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**VIA EMAIL AND REGULAR U.S. MAIL**

January 18, 2008

Mr. Ed Gortner  
Ohio Environmental Protection Agency  
PO Box 1049  
Columbus, OH 43216-1049

**RE: RESPONSE TO JANUARY 14, 2008 NOV LETTER  
COUNTYWIDE RECYCLING AND DISPOSAL FACILITY**

Dear Mr. Gortner:

Countywide Recycling and Disposal Facility (Countywide) is in receipt of your Notice of Violation (NOV) letter dated January 14, 2008. This letter constitutes Countywide's response which you require within five business days from the date of your letter.

It is Countywide's position that most of the cited NOV's are not supported. As described in this response, Countywide has, and continues to take extreme measures to comply with all rules and requirements, despite the unprecedented conditions and challenges presented by the reaction occurring at the facility. Prior to the reaction, Countywide's compliance history was exemplary—the best in the area. Today, that same philosophy continues to be applied by Countywide.

This letter will provide context regarding the conditions and challenges at the South Slope in 2006, describe why some of the observations made in the field by OEPA may be misleading and require additional investigation, and provide a point-by-point response to the NOV citations.

**Description of Efforts Made At the South Slope**

Countywide previously prepared and submitted summaries of the events at the South Slope that took place during 2006. The first was submitted on July 13, 2007 (attached hereto as Exhibit A), and the second on January 8, 2008 (attached hereto as Exhibit B). These submittals presented chronological sequences of events as well as a description of the extraordinary challenges faced--and the remarkable efforts made--by Countywide

personnel, contractors, and consultants designed to minimize impact on the community and the environment.

In the Spring of 2006, Countywide found itself responding to conditions that no one had ever experienced before. Forceful gas releases (termed "vents" by site personnel), aggressive leachate outbreaks, and water vapor discharges (termed "steamers" by site personnel) had begun at the South Slope and intensified in May 2006. Attempts at controlling these with traditional methods of leachate outbreak repair, such as adding soils and excavating trenches in the waste were unsuccessful. Due to the unusual nature of these conditions, Countywide hired expert consultants and contractors with experience from hundreds of landfills to address the issues. All concluded that something unprecedented was occurring at the site which did not exhibit all the normal symptoms of a landfill fire, but yet were related to elevated temperatures occurring in the South Slope area.

Extensive temporary measures were implemented to control, collect and manage leachate outbreaks within the sanitary landfill facility, and then, on Memorial Day, May 29, 2006, the vents and steamers were encapsulated with a 3-acre temporary synthetic cap. This effort brought temporary relief to the situation and had an immediate positive impact.

However, in June and July 2006, leachate outbreaks were again discovered at the toe of the new 3-acre cap and creep of soil cover material started occurring upslope from the cap. Additional temporary leachate outbreak controls were installed and survey monitoring was initiated on the soil cover. At this time it also appeared that some bulging was occurring under the 3-acre cap at the toe of the South Slope. This was attributed to local sloughing of moist, softened soil material that was placed for leachate outbreak control prior to placing the cap.

From July to September 2006 Countywide undertook extraordinary efforts, albeit without complete success, to mitigate the excess liquid contributing to the surficial movement of the material on the South Slope. In August and September 2006, survey monitoring indicated that a shallow, surficial slide was gradually occurring. Throughout that time, the movement was slow and not discernible to the eye. No waste material was exposed, added to, or taken away from this area.

Stability was studied by an expert who concluded that a set of unique conditions (that did not exist anywhere else on the site) were present in the South Slope area. The expert determined that these unique conditions were causing a shallow slide along a preferential path and recommended that engineered gas and liquid relief wells be installed.

Then, in late September, the rate of movement increased, along with the realization that the previously chosen methods to provide gas and liquid relief could not be implemented in time to address the stability of the South Slope. Accordingly, measures were taken, with OEPA approval, to ensure the stability of the slope and to avoid any rapid or large scale slide. A slide of this nature could likely have resulted in a significant translation of waste (perhaps on the order of 50 feet horizontally), potentially large releases of leachate, a long-term release of odor, and exposure of a large volume

of waste to oxygen intrusion which may have ignited an actual fire in the waste, and/or caused an increase in the reaction.

The possibility of such a slope failure was immediately and comprehensively addressed by Countywide. At that time, it was unknown if any, or how much, waste had moved outside the designated limit of waste at the toe of the South Slope. However, it was determined by evaluating the mode of movement and the other physical features at the toe of the South Slope, that any waste displacement was not significant in volume. Quantification through investigation and subsequent removal of displaced material, if any, was not possible in light of the conditions at the South Slope. For any slope, the surest way to reduce stability and possibly trigger a large-scale failure is to remove material from the toe. This risk is severely compounded when a slope already demonstrates evidence of stability concerns. In any event, investigation and removal of material from the toe of the South Slope would have been ill advised and was never seriously considered.

At the advice of Countywide's stability expert, a stabilizing berm (buttress) was initiated immediately. The buttress, completed on October 26, 2006, contained features designed to collect and convey leachate within the limits of waste, but it was recognized at the time that the buttress could provide a communication pathway for gas and leachate to move beyond the designed limit of waste. So, in December 2006, the buttress was encapsulated with a portion of the existing 30-acre temporary synthetic cap, and equipped with a lined toe drain for collection of any leachate expressed into the buttress area.

Throughout these extensive efforts, numerous OEPA personnel made site visits (at least 17 between April and December 2006) and were briefed on the actions being taken. A meeting was held in OEPA's office on July 14, 2006 to describe measures being undertaken. In addition, in 2007, these efforts were described to OEPA personnel, and, as previously discussed, summarized in writing and submitted to the OEPA on July 13, 2007.

The nature of the issues occurring at Countywide are without precedent in this industry. Countywide is extremely proud of the efforts made during the immense challenges at the South Slope in 2006. Countywide believes that those efforts were responsible and provided the *best* possible protection for the community and the environment.

#### **Observations Made in NOV Letter**

The NOV is substantially based on observations made by OEPA during drilling of gas probe SGP-6 on December 7, 2007. Countywide would like to comment on those observations made by, and conclusions drawn by, the OEPA.

- OEPA concluded that the entire interval in the one-inch probe between 12 feet to 24 feet deep in SGP-6 was solid waste material. However, only 1.2 feet of material was recovered from that 12-foot interval. The method used for installing SGP-6 (which is a push sampling technique) often results in "lost" samples due to any number of moisture or soil conditions, or due to blockage of the tip of the small sampling tube by a large rock particle. It is possible that the

material encountered at a depth of 12 feet was a remnant remaining from activities associated with installation of drains during the buttress construction. In addition, the diameter of the sampler is so small that it can easily drag material down, leading to misinterpretation. It is unreasonable to conclude that any specific part of the interval between 12 feet and 24 feet consists of waste material in light of the poor recovery noted above.

