Ohio Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

July 10, 2012

RE: RITTMAN PAPERBOARD RESIDUAL WASTE LANDFILL NOTICE OF VIOLATION WAYNE COUNTY

CERTIFIED MAIL 7011 0470 0002 3496 4628

Mr. Gary McQuate.
Rittman Paperboard Landfill
100 Industrial Ave.
Rittman, Ohio 44270–1573

Dear Mr. McQuate:

On February 13, 2012, the Ohio Environmental Protection Agency (Ohio EPA), Division of Materials and Waste Management (DMWM), Northeast District Office (NEDO), received a document entitled, "*Statistical Analysis of Ground Water Quality, November 2011,*" dated February 13, 2012, for Rittman Paperboard Residual Waste Landfill, located in Wayne County.

Rittman Paperboard operates a Class III Residual Waste Landfill currently owned and operated by Caraustar Mill Group, Inc. The PTI #02-5056 was approved on June 4, 1997. The landfill received waste from the pulp and paper making operations conducted at the Facility. Rittman Paperboard closed and ceased production of paper materials in 2006. The Residual Waste Landfill currently only receives paperboard waste sludge removed from the north lagoons and dried prior to placement within the permitted limits of waste placement.

Upon statistical analysis of the February 2005 ground water sampling data, Rittman Paperboard determined the presence of two consecutive statistically significant increases at downgradient ground water monitoring wells MW-2, MW-3, MW-4, MW-11R, and MW-12R. In order to comply with Ohio Administrative Code (OAC) Rule 3745-30-08(E)(1), Rittman Paperboard submitted to the Ohio EPA, Division of Materials and Waste Management (DMWM), a *Ground Water Quality Assessment Work Report* on June 2, 2006, for the shallow hydrostratigraphic unit and April 15, 2011, for the deep hydrostratigraphic unit. The Ohio EPA reviewed and commented on the adequacy and completeness of the submittal within a Notice of Violation (NOV), dated May 25, 2011. The May 25, 2011 NOV indicated that Rittman Paperboard did not adequately comply with OAC Rule 3745-30-08(E)(1).

For compliance with OAC Rule 3745-30-08(E)(2), which requires the submittal of a *Ground Water Quality Assessment Report,* Rittman Paperboard submitted on July 16, 2007, and June 12, 2007, to the Ohio EPA, Division of Materials and Waste Management (DMWM), Northeast District Office (NEDO), two documents entitled, *"Shallow Aquifer Ground Water Quality Assessment and Deep Aquifer Ground Water Quality Assessment for Rittman*

Paperboard Residual Waste Landfill," located in Wayne County, and were dated July 11, 2007, and June 7, 2007, respectively. Ohio EPA reviewed and commented on the submittals within a Notice of Violation, dated May 31, 2011. Ohio EPA denied Rittman Paperboard's request to return to detection monitoring. In addition, Ohio EPA determined that Rittman Paperboard has not adequately complied with OAC Rule 3745-30-08(E)(2).

Ohio EPA staff from the Division of Drinking and Ground Waters (DDAGW) and DMWM met with representatives of Caraustar on August 4, 2011. During this meeting, Caraustar committed to evaluating existing information and data within 90 days. This evaluation will be utilized to revise the *Sampling and Analysis Plan (SAP), the Statistical Analysis Plan,* and the eventual resubmission of a *Ground Water Quality Assessment Plan and Report.* Therefore, the following issues contained within the April 25, 2011 Notice of Violation and the May 31, 2011 Notice of Violation remain outstanding. However, Caraustar is in the process of addressing the comments.

On November 16, 2011, Ohio EPA met with representatives of Rittman Paperboard. During this meeting, representatives of Rittman Paperboard discussed the intention to statistically reevaluate ground water monitoring data and by doing so demonstrate that there has not been a release of waste-derived constituents to ground water and on February 13, 2012, Rittman Paperboard submitted to the Ohio EPA, DMWM, a document entitled, *Statistical Analysis of Ground Water Quality, November 2011.*

The following represents violations of rule or statute that were identified during review of the subject document.

OAC Rule 3745-30-08(C)(1) *"The ground water monitoring program shall include consistent sampling and analysis procedures that are protective of human health and safety and the environment and that are designed to ensure monitoring results that provide an accurate representation of ground water quality at the background and downgradient wells installed in accordance with paragraph (B) of this rule..."*

A. Rittman Paperboard has not utilized purging and sampling techniques that ensure the acquisition of ground water samples that accurately represent background and downgradient ground water quality. Rittman Paperboard has purged the ground water monitoring wells on one day, and then acquired ground water samples for analytical analysis the following day. Thus, Rittman Paperboard allowed ground water within the well casing to be exposed to atmospheric conditions during the time interval between purging and sampling.

   Rittman Paperboard has not adequately demonstrated that the time interval between purging and sampling is appropriate and is capable of adequately yielding representative ground water quality.

