA facilities that have selected Final Remedies in the past. Part of the assessment included a Facility inspection, which was completed June 24, 2014, and a Facility-specific checklist, to be completed during the inspection.

Based on EPA's Facility inspection, including the discussion with you and your consultant, Lisa Bryda, of WSP, EPA has concluded that the remedy implemented at the Facility continues to be protective of human health and the environment. However, as discussed at the Facility and documented in the attached checklist, there were a couple of items requiring attention. Additionally, as part of EPA's due diligence regarding the accuracy of maps/figures related to EC/ICs, the Facility survey, dated April 18, 2011, requires modification.

To summarize EPA's assessment: 1) the asphalt cap requires completion in the area pointed out during the inspection; 2) stormwater discharging from the roof over the loading dock must be managed so there is 100% discharge to the asphalt cap; 3) the Facility survey must be corrected to depict the true extent of the asphalt cap; 3) annual reports should be submitted as follows: one paper copy to EPA Region 3, Philadelphia (pursuant to the Environmental Covenant); one electronic copy to Jutta Schneider, VADEQ (pursuant to the Environmental Covenant); one electronic copy to me. Finally, we agreed the repairs would be documented in the annual report and submitted as specified above. If you need to discuss this assessment or have any questions please contact me at (410) 305-2779 or by email at [weissbart.erich@epa.gov](mailto:weissbart.erich@epa.gov).

Sincerely,

*Erich Weissbart*

Erich Weissbart, P.G.  
Project Manager  
Office of Land and Chemicals Division

Attachments: EC/IC checklist  
Revised Site Figure

Cc: Luis Pizarro, EPA  
Lisa Bryda, WSP

**Check List for Engineering Controls /Institutional Controls Long Term Assessment  
For  
International Paper, Richmond Gravure Facility,  
Richmond, Virginia  
RCRA ID# VAD 046979498**

**A. Pre-Site Visit Checklist for Site Project Manager**—In-office review of:

1. Engineering Controls/ICs documents: EPA issued the Final Remedy on December 7, 2010. The Final Remedy was implemented through an Environmental Covenant (EC) signed by EPA on September 26, 2011.

The 2011 EC requires the monitoring and maintenance of an asphalt cap covering an old “waste in place” area and implementation of, compliance with and continued maintenance of institutional controls that prohibit the use of groundwater and restrict the site from residential use.

2. Location maps: EPA Facility website figures require updating. Map links still work. Aerial maps on Google Earth show previous year satellite maps showing no evidence of changes, disturbances to and around EC/IC areas. Paper copies of boundaries from reports. Joel updated EC/IC and Facility boundary maps. Facility provided survey data/maps. **The provided survey (Draper Aden, April 18, 2011) drawing was determined in be inaccurate as it depicts the asphalt cap extending under the roofline of the covered dock/ramp area.**

3. Local and State contact: (1) send letter to local/county gov’t to ensure title notice has not been revoked or changed by Facility. **Considering the EC was recently recorded, this task was deemed unnecessary.**

4. Facility Contact: EPA (Erich Weissbart and Joel Hennessy), VADEQ (Ryan Kelly) met with Brian Jones of International Paper and Lisa Bryda, IP’s consultant from WSP on June 24, 2014.

**B. Facility visit:**

1. Facility in-office review: (a) compare Engineering Controls/IC maps for accuracy/consistency; (b) discuss any Engineering Controls/IC and/or remediation units regarding updates or info. not conveyed in reports to EPA, any plans for land use, construction or sale of restricted use land; (b) discuss how restricted areas and restrictions are communicated to staff, contractors, upper management, local planners/govt. as applicable; (c) discuss any issues identified under A, above; (d) discuss any recommendations with Facility, if they arise. **The in-office review uncovered minor discrepancies in EPA’s map which have since been corrected.**

2. View Engineering Controls/IC and on-going remediation areas including photo documentation, if applicable. Note activities on and around Engineering Controls/IC/remedy areas. Note any remedy difficulties, like equipment malfunctions, timely responses and notifications to EPA.

**C. Document the Review in Memo/Report to Files**: Document what was reviewed, photos, findings and recommendations. Once approved by management, send Report to Facility and upload to EPA Facility website and update RCRA Info with applicable code(s).


**D. Institutional Control (IC)/ Engineering Control Generic Review and Inspection Questions:**

**The ICs specified in the CA remedy have been fully implemented through an Environmental Covenant (EC) dated September 8, 2011. The EC provides control for the entire extent of contamination consisting of an area behind the building under an asphalt cap. Additionally the Facility is restricted, through the EC, to “industrial use” only. The ICs eliminate and reduce exposure of all potential receptors to known contamination. The ICs sufficiently meet the risk goals and applicable standards specified in the CA remedy. The ICs are effective and reliable for the activities (current and future) at the property to which the controls are applied. The ICs are suitable for the period/length of time which the controls are intended to be used which is for life or until it is shown there is no further risk from exposure to soil or groundwater. The ICs are maintained as required by the CA remedy. No additional ICs are necessary to achieve the intended goals of the CA remedy and no modifications to the ICs are needed.**

**The sole Engineering Control utilized at the site is an asphalt cap covering an area containing soil and perched groundwater with contaminant concentrations exceeding risk based standards as documented in the Final Decision, signed December 7, 2010. The Engineering Control has been fully implemented, constructed, and maintained; however, a small area (approximately 5 x 5 feet) was discovered to be unpaved. This area requires additional asphalt to complete the cap. Additionally, stormwater from the overhang discharges almost directly adjacent to the unpaved area of the asphalt cap, which further serves to reduce the effectiveness of the cap. Therefore the cap is currently not wholly meeting the goal of the CA remedy. The cap is monitored and clearly maintained. It predominantly eliminates exposure however there is likely some groundwater infiltration during storm events. Upon completing the cap, the Engineering Control will be effective and reliable. No additional Engineering Controls are necessary and the necessary modifications are noted.**



**International Paper/Richmond Gravure**

 Asphalt\_Cap\_minus\_overhang