- OEPA noted black liquid on and in the sampling tube as if this were unexpected. It should not have been unexpected. In fact, it was anticipated that liquid could enter the area of the buttress. For that reason, the temporary cap was installed over that area, and a lined toe drain was installed to assure that environmental protection is provided.
- OEPA noted that recovered material "appeared to be charred," and "emitted a strong smoldering odor." Leachate from within the reaction area has a characteristic appearance (dark brown to black), and a characteristic odor. However, in over 100 borings drilled at the site to date, there has been no sign of ashes or burnt material (other than a few remnant charred wood fragments which likely came in that way as delivered). Any material that is saturated by leachate at the site takes on a blackened appearance, which the OEPA interpreted as charred. Observation made by the Countywide inspector, and examination of the photo in Figure 2 of the NOV, clearly shows that wood fiber is present in the sample which would likely not be the case if a fire had moved through the area. Countywide believes that the OEPA description of the material encountered is inaccurate and could mislead individuals to conclude that a fire existed in the area of SGP-6.
- OEPA observed that "warm drilling equipment (rods and sampler) which were steaming when retrieved from the boring." First, it should be pointed out that any drilling or push probe installation generates some degree of heat through friction. Second, it is likely that the material in this area was warmed by the liquid which originates deep in the landfill in the reacting area and then is transmitted horizontally through the waste in the form of warm vapor. Observations of "steaming" only mean that the material was warm and moist enough to cause condensation in the cool (35° F) ambient temperature at the time (much the same as the way one can see their breath on a cool day). Countywide does not believe that warm temperature at this location is verification of waste present or fire present at the SGP-6 location.

### **Response to Violation 1**

Countywide believes that there were no violations of 3745-27-19(B)(2), or of Condition 2 of the PTI. The landfill, including the South Slope was constructed in compliance with approved construction drawings and was operated in compliance with the documents referenced in paragraph (l) of 3745-27-09.

Further, it is clear that the Ohio EPA was aware of the events at the South Slope and expressly approved the measures employed by Countywide to ensure stability at this area of the site. This portion of the facility was the focus of F&Os by the Ohio EPA in

September 2006. After issuance of the F&Os, Countywide and the Ohio EPA participated in technical discussions regarding potential measures to stabilize that area of the facility. Those discussions culminated in an agreement between Countywide and Ohio EPA regarding the measures taken at the south slope that were memorialized by Ohio EPA in a letter dated December 29, 2006 (attached hereto as Exhibit C).

Specifically, with respect to the toe buttress and other measures related to the south slope area, the agency concluded that "[a]fter reviewing this information, Ohio EPA agreed that the benefits contemplated under Order 7 were better accomplished with Countywide's technical approach set forth above." That letter further states that "Ohio EPA expects that these measures be maintained and any alterations be approved by Ohio EPA." Although OEPA retained the right to "add or make changes to these requirements," the OEPA has not instructed Countywide to do anything other than to maintain these features at this time.

The OEPA further referenced its agreement to these measures in the March 28, 2007 F&Os noting that the "Ohio EPA summarized the actions that Respondent reported it had taken to address proposed revised Order 7, requested that Respondent maintain these measures, [and] required Ohio EPA's approval prior to making alterations to these measures. . ." See March 28 F&Os, p. 5, 6.

Based on the above, Countywide does not believe the issues identified in "Violation 1" constitute a violation. The work conducted with respect to this area was necessary and the Ohio EPA concurred that the work was necessary and then required the features to be maintained and remain unaltered unless approved by Ohio EPA.

### **Response to Violation 2**

The information provided in the January 14 letter does not support the alleged violations of 3745-27-19(K)(1). The facts show that Countywide acted in compliance with this rule by repairing, collecting, and managing the leachate within the sanitary landfill facility as defined by 3745-27-01(S)(4). Leachate in this area was and is collected and disposed of in compliance with 3745-27-19(K)(5) and (6).

On July 14, 2006, Countywide attended a meeting with OEPA to describe the efforts that were being made to control and manage leachate outbreaks during which OEPA acknowledged that Countywide has a responsibility to self-implement such controls.

Accordingly, Countywide disagrees that that activities referenced as the basis for the agency's alleged violation constitute a violation of the referenced rule. OAC 3745-27-19(K)(1) contains language that references the operator's duties with respect to leachate outbreaks and how to respond to them. Leachate outbreaks are not prohibited, and in fact, they are known to arise at landfills and therefore, the rules provide a structured approach for responding to leachate outbreaks. In particular, the rule states:

If a leachate outbreak(s) occurs at a sanitary landfill facility, the owner or operator shall repair the outbreak(s) and do the following: (a) Contain and properly manage

the leachate at the sanitary landfill facility, (b) If necessary, collect and dispose of leachate in accordance with paragraph (K)(5) and (K)(6) of this rule, (c) Take action to minimize, control, or eliminate the conditions which contribute to the production of leachate.

Countywide has met each of the above requirements and the conditions identified in your letter do not support that a violation of this rule has occurred. With respect to subparagraph (a) of the rule, it is clear that Countywide "contained" and "managed" the leachate at the sanitary landfill facility. Pursuant to OAC 3745-27-01(S)(4) "sanitary landfill facility" is defined as:

An engineered facility where the final deposition of solid waste on or into the ground is practiced in accordance with Chapters 3745-27, 3745-29 or 3745-30, as appropriate, and 3745-37 of the Administrative Code, and includes the unit(s) within the limits of waste placement, all ground water monitoring and control systems structures, buildings, explosive gas monitoring, control, and extraction system structures, sedimentation pond(s), liner systems, and leachate management system structures. The sanitary landfill facility includes all portions of the facility described above *and those areas within three hundred feet of the limits of waste placement unless an alternate setback is deemed acceptable by the director.* (emphasis added.)

As described above, numerous measures were taken with respect to the repair, control and management of leachate outbreaks. All of those activities were taken on the sanitary landfill facility as defined in the Ohio Administrative Code. Thus, it is Countywide's position that no violation of subparagraph (a) is supportable and therefore no violation occurred.

With respect to subparagraph (b), the letter fails to provide any evidence that the leachate collected was not disposed of in accordance with paragraphs (K)(5) and (6) of the rule. The leachate from this area was disposed of in accordance with the provisions of the rule, and therefore, no violation of subparagraph (b) is supportable and therefore no violation occurred.

