

COMMONWEALTH OF MASSACHUSETTS

SUFFOLK, ss.

SUPERIOR COURT
CIVIL ACTION NO. 06-0790 C

COMMONWEALTH OF MASSACHUSETTS,

Plaintiff,

v.

NEW VENTURES ASSOCIATES, LLC,

Defendant.

**MEMORANDUM IN SUPPORT OF COMMONWEALTH'S MOTION FOR A
SUPPLEMENTAL ORDER DECLARING THAT DEFENDANT HAS FURTHER
DEFAULTED ON ITS CLOSURE OBLIGATIONS AND AUTHORIZING MASSDEP TO
CONSTRUCT THE BERM AND COMPLETE OTHER LANDFILL CLOSURE WORK**

Despite this Court's (Cratsley, J.) March 30, 2010 Order ("Default Order") declaring that defendant New Ventures Associates, LLC ("New Ventures") defaulted on its obligations to close the Crow Lane Landfill and authorizing the Massachusetts Department of Environmental Protection ("MassDEP") to "control and direct the use of all remaining Trust Funds," New Ventures continues to delay Landfill closure work required by the Final Judgment. The Commonwealth therefore now seeks a further order authorizing MassDEP to perform additional closure work, including completion of the design and construction of the Landfill berm.

As demonstrated by the attached affidavits, New Ventures claims that it does not have sufficient funds to complete its closure obligations and has admitted that it will not meet the Landfill closure deadlines in the Settlement Agreement and April 30, 2009 Final Judgment in this case. Among other violations, New Ventures has failed to comply with the Final Judgment's requirements that it make necessary safety and stability modifications to the Landfill's berm design and construction plan and then build the berm according to a MassDEP

approved design. The berm contains and supports the massive weight behind the Landfill's base and steep side slopes. It is thus critically important that the Landfill berm be constructed according to a MassDEP approved, safe and stable berm design. It is also critical that berm construction start as soon as possible; further delay will prevent completion of the Landfill's closure this year because some of the final closure work cannot start until the berm has been built. MassDEP, with the assistance of its consultant, is prepared to make the necessary safety and stability design changes, and then contract to have the berm built according to the corrected design this summer or fall.

Indeed, berm construction must begin soon because the Landfill side slopes in the northwest corner have begun to shift due to the inadequate support caused by the unfinished berm. The Landfill's cap has been stretched and stressed by the lack of stable support in this area. If the berm is not completed this summer or fall, increased stress could result in a further slumping or partial collapse of the Landfill's side slopes that could deposit contaminants into the abutting wetlands and cause the release of untreated Landfill gases containing highly toxic concentrations of hydrogen sulfide gas into the ambient air, threatening the health, safety and welfare of residents in surrounding neighborhoods. Furthermore, remedial actions to repair such a collapse would be extremely difficult and costly because the Landfill's side walls are nearly vertical in this area, limiting the available work staging area and creating problems for disposal of released waste and contaminants back inside the Landfill.

The remaining Landfill closure work must be properly and expeditiously completed according to the specifications and requirements in the Final Judgment in order to protect the public health, safety and welfare, and the environment. As demonstrated by the attached affidavits, for years, residents living near the Landfill have been subjected to periodic releases of Hydrogen Sulfide and other Landfill gases that have threatened their health and welfare and

created nuisance conditions. As further demonstrated by the attached affidavits, New Ventures has a long history of failing to operate the Landfill in a manner that prevents the release of noxious Hydrogen Sulfide and other Landfill gases -- even when the Landfill was generating revenue. New Ventures' persistent delays in fully and promptly responding to problems at the Landfill, its repeated claims that it lacks sufficient funds to carry out its Landfill closure and post-closure obligations, and its admission that it will not meet the closure deadlines in the Final Judgment, warrant supplementing the Default Order to declare that New Ventures has further breached its agreement and defaulted on its statutory obligations.

New Ventures deserves no further chances. The Commonwealth respectfully requests that this Court supplement its Default Order and declare that New Ventures has further defaulted on its remaining Landfill closure obligations and breached the Trust Agreement for the Landfill's financial assurance mechanism ("FAM"). In accordance with the terms and conditions of the FAM Trust Agreement, this Court should also supplement the Default Order and authorize MassDEP to "control and direct the use of all remaining Trust Funds" to its contractors to complete all remaining Landfill closure work on which New Ventures has defaulted, including making the necessary berm stability design changes, constructing the berm this summer or fall according to the corrected design, constructing the Landfill's storm water management system, and completing the closure by covering the Landfill with loam and grass seed late this summer or early this fall. *See* Default Order, p. 1-2, ¶¶ 2, 3.

FACTS IN SUPPORT OF DEFAULT DECLARATION AND REQUESTED RELIEF

New Ventures owns and operates the Landfill, which is located on Crow Lane in Newburyport (the "Site"). *See* attached Affidavit of John Carrigan, Chief of the Solid Waste Division of the Massachusetts Department of Environmental Protection's (the "Department") Northeast Regional Office. ("Carrigan Aff."), paragraph 5 ("¶ 5").