Rittman Paperboard should revise the *SAP* such that ground water samples will accurately represent the background and downgradient ground water quality.

B. Rittman Paperboard has utilized purging and sampling techniques that produce excessive turbidity. Turbidity either at the end of purging or over 24 hours later typically exceeds 5 NTUs.

Rittman Paperboard should revise the *SAP* such that ground water samples will accurately represent the background and downgradient ground water quality.

Ohio EPA has the following statements regarding the documents:

Statement 1

Section 4.0 of the February 13, 2012, *November/December 2011 Statistical Report of Ground Water Quality* provides Rittman Paperboards definition of two terms – Calculated Statistical Significance and Validated Statistical Significance.

Rittman Paperboard defines these two terms as:

> Calculated Statistical Significance – is the result of the application of mathematical equations to water quality data to investigate variability over time by mathematical means. These mathematical means do not consider the natural dynamics of the hydrogeochemistry of the formation being monitored; possible sample collection/laboratory analytical errors; or other factors that may be responsible for the inherent variability of the system not related to operational activities of the landfill Facility.
>
> Validated Statistical Significance – is determined when, based on a review of the dataset as a whole, it can be concluded that the calculated statistical significance might be a function of activities at the Facility, and not a function of natural variability and/or other conditions. The absence of a calculated statistical significance is an indication that there has been no significant change in ground water geochemistry and that no impact to ground water has occurred. However, a calculated statistical significance does not necessarily mean that an impact of ground water has occurred, but that additional evaluation or the data may be merited to identify the cause of the statistical significances.

The above definitions provided by Rittman Paperboard do not conform to OAC Rule 3745-30-08. The procedures for an initial and verified statistically significant difference (SSD) and submittal/approval of an alternate source demonstration are as follows:

Upon initially determining the presence of a statistically significant difference, the Facility should perform a resampling, as provided by OAC Rule 3745-30-08(D)(9)(a). The resampling will either verify the initial SSD or not verify the initial SSD. If resampling verifies the initial SSD, the Facility may submit an alternate source demonstration for approval by the Director of the Ohio EPA, as provided by OAC Rule 3745-30-08(D)(9)(b). Until the Facility receives approval of the alternate source demonstration by the Director of the Ohio EPA, the Facility will remain in Assessment Monitoring.

Statement 2

Rittman Paperboard has provided intrawell statistical analyses. Due to the current indication of a release of waste-derived constituents to ground water, Rittman Paperboard must first demonstrate through interwell statistical analyses that a release of waste-derived constituents has not occurred. Therefore, at this time, intrawell statistical analysis is premature.

Statement 3

Rittman Paperboard has indicated that the initial SSDs are due to natural variation of ground water quality. Although Rittman Paperboard has not submitted a formal request that the Director of the Ohio EPA approve reinstatement of detection monitoring, Ohio EPA reviewed the information and data provided to support an alternate source demonstration. Upon review, Ohio EPA has determined that Rittman Paperboard has not submitted a sufficient quantity of information and data to support an alternate source demonstration. Specifically, Rittman Paperboard did not adequately:

(1) Acquire ground water samples in a manner that yield representative ground water quality up and downgradient of the limits of waste placement;

(2) Conduct a resampling event for verification of the initial SSD;

(3) Compare trends of upgradient and downgradient ground water quality, and

(4) Evaluate major cation/anion geochemistry of up and downgradient ground water quality compared to leachate.

Therefore, Ohio EPA cannot recommend approval of the alternate source demonstation or reinstatement of detection monitoring at the Rittman Paperboard Landfill.

Rittman Paperboard should revise the *SAP* such that ground water samples will accurately represent the background and downgradient ground water quality.

Due to deficiencies in the sampling and analysis and alternate source demonstration, Ohio EPA does recommend approval of the alternate source demonstration or reinstatement of detection monitoring at the Rittman Paperboard Landfill.

Nothing in this letter shall be construed to authorize any waiver from the requirements of any other applicable federal or state laws or regulations except as specified herein. This letter shall not be interpreted to release the owner or operator from responsibility under Ohio Revised Code (ORC) Chapters 3704, 3714, 3734, or 6111; under the Federal Clean Water Act, the Resource Conservation and Recovery Act, or the Comprehensive Environmental Response, Compensation, and Liability Act; or from other applicable requirements for remedying conditions resulting from any release of contaminants to the environment.

Please contact Jeff Rizzo at (330) 963-1115 if you have any questions regarding this review. Otherwise, submit all correspondence to Clarissa Gereby, Division of Materials and Waste Management, Northeast District Office, Ohio EPA, 2110 East Aurora Road, Twinsburg, Ohio 44087.

Sincerely,

Clarissa Gereby

Clarissa Gereby
Environmental Specialist
Division of Materials and Waste Management

CG/cl

cc: Ken Eng, Wayne County General Health District
Jeff Rizzo, DDAGW, NEDO
File: [Sowers/LAND/Rittman Paperboard/GRO/85]
DMWM #4281