With respect to subparagraph (c) of this rule, Countywide has previously reported to you the significant and substantial measures that it has taken to "minimize, control, or eliminate" the conditions which contribute to the production of leachate. Specifically, Countywide has installed approximately 30 acres of synthetic cap, equipped 20 gas wells on the South Slope with pumps to remove liquid, and designed and installed drains through and under the buttress. Accordingly, Countywide has complied with the language of the rule.

### **Response to Violation 3**

The information contained in the January 14, 2008 letter does not provide support for the alleged violation of OAC 3745-27-19(B)(5). To the contrary, actions taken by Countywide have prevented the creation of a nuisance or health hazard, and prevented water pollution. Specifically, the engineering measures employed, and agreed to by the OEPA, were specifically designed to stabilize the slope, and therefore prevent large amounts of waste from moving outside the sanitary landfill facility and being exposed to the environment. The measures taken in that area were also designed to address and minimize the frequency and magnitude of leachate outbreaks in the area of the South Slope.

Although your letter declares a violation, it does not provide specific facts that support its allegation that features contained within the buttress constitute a nuisance or caused water pollution. In fact, the installation of the leachate drains were specifically designed and constructed to collect leachate and therefore, prevent water pollution from occurring. Moreover, groundwater monitoring results at the site demonstrate that these measures have been and continue to be effective. Accordingly, Countywide does not believe there is a basis for the alleged violation.

With regard to landfill gas issues described in your letter, please refer to Countywide's Explosive Gas Monitoring Report submitted to OEPA on January 4, 2008. As explained in that report, landfill gas monitoring results clearly indicate there is no nuisance or health and safety hazard attributable to landfill gas. The small positive readings for landfill gas that have been found are contained on site, not an exceedance of EGTL's, not at odds with the site EGMP nor state rules for explosive gas, and therefore not the basis for a notice of violation (NOV). The small positive levels of landfill gas found are not an indication of bottom liner failure, and Countywide believes that alternate manageable pathways for gas migration apply here.

### **Response to Violation 4**

Countywide properly submitted its annual report and provided the information required by OAC 3745-27-19(M)(1)(i). A topographic map was included in the Annual Report that was timely submitted. Specifically, Figure 5 of the report (attached hereto as Exhibit D) delineated the area where the approved toe buttress was constructed. Because the contour lines in that area were higher than the permitted grades due to the buttress material, Countywide specifically identified the discrepancy on the drawing. Countywide did not "emplace" (emplace meaning to put waste in place) waste above the permitted limits; in fact *no* waste had been placed in the South Slope area since 2003. Furthermore, Countywide had no actual knowledge of the limits to which waste material, as opposed to cover material, had moved in 2006. Notwithstanding that this rule is not meant to address situations such as those experienced at Countywide, Countywide met the requirements of the rule by submission of an annual report with a specific drawing that contained notes regarding the comparison of actual and permitted grades at the facility.

#### **Response to Violation 5**

Countywide agrees with OEPA's statement that "it is apparent that a slope failure has occurred that necessitated the placement of the soil buttress to arrest that slope movement." However, the presence of the failure referenced above does not automatically mean that a violation of 3745-27-19(E)(1)(c) has occurred. In fact, the letter does not identify specific evidence or references that support the allegations.

For instance, there is no evidence that leachate collection pipe 3A has been damaged in a way that impacts its function. The above-grade cleanout extension of the pipe (which does not serve to actively collect leachate) was damaged by construction activities at the toe of the South Slope in 2006. Then, the cleanout extension was buried by the approved placement of the buttress to arrest slope movement. It is apparent, however, that the site's leachate collection system is functioning properly in light of the continued collection and off-site disposal of large amounts of leachate from this area of the facility as demonstrated in the report "Leachate Collection System Investigation" dated December 7, 2007. While it is a subtle distinction, the cleanout extension is not an integral part of the leachate collection system. Although the cleanout extension was damaged during the installation and construction of the approved buttress, the functions intended to be provided by the engineered components in that portion of the facility continue to exist and in fact, in many instances, have been enhanced pursuant to authorizations provided under various orders.

For example, the reference to damaged explosive gas extraction wells is unfounded. Before the slope movement, referencing gas system as-built drawings date May 15, 2006, there were 11 gas wells present on the South Slope. After the slope movement, referencing as-built drawing dated March 12, 2007 there were 30 gas wells on the South Slope. In addition, many of those wells have pumps installed to enhance the liquids collection in that area of the facility. Countywide has, and will continue to replace gas wells that are damaged by slope movement, heat, or settlement in compliance with the rules, which specifically references the repair of damaged equipment.

#### **Response to Violation 6**

The violation has been corrected. As of the date of the NOV letter, Countywide had paid said invoice with a check that was delivered via express service on January 14, 2008.

#### **Response to Violation 7**

The violation has been corrected. See above.

#### **Response to Violation 8**

Finally, Countywide disagrees with the alleged violation of OAC 3745-27-19(E)(3)(a). The rule cited in your letter states that the "owner or operator shall have adequate equipment, material, and services available at or near the facility to control fire. The

owner or operator shall act immediately to control or extinguish any fire." The agency's continued citation of this alleged violation is inappropriate for several reasons.

On February 27, 2007, Director Korleski sent a letter along with proposed F&Os related to Countywide Landfill. The Director invited Countywide to work with his staff to "**resolve** this matter amicably and expeditiously through negotiated Orders." The letter identified the potential benefits that negotiated Orders would permit including the fact that the process "would be more likely to lead to a prompt resolution of the problems at the Facility." The letter also stated that the Director was "encouraged that [the] respective staffs [had] already scheduled a settlement meeting in anticipation of the Orders." Countywide accepted the Director's invitation to negotiate a resolution. In response to the Agency's invitation to negotiate, an initial meeting was held on February 28, 2007. Several additional meetings and telephone conferences were conducted throughout the month of March. Final F&Os were executed and journalized on March 28, 2007.

The March 28, 2007, F&Os specifically address the alleged "fire" at the facility and the alleged violation of OAC 3745-27-19(E)(3)(a). The violations alleged in the NOV's result from the exact same facts and the exact same alleged violation of OAC 3745-27-19(E)(3)(a) that are addressed in the F&Os. The F&Os require the Company to comprehensively address the alleged violation that is referenced in the NOV's.

Therefore, for purposes of enforcement issues, this issue is resolved. There is no environmental or health related reason to provide the company with "notice" of a violation that has been resolved, that the company is keenly aware of, and that the company has committed tens of millions of dollars to address and has assembled a team of expert consultants and engineers to manage and implement the F&Os entered with OEPA.