The Landfill Closure Schedule

The Final Judgment set a schedule for the Landfill's capping and closure. The Final Judgment required that New Ventures complete installation of the impermeable, FML cap for the entire Landfill by November 27, 2009, before winter weather conditions would halt all installation work until spring. *See* Final Judgment, ¶ 12 (g). The Final Judgment then requires that New Ventures construct the sand drainage layer and cover the entire Landfill cap with loam and grass seed by May 30, 2010. *Id.*, ¶ 12 (h).

Paragraph 12(f) of the Final Judgment required that New Ventures complete construction of the berm along the south side of the Landfill abutting the Phase IA, IIA, and III Areas by November 27, 2009. The Final Judgment requires that the remaining MSE berm along the west and northwest sides of the landfill be completed within ninety (90) days of MassDEP's approval of any required stability design changes. *See Id.*, ¶ 12(a)(i) - (vi). New Ventures has failed to submit for MassDEP approval stability design modifications to the berm that address and "remedy all deficiencies noted" by MassDEP's notice of deficiency regarding New Ventures proposed berm design modifications. *Id.*, 12(a)(v) & (vi). Among other requirements and deadlines, the Final Judgment also orders that New Ventures complete construction of all stormwater controls for the Landfill by June 14, 2010, and submit to MassDEP a Landfill Closure Completion application by June 29, 2010. *Id.*, ¶ 12 (i) and (j).

Design and Construction of the Landfill's Perimeter Berm

The final perimeter berm ("Perimeter Berm") is a critical component of the Landfill design because it supports the massive weight behind the Landfill's steep side slopes, preventing the slopes from collapsing. Affidavit of David Adams, MassDEP Environmental Engineer IV ("Adams Aff."), ¶¶ 9, 10; Affidavit of Benjamin Siebecker, Environmental Engineer at Shaw Environmental, Inc. ("Siebecker Aff."), ¶ 7.

New Ventures has proposed a design for the Perimeter Berm consisting of an unreinforced, earthen berm constructed along the entire perimeter of the Landfill, along with a nearly vertical, mechanically stabilized earth (“MSE”) berm to be built on top of the unreinforced earthen berm, but only along the Landfill’s west side. Siebecker Aff., ¶ 7; Adams Aff., ¶ 25. The MSE berm is necessary because the Landfill’s higher elevation and extremely steep slopes along the west side cannot support a stable construction of the final cover solely by an unreinforced earthen berm. Siebecker Aff., ¶ 7. As of the date of this memorandum, New Ventures has constructed the unreinforced earthen berm along the east and most of the north side of the landfill. Adams Aff., ¶ 12. Although New Ventures has completed some of the unreinforced earthen berm along the west side, this work has not been completed and no work has started on the MSE berm. *Id.*

During construction of the earthen berm, New Ventures failed to comply with the solid waste regulation at 310 C.M.R. 19.107, which requires that berm construction be overseen and documented by an independent, state registered professional engineer, who must certify, with supporting documentation, that construction adhered to MassDEP approved design plans and specifications. Adams Aff., ¶¶ 14-18. *See* 310 C.M.R. 19.107(1), (2). The berm work was not overseen, documented, or certified by an independent engineer. *Id.* Because of this violation, MassDEP was unable to determine whether the berm was properly constructed and compacted, with all soft organic materials removed. Adams Aff., ¶ 18. Siebecker Aff., ¶ 7. In addition, New Ventures’ design assumed that the earthen berm sat on top of a shallow layer of soil followed by bedrock. *Id.* However, this assumption was largely based on conditions along the eastern side of the Landfill. *Id.* New Ventures also dug a limited number of test pits, but these pits were too shallow to confirm that subsurface conditions on the east side also existed on the Landfill’s west side. *Id.*

In March 2006, MassDEP informed New Ventures that it must perform a subsurface “geotechnical investigation” to verify proper berm construction and document the strength and stability of the foundation soils and subsurface conditions. Adams Aff., ¶ 19. Throughout 2006, New Ventures refused to perform the subsurface soil sampling investigation, insisting that a geotechnical evaluation was unnecessary. *Id.*

Because of New Ventures’ failure to document and provide an independent engineer’s certification regarding the earthen berm’s construction, MassDEP issued a notice of deficiency dated March 7, 2007. Adams Aff., ¶ 19. New Ventures failed to address and remedy these deficiencies and MassDEP renewed its demand that New Ventures conduct a soil sampling investigation. *Id.* New Ventures continued to insist that stability testing was not necessary. Siebecker Aff., ¶ 7.

After fighting the need for stability testing for nearly three years, New Ventures agreed to perform the subsurface soil sampling investigation as a requirement of the Settlement Agreement and paragraph 12(a) of the Final Judgment. Adams Aff., ¶ 19. This geotechnical investigation required that New Ventures dig test pits and drill soil borings, with the collected samples subjected to both field testing and laboratory analysis to determine soil composition and strength. *Id.*, ¶ 20. *See* “Crow Lane Landfill Perimeter Berm Boring Protocol,” attached as Appendix A to the Settlement Agreement.

The Factor of Safety Required by the Final Judgment for the Perimeter Berm Design

For heavy, load bearing support structures such as MSE and earthen berms, MassDEP requires that design proposals calculