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17 November 2011
File No. 34858-006

Mr. David Szymanski
New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue
Buffalo, NY 14203-2999

Subject: **Corrective Measures Work Plan**
2011 Site Management Periodic Review
Hydro-Air Components, Inc. Property (formerly Steelfields Area IV)
BCP Site # C915204, Buffalo, New York

Dear Mr. Szymanski:

This letter serves as the Corrective Measures Work Plan requested in your letter dated 17 October 2011. It is intended to also supplement the 2011 Periodic Review Report (PRR) and Institutional Control/Engineering Control Certification (Certification) previously submitted for the above-referenced Site.

In that PRR and Certification, Haley & Aldrich could not provide a complete certification of the engineering controls in the Site Management Plan (SMP) because of indications that groundwater with an elevated pH (alkaline water) was surfacing above the soil cover system that is maintained to isolate below-surface contaminants in accordance with the SMP's Soil/Fill Management Plan. To address the alkaline water issue, we incorporated and included (as Attachment 4) in the PRR and Certification a letter dated 2 August 2011 that described the previous and planned future corrective measures to address the issue.

Hydro-Air Components, Inc. (Hydro-Air) had intended that 2 August 2011 letter to fulfill the basic requirements of a corrective measures work plan that the Department is requesting. Now that we have a second opportunity to provide such a plan to the Department, Hydro-Air can fine tune this Corrective Measures Work Plan based upon the progress made since August 2011 when Hydro-Air reportedly raised the surface of the gravel driveway along the northern property boundary approximately 3 additional inches.

On 17 October 2011, Haley & Aldrich conducted a walk-through to assess the efficacy of the regrading and found that previously observed surfacing of alkaline water was no longer occurring. Thus, it appears that the addition of more cover in this area has to date prevented any further surfacing of alkaline groundwater.

The Regional Alkaline Water Problem

The alkaline water which Haley & Aldrich had previously observed surfacing in July 2011, prior to the gravel being placed in August 2011, was the same alkaline water conditions at and surrounding the Site about which Haley & Aldrich apprised the Department in an attachment to the 2010 PRR and Certification.¹ In that 2010 PRR and Certification, Haley & Aldrich was not able to provide an unconditional certification of the institutional and engineering controls due to the observed, primarily seasonal, occurrence of alkaline water seeps along the north boundary of the Site. As noted in the attachment to the 2010 PRR and Certification, even though Hydro-Air has diligently taken steps to address these conditions, it may or may not be feasible to entirely eliminate the surfacing of alkaline water at the Site because the source of the alkaline water is believed to be the adjoining Steelfields III property and other properties to the north of the Site which were impacted by the historical production of steel in this area of Buffalo.

Alkaline water and its associated whitish calcite flocculent were also detected in the onsite stormwater detention pond (principally in the pond's northern settling basin) in 2008. The source of the discoloration and alkaline water appeared to be from a perforation in a catch basin that was allowing alkaline groundwater to enter into the stormwater pipes and discharge to the pond. A small area of white discoloration indicative of a calcite flocculent was also observed in the recessed loading dock area. That loading dock area discharges accumulated stormwater to the same pond through a pipe by means of a sump pump.

Corrective Measures Taken

The approximately 3 additional inches of gravel placed prior to Haley & Aldrich's October 2011 inspection appears to be working, but only time will tell if the previously observed surfacing of alkaline groundwater has been eliminated under the wetter periods, such as the Spring.

With regard to the stormwater detention pond, corrective measures activities have included:

- Sealing the perforation in one of the catch basins to prevent alkaline groundwater from directly entering the stormwater system;
- Installing trench collars² along the length of piping between the catch basin and stormwater pond to reduce preferential migration of alkaline ground water along the pipe bedding ; and
- Raising the inlet of the catch basin to prevent the water which previously surfaced along the northern boundary from entering the catch basin.

With regard to the recessed loading dock, the operation of the sump pump that discharges the stormwater to the pond was reduced from an automatic continuous operation to manually activated operation, used as necessary, to empty out significant accumulations of water. This change in operation appears to have

¹ Haley & Aldrich letter dated 30 August 2010 to Mr. David Szymanski of the New York State Department of Environmental Conservation regarding Stormwater Pond – Alkalinity at the HydroAir Components, Inc. Property (formerly Steelfields Area IV).

² E.g., Work Plan for Installation of Soil-Bentonite-Cement Collars, dated August 21, 2009, and approved the Department in a letter dated September 2, 2009.

reduced the possibility that Hydro-Air was creating a cone of depression in the shallow water table around the sump which may have inadvertently enhanced the natural flow of alkaline groundwater toward the loading dock during high water conditions.

Current Site Conditions

Site visits were completed by Haley & Aldrich on 06 July 2011 and 17 October 2011. The stormwater pond and its two settling basins were in good condition during both visits; the pond was not discolored. There was some minor standing water in the recessed loading dock; but the former small area of whitish staining, indicative of flocculent, was not observed. Standing water and puddling were also not observed in the driveway along the northern site boundary. Although evidence of puddling of alkaline water was observed in July 2011 (white flocculent residual), it appeared that, by October 2011, the alkaline water was no longer surfacing due to the additional gravel placed in August over the portions of the driveway where flocculent residual had been present. Thus, it appears that the addition of more cover in this area is preventing the surfacing of alkaline groundwater at this point in time.

Corrective Measure Work Plan for the 2011 PRR and IC/EC Certification

Because it appears that the soil cover issue may have been resolved to the extent feasible by the placement of approximately 9 - 11 inches of gravel along the northern driveway, Hydro-Air's Corrective Measure Work Plan is comprised of two activities:

- Haley & Aldrich monitoring the continued efficacy of the gravel cover by undertaking three separate site visits, one each in March, April and May of 2012 coincident with the anticipated seasonal high water table, to observe whether there is any evidence that the alkaline water is surfacing; and,
- Hydro-Air monitoring the water pumped from the loading dock area to assess the quantity and quality of the discharge for a one-year period by estimating the approximate volume of accumulated water to be discharged to the pond, testing a representative sample of the water for its pH level prior to every manual activation of the sump pump, and recording the results in a log.

The results of this Corrective Measure Work Plan will be reported to the Department upon completion of the one-year monitoring period. If the monitoring establishes that Hydro-Air has been successful at correcting the situation to the extent feasible, then Hydro-Air proposes that the SMP be amended to acknowledge the existence of the regional alkaline groundwater condition related to Steelfields III site and require the continued monitoring of the northern driveway surface and the stormwater pond as part of the annual certification process.

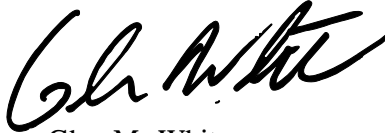
Hydro-Air hopes that the Department finds this Corrective Measures Work Plan sufficient to complete Hydro-Air's 2011 PRR and Certification obligations as well as to address the alkaline water issue going forward. Upon the Department's approval, we will proceed as proposed. Should you have any questions or concerns regarding this Corrective Measures Work Plan, please do not hesitate to contact us.

Sincerely yours,

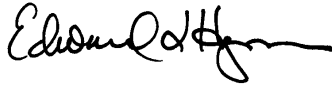
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