Moreover, it defies all reason to insist that, to the extent Countywide ever was in violation of this rule, that it currently is in violation of this rule. The rule's language requires the owner or operator to "have adequate equipment, material, and services available at or near the facility to control fire. The owner or operator shall act immediately to control or extinguish any fire." Notwithstanding that this language was obviously written to pertain to common landfill fires that generally occur at the working face and are able to be quickly extinguished and or controlled through conventional methods, the facts show that Countywide did act immediately to control or extinguish the "fire". While Countywide cannot state that its immediate action was successful in finally extinguishing the "fire," Countywide acted immediately and has continued to act to control and or extinguish the "fire."

Furthermore, one need only visit the site to observe the "equipment, material, and services" available at the site that are being employed to control the "fire". Countywide submitted an Interim Action Evaluation Plan (IAEP) on April 10, 2007 which was approved by the Director as specific actions that could be applied to suppress the reaction. Countywide continues to comply with the actions outlined therein, to the extent that OEPA has allowed. Countywide also submitted a Fire Suppression Plan on May 25, 2007 to which the Director has yet to respond.

Mr. Ed Gortner  
January 18, 2008  
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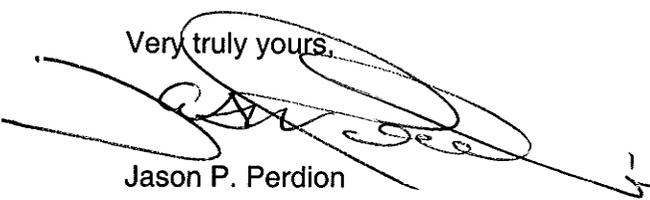
As the Director requires interim measures, Countywide has implemented those measures. For instance, Countywide recently completed the installation of a "fire break," the purpose of which was to control the "fire". Countywide has also been in the process of dewatering the landfill (for quite some time prior to the latest F&Os issued on this topic) which the Director has stated he believes will address the "fire." This is further evidence that Countywide is complying with the rule. There is no basis to continue to allege that Countywide is in violation of this rule.

In summary, Countywide has done everything reasonably within its power to address the reaction and the symptoms that have arisen from the reaction. Countywide has previously informed the agency in writing that any waste in the buttress that is outside the limits of waste would be addressed when the buttress was decommissioned. The agency has never asked Countywide to do anything different with the buttress and the fact is that any waste material in the buttress is encapsulated and leachate in that area is being collected and treated.

Countywide has initiated a geophysical investigation in an attempt to understand the nature and volume of materials in this area. Regardless of the results, it is likely that there is no significant environmental threat related to any waste material in the buttress, and that the best course of action for this area is to wait until this area is stable without the need for the buttress, and once judged by Countywide and OEPA safe to do so, remove and relocate materials in a way which is safe, minimizes potential (odor) impact on the community, and provides the least environmental impact. Countywide would like to discuss developing a plan so that when both Countywide and OEPA believe it is appropriate, the material can be removed and relocated. Countywide believes that portions of the investigation and evaluation can be conducted now so that measures can be taken quickly when it is determined that activities in this area will not compromise stability. Please let me know when the agency is able to meet to discuss a resolution of these issues.

If you have questions or comments, please do not hesitate to contact me.

Very truly yours,



Jason P. Perdion

cc: Chris Korleski, Director OEPA  
William Franks, Commissioner, SCHD  
Bill Skowronski, OEPA-NEDO  
Pam Allen, OEPA-CO  
Kurt Princic, OEPA-NEDO  
Jeff Martin, OEPA-CO  
Kirk Norris, SCHD  
Dan Aleman, CCHD  
Todd Hamilton, CWRDF  
Clarke Lundell, Republic Services  
Michael Beaudoin, Earth Tech

# EXHIBIT A



## Countywide Recycling & Disposal Facility

Division of Republic Waste Services of Ohio  
3619 Gracemont Street S.W.  
East Sparta, Ohio 44626  
Phone: 330-874-3855  
Fax: 330-874-2426

July 13, 2007

Ohio Environmental Protection Agency, Central Office  
Division of Solid and Infectious Waste Management  
Attn: Mr. Ed Gortner  
PO Box 1049  
Columbus, Ohio 43216-1049

RE: REQUEST FOR INFORMATION  
SOUTH SLOPE AREA  
COUNTYWIDE RECYCLING AND DISPOSAL FACILITY

Dear Mr. Gortner:

This letter transmits information requested in your letter dated June 22, 2007. In an attempt to provide a clear understanding of the activities at the south slope in 2006, we have assembled a detailed package which we believe addresses your concerns, supports our conclusions and actions, and goes beyond your request. Attachment A presents a time-line of the major issues and actions, and Attachment B presents a list of the information provided.

Many Countywide personnel, experts, and contractors were hard at work in 2006 with a primary objective of combating odors, while simultaneously reacting to challenging conditions which included working to mitigate leachate outbreaks and slope movement in the south slope area. Please keep in mind that much of this information was not intended to be provided as "formal" submittals. Therefore, much of what we present herein is in the form of "raw" data, photographs, working drawings, sketches, etc. However, we do believe that this information is useful for a more complete understanding of the conditions faced by Countywide and the measures taken to deal with this extraordinary event.

In response to specific questions contained in your June 22 letter:

1. The buttress was constructed using a weathered shale soil material which was placed in 1'-2' thick horizontal lifts. The soil that had been covering the waste was stripped as the berm progressed and commingled with the structural fill. In other locations, if the cover soil was suitable, it was notched to provide interlocking between it and the buttress fill. A series of drains were installed to collect possible outbreaks from under the buttress and prevent excess liquid pressure under the buttress. No waste was excavated during construction with the exception of spoil from the bottom of the finger drain trenches. Documentation for the buttress construction is attached hereto. One leachate inspection/cleanout riser (3A) was damaged during construction of the 3-acre cap (over Memorial Day Weekend); there is no known documentation of the incident, and no other risers have been damaged. We intend to repair and restore the leachate inspection/cleanout riser pipe when the buttress is decommissioned.
2. Through subsequent analysis, it has been determined that a maximum of 11.5 feet of shallow horizontal movement occurred prior to buttress construction, and that movement was located well up the slope from the toe. A small rise and horizontal displacement (less

that 3 feet) was measured at the toe (much of that movement was likely softened soil sloughing due to the higher-elevation movements and is likely overstated in the data because of the placement of material in that same area at that time). The shallow movement that occurred has pushed waste over the permitted final waste grade as would be expected given the mode of movement. However, the buttress has stabilized this area and the temporary synthetic cap has encapsulated the waste. When the reaction has subsided, the temporary cap, buttress, and other temporary features will be removed so that displaced waste can be cut down to original permitted grades prior to placement of the permanent cap.

We hope that this information will be useful to you and contribute to your understanding. Please feel free to call me should you have any questions or need additional information.

Countywide Recycling & Disposal Facility

A handwritten signature in black ink, appearing to read 'Tim Vandersall', with a long horizontal line extending to the right.

Tim Vandersall, P.E.  
General Manager

cc: (with attachments)  
Michael Beaudoin, Earth Tech  
Todd Hamilton, Countywide

ec (without attachments)  
Tim Vandersall, Countywide

## Attachment A – Quarterly Time Line, South Slope, 2006

### January-March 2006

- Had ceased recirculating in January 2006 due to observance of leachate outbreaks in south slope, increased gas well temperatures, and increased odors.
- Added soil to the south slope toe and created berms to collect leachate outbreaks coming from south slope.
- Installed temporary "finger drains" to collect leachate outbreaks and direct them into the leachate collection system.
- Site visits and meetings with NEDO personnel on January 13, January 19, and January 30.
- Installed horizontal gas collectors and toe drains near toe of south slope to reduce fugitive emissions from this area.

### April-June 2006

- Observed increased leachate outbreak activity, with pressurized driving force. Mapped "vents" and "steamers" in lower portion of the south slope.
- Continued to use finger drains and collection berms to manage leachate outbreaks. Leachate collected in the bermed areas was pumped out with vac trucks.
- Constructed several, small, localized cap "patches" with "chimneys" to relieve largest "vents" through charcoal filter to reduce odors.
- Installed 37 new gas collection wells at the facility to reduce fugitive emissions.
- Started to note increased settlement at top of south slope.
- Constructed small horizontal synthetic cap near the "auto fluff" pile.
- Determined that small localized cap patches were not satisfactorily abating odors. Countywide elected to work through Memorial Day Weekend to install a 3-acre cap umbrella over the lower third of the south slope to encapsulate vents and steamers and prevent surface flow of leachate outbreaks.
- Site visits and meetings with NEDO personnel on April 6, and May 3. Briefed NEDO on events and actions to date.
- Held meeting with other regulators to advise of status.

### July-September 2006

- Observed softening and consequent sloughing of soil under 3-acre cap at toe of south slope.
- Observed continuing settlement at top of south slope with associated settlement cracking at top edges of settling area.
- Observed creep of soil and 3-acre cap, initiated weekly cross section stake monitoring of south slope on July 14.
- Installed about 50 new gas wells and numerous other collectors to reduce fugitive emissions and gas pressures.
- Observed leachate outbreaks at toe of temporary 3-acre cap. Installed additional temporary leachate outbreak controls at toe of slope.
- Retained Peter Carey to assess slope stability due to increased concern with creep being noted by weekly survey.
- Installed several gas pressure monitoring probes to help assess slope stability.

- 
- During construction of access road at top of 3-acre cap (required to drill proposed dewatering points) the cap slid along the wet softened soil. Removed the 3-acre cap and placed thick layer of clay in its place.
  - Site visits and meetings with NEDO personnel on July 28, August 11, August 24, and August 31, September 26, and September 29. Briefed NEDO on events and actions to date.

#### October-December, 2006

- Observed continuing settlement at top of south slope with associated settlement cracking at top edges of settling area.
- Continued weekly cross section stake monitoring of south slope. Determined that movement was continuing, mostly parallel to slope, but with a slight apparent shallow circular component the middle of the south slope.
- Constructed soil buttress to arrest movement.
- Constructed 30-acre temporary synthetic cap.
- Site visits and meetings with NEDO personnel on October 6, October 10, October 13, October 18, October 24, October 31, November 2, November 21, and November 28, December 6, December 12, and December 16. Briefed NEDO on events and actions to date.

## Attachment B – Drawings, Field Notes, Other Data

### Topo Maps

4/06/06 West Half (88 Acre) Topo	24x36 CAD Plot
7/01/06 West Half (88 Acre) Topo	24x36 CAD Plot
3 Acre Cap High-Resolution Topo, 8/07/06	11x17 CAD Plot

### Buttress (Stabilization Berm) Design, As-Builts, Information

"Existing and Previous Conditions", 07/18/06 (cross section)	11x17 hand drawing
PJ Carey Letter Report – Stabilizing Berm, 09/27/06	8.5x11 copy
PJ Carey – Stabilizing Berm Design	11x17 CAD Plot
As-Built Record Drawing – Stabilization Berm	24x36 CAD plot
Cross Section A-A', Plan View – Stabilization Berm, 10/18/06	11x17 CAD Plot
Cross Section A-A', Section View - Stabilization Berm, 10/18/06	11x17 CAD Plot
"South Toe Buttress" (compilation of field notes)	8.5x11 copy

### Stability Analyses and Reports

PJ Carey Miscellaneous Working Drawings and Plots	8.5x11 copies
PJ Carey Report – South Slope Stability Anal., 10/04/06	8.5x11 copy
PJ Carey Letter Report – South Slope Stability, 12/15/06	8.5x11 copy
PJ Carey Letter Report – Monthly Stability Report, 1/19/07	8.5x11 copy
PJ Carey Letter Report – Monthly Stability Report, 2/19/07	8.5x11 copy

### Slope Movement Monitoring

Weekly Cross Sections, 7/14/06-8/21/06	24x36 CAD plots
PJ Carey "Table of Figures for PJCA Submittal" 07/12/07	8.5x11 copy
PJ Carey Compilation of Stake Movements 07/12/07	8.5x11 copy
PJ Carey Compilation of Iron Pin Movements 07/12/07	8.5x11 copy
PJ Carey Slope Displacement Analyses, 07/13/06	8.5x11 copy

### Cap As-Builts and Other

"Cell 3 South Toe Cap," (3-acre cap), June 2006	3-ring binder
"Temporary Cap" (30-acre cap), (Compilation of field notes)	8.5x11 copy
Plan View of 8/14/06 – Leachate Toe Drain "As-Built"	24x36 CAD plot
2006 Gas Control System, 6/02/06	11x17 CAD Plot
"Alternative B" (for buttress drainage under 30-acre cap), 11/15/06	11x17 CAD Plot
Temporary Leachate Control Details, 7/25/06	11x17 CAD Plot
"Untitled" (depicts plan view of proposed temp. leachate outbreak control trench)	11x17 CAD Plot
Gas Monitoring Pressure Probes (design)	8.5x11 hand sketch
Option A, B, and C (proposed temporary leachate outbreak controls)	11x17 hand sketches
Temporary Leachate Outbreak Control As-Builts	8.5x11 copy

### Photos

South Slope Photos, 2006	DVD
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## EXHIBIT B

## Countywide Landfill South Slope Monitoring/Movement Chronology

Date Compiled: January 8, 2008

This chronology has been made to facilitate understanding of the monitoring program as it relates to observed slope movement and other related events. The slope monitoring was comprised of a several events which were required/affected by construction activities or maintenance. Throughout the monitoring program, points were, disturbed, restaked, buried, reestablished, destroyed, etc. Whole systems were eliminated and replaced by new systems entirely. There are gaps in data which make it impossible to determine the total movement that occurred in any particular point based on the measurements. Nevertheless, the program allowed scientific evaluations and decision-making, resulting in proper controls (dewatering, gas removal, leachate outbreak control, buttress construction, capping, etc.) for odor control and environmental protection by providing continuing movement information so that the impact of actions relative to slowing or stopping slope motion could be assessed quantitatively.

Note that this chronology focuses on monitoring and, as such, omits many other remedial activities that were occurring at the south slope such as the installation of 50 new gas wells, new gas laterals and header, liquid pumping wells, continuous addition of soil at the toe of the south slope, etc.

Note: ID-# correlates to the attached schedule schematic.

- ID-1 May 29, 2006 Installed 3-acre cap on south slope with underlying leachate outbreak controls and drains. During this time frame, unusually high settlement was being observed and monitored with a survey at the top of the 88-acre area.
- ID-2 June 30, 2006 Michael Beaudoin of Earth Tech observed that soil (placed to control leachate outbreaks) at toe of south slope, underlying 3-acre cap, was bulging, and that gas bubbles and leachate were emitting through the soil at the southern edge of the 3-acre-cap outside the limit of solid waste. It was also observed that cracks were present near the top of the slope but no scarps were observed and it was not known how much of the cracking was attributed to the settling and formation of the "bowl" on top and how much was attributed to downslope movement. Mr. Beaudoin subsequently recommended that stakes be placed on the south slope for monitoring movement.
- ID-3 July 14, 2006 DEI began monitoring easting, northing, and elevation of ground at the base of wooden stakes located on eleven section lines and other non-marked points on the south slope. All of these points were located on cover soils above (north of) the upper edge of the 3-acre synthetic cap which existed at the time. By late July, this monitoring confirmed that downslope movement was occurring north (above) the 3-acre cap. Peter Carey was retained to evaluate and make recommendations.
- ID-4 July 14, 2006 Tim Vandersall and Michael Beaudoin met with NEDO in Twinsburg to discuss the leachate outbreak issues, temporary measures and future measures that may be required to manage, control, and contain leachate

within the facility boundary. Additional soli was places at the toe of the south slope to control bulging around this time.

- ID-5 July 25 A lined toe drain, associated lateral "fingers" and a pump station was installed at the toe of the south slope to allow control of leachate outbreaks which were emerging from the bulged soil. The lateral fingers extended northward into the soil that was seeping in order to try to get to the source of the seep. No waste was encountered during installation of this system and it was completed August 10, 2006.
- ID-6 August 3, 2006 At the advice of Mr. Carey, DEI added paint marks to the 3-acre cap on the section lines, and began survey monitoring of the paint marks. This monitoring showed that downslope movement was also occurring in this area. Mr. Carey also recommended that additional gas wells, leachate pumping points and gas pressure monitoring probes be installed.
- ID-7 August 25, 2006 Survey began on a second set of specific locations (iron survey pins) which were established on the new soil cover and regraded areas of the south slope. These stakes replace the wooden stakes which were located above the cap but which were not able to maintained due to new grading, drilling and other construction activities.
- ID-8 Sept. 21, 2006 During construction of a bench which was to be used for installing dewatering points (per Mr. Carey's recommendations), a portion of the 3-acre cap was ripped and slid to the bottom of the south slope. Monitoring of paint marks on the cap ceased.
- ID-9 Sept. 23, 2006 Continued downslope movement appeared to be accelerating so Mr. Carey recommended immediate construction of a soil berm. Construction began on Sept. 23 at the bottom of the slope and progressed up the slope. As construction moved up slope, monitored wood stakes were removed while monitoring continued on remaining stakes. Construction of the soil buttress was completed on October 26, 2006. Monitoring of remaining iron pins in the upper section of the slope continued during this period.
- ID-10 Nov. 1, 2006 After completion of the buttress, a series of iron pins were established to allow monitoring of the surface of the buttress. Some movement of these pins was observed and attributed to consolidation and disintegration of the weather-exposed broken shale material used to build the buttress (that movement ceased after the cap was installed as described in ID-11 below.)
- ID-11 Nov. 21 A new synthetic temporary cap was installed over the south slope including the entire footprint of the buttress. The cap was draped over the iron pins so that monitoring could continue where possible. The placement of the cap affected all the pins, which required reestablishment of their positions. Monitoring done after buttress capping confirms that movement has been arrested. Monitoring on some of these pins continues today, referenced to their locations on December 26, 2006.



# EXHIBIT C



State of Ohio Environmental Protection Agency

Northeast District Office

2110 East Aurora Road  
Twinsburg, OH 44087-1924

TELE: (330) 963-1200 FAX: (330) 487-0769  
www.epa.state.oh.us

Bob Taft, Governor  
Bruce Johnson, Lieutenant Governor  
Joseph P. Koncelik, Director

December 29, 2006

RE: REPUBLIC WASTE SERVICES OF OHIO  
COUNTYWIDE RECYCLING  
& DISPOSAL FACILITY (RDF)  
STARK COUNTY  
DIRECTOR'S FINAL FINDINGS  
& ORDERS, SEPT. 6, 2006

Mr. Tim Vandersall  
Countywide RDF  
3619 Gracemont Street S.W.  
East Sparta, OH 44626

Dear Mr. Vandersall:

The Ohio Environmental Protection Agency ("Ohio EPA") issued Final Findings and Orders ("Orders") on September 6, 2006, to Countywide Recycling & Disposal Facility ("hereinafter Countywide or Respondent") pursuant to the authority vested in the Director of Ohio EPA under Ohio Revised Code ("ORC") § 3704.03 and 3734.13. This letter is intended to memorialize the steps taken to implement these Orders and to document, where applicable, in field actions that were agreeable to Ohio EPA towards controlling odors at the facility.

The Findings and Orders required a number of actions on the company's part, all of which were designed to reduce odors at the facility to acceptable levels. Order 1 set forth an overarching timeframe to take these actions. Compliance with Order 1 is dependent on implementing and maintaining actions required in the Orders. While Countywide has implemented the required actions within the December 15<sup>th</sup> deadline, continued compliance will be contingent upon the proper operation and maintenance of the items listed in the Orders below. Note as well that ultimately, Respondent is obligated to comply with the air pollution nuisance prohibition in Ohio Administrative Code (OAC) Rule 3745-15-07.

Order 2 required the Odor Sampling and Analysis Workplan with an implementation schedule. The Respondent submitted Odor Sampling and Analysis Workplan, dated 9/27/06. This document detailed the odor sampling and analysis workplan that described the work required to comply with Order 2. The 14-Day Progress Report 4, dated 10/18/06, and Interim Status Report: Air Monitoring, dated 11/14/06, detailed the progress of odor-related air sampling at Countywide RDF and the surrounding areas and explained the progress of liquid leachate sampling. This report summarized the actions taken as of 11/14/06 to comply with Order 2, as well as the actions that still were pending as of that date.

Order 3 required Respondent to install, implement, operate and maintain a number of control measures designed to capture or control landfill gas emissions. As staff from Ohio EPA and Countywide worked to implement some of these provisions, Ohio EPA and Countywide agreed to certain alternative steps that were deemed more technically prudent from perspectives of both environmental benefit and safety. These are summarized below:

- Order 3b: It was agreed that Countywide would not be required to conduct the survey required by this Order under the areas where the temporary flexible geomembrane cap has been installed.
- Order 3f: It was agreed that Countywide would not be required to install a new flare arrestor until it has completed an evaluation to determine if a new, more efficient arrestor is available that will improve the performance and decrease the downtime of the flare. Countywide shall submit the results of the evaluation for Ohio EPA to review and shall expeditiously install the arrestor if it is determined that it will improve the performance or decrease the downtime of the flare. Countywide shall monitor the current arrestor and shall frequently clean it to assure proper flare performance. Ohio EPA recommends that Countywide perform similar preventative maintenance on all of the landfill's flares.
- Order 3j: It was agreed that the landfill gas collection system plans required to be submitted by December 15, 2006, would be "as-built" as of November 15, 2006. Countywide is required to comply with all other requirements specified by this Order.
- Order 3k: It was agreed that the installation of the flare # 1 backup blower as required by this order would be installed as needed to minimize the flare's downtime. It is also recommended that Countywide purchase additional blowers and other equipment for all the landfill's flares to minimize *downtime and improve operation*.
- Order 3e: To fully comply with this Order, Countywide needs to provide Canton and Ohio EPA written completion reports of the outstanding corrective measures identified in Countywide's progress report dated October 18, 2006. These report(s) are due within 15 days of the completion of the corrective measure and are for the items not identified as being completed in the October 18, 2006, progress report.

MR. TIM VANDERSALL  
COUNTYWIDE RDF  
DECEMBER 29, 2006  
PAGE 3 OF 4

Order 7 required the installation of eight new gas pressure-monitoring probes in the south slope. As of 9/22/06, nine of the planned ten pressure monitoring probes were installed on the south slope. The tenth probe was not installed due to the construction of the buttress.

In accordance with Order 11, on October 18, 2006, Countywide submitted a request to change the language contained in Order 7. The request asserted that Countywide's strict adherence with Order 7 could possibly be detrimental to the overall goal of odor management and the stability of the landfill. The request contained alternative measures Countywide believed would sufficiently address the intent of the Order 7 including the construction of: (1) a toe buttress in the south slope toe area, (2) additional gas collection and control systems, (3) a temporary flexible membrane liner (FML) cap in the affected area, and (4) a gas collection and control system to remove and control the landfill gas collected under the cap. After reviewing this information, Ohio EPA agreed that the benefits contemplated under Order 7 were better accomplished with Countywide's technical approach set forth above.

On December 15, 2006, P.J. Carey & Associates submitted a letter that contained a summary of the additional measures discussed to improve and maintain stability in the affected area of the landfill. This letter stated that Countywide had: (1) completed construction of the stabilizing buttress and that the stability of the south slope is sufficient to allow capping of the affected area with FML, (2) completed most of the installation of the FML cap in the affected area and that the gas collection is currently being performed under the cap, (3) installed nine pressure probes (eight of which were required by Order 7) to monitor gas pressure and liquid heads in the south slope and monitoring was being conducted once per week; (4) installed six dewatering wells; and (7) installed vertical and horizontal gas collectors as shown on the "as built" drawing submitted to Ohio EPA. The letter additionally stated that Countywide planned to install additional dewatering and gas collection wells in the beginning of 2007, and they would submit a report addressing the stability of the affected area in or around January 20, 2007.

Ohio EPA expects that these measures be maintained and any alterations be approved by Ohio EPA. Records of the weekly monitoring of the gas pressures and liquid head pressures shall be maintained and made available upon request. Countywide shall also submit monthly reports to Ohio EPA containing the previous month's factors of safety for the affected area. The submittals shall start with the January 2007 report mentioned in P.J. Carey & Associates' December 15, 2006, letter and shall be submitted by the 20<sup>th</sup> of following month thereafter. Additionally, Ohio EPA reserves the right to add to or to make changes to these requirements.

Additionally, Ohio EPA requests that Countywide submit, for the Director's approval, a preventive maintenance and malfunction abatement plan (plan) for all landfill flares and other control measures and to expeditiously implement the plan. The plan shall be

MR. TIM VANDERSALL  
COUNTYWIDE RDF  
DECEMBER 29, 2006  
PAGE 4 OF 4

designed to prevent, detect and correct any malfunctions or equipment failures prior to their occurrence. It shall include, but is not limited to, a comprehensive preventive maintenance program that addresses the items and or conditions that will be inspected, the frequency of the inspections and/or repairs and the quantity and type of replacement parts that will be maintained in inventory for quick replacement. The plan will also contain a list of the monitoring parameters that will be used to detect and aid in the prevention of a malfunction or equipment failure, the normal range of these parameters, the monitoring frequency, and the recording and retaining of the monitoring and repairs records, as well as the procedure to be followed to aid in the prevention and correction of a malfunction or equipment failure.

Finally, the plan will describe the corrective procedures that will be taken in the event of a malfunction or equipment failure that will used to expeditiously as practicable correct the event. Malfunction as used herein shall not necessarily have the same meaning as a malfunction defined in OAC 3745-15-06.

If you have any municipal solid waste questions concerning this document, please contact Joshua Adams, Ohio EPA, Northeast District Office at (330) 963-1103. If you have any air pollution control questions concerning this document, please contact Dan Aleman, Canton City Health Department at (330) 489-3327.

Sincerely,

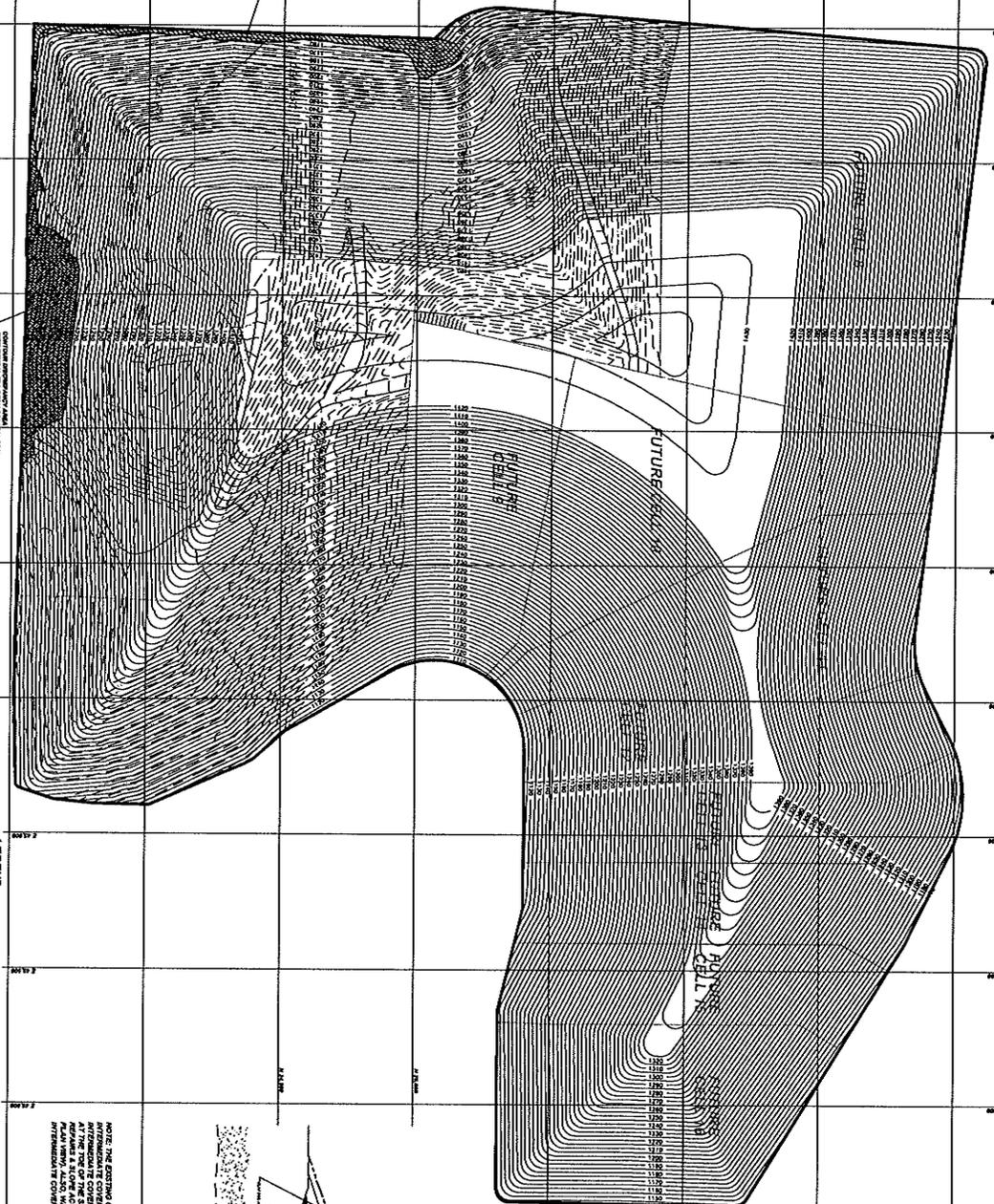


William T. Skowronski  
District Chief

WTS/ams

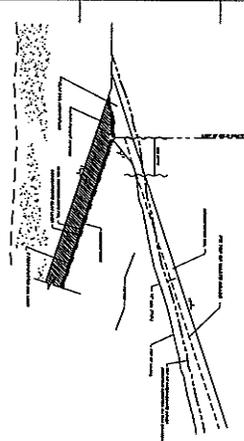
cc: Bob Hodanbosi, Ohio EPA, Central Office, DAPC  
Tom Kahlman, Ohio EPA, Central Office, DAPC  
Dan Harris, Ohio EPA, Central Office, DSIWM  
Carl Mussenden, Ohio EPA, Central Office, DSIWM  
Lynn Sowers, Ohio EPA, NEDO, DSIWM  
Kirk Norris, Stark County Health Department  
Dan Aleman, Canton City Health Department

# EXHIBIT D



**LEGEND**

- THE 10' INTERVAL PLAIN FROM SEPARATION/ADJUST PLACEMENT AREA (20' - 20')
- PLAINLY 10' INTERVAL ON ORIGINAL TO BE DETERMINED IN CENTER PROPOSED COVER
- ADJUSTED HORIZONTAL LIMITS OF WASTE
- CELL SEPARATION LINES
- CONTOUR DEFORMATION/ADJUST (SEE TYPICAL SECTION A-A)
- SPECIAL OPEN REINFORCED CONCRETE/ADJUSTED STRUCTURAL WALL



NOTE: THE EXISTING GROUND CONTAINS WITHIN SOLID WASTE PLACEMENT AREA AND ADJUSTMENT TO COVER INDICATED IS ONE FOOT THICK DIRT TO BE PLACED AT THE TOP OF THE SLOPE. ADJUSTMENT TO BE PLACED FOR SECTION A-A AND PLAN VIEW. ALSO, WASTE COILS ARE VERIFIED IN THE FIELD FROM DUAL COVER & ADJUSTMENT TO COVER SOIL PLACEMENT.

0' 20' 40' 60'

**COUNTY WIDE RDF**  
3019 GRACENONT ST., SW. EAST SPARTA, OHIO 44826

2006 ANNUAL MAP

**REGISTERED ENGINEERING**

DATE: 08/20/06

FIGURE 5

117.000 117.020 117.040 117.060 117.080 117.100 117.120 117.140 117.160 117.180 117.200

42.000 42.020 42.040 42.060 42.080 42.100 42.120 42.140 42.160 42.180 42.200

DATE: 08/20/06

FIGURE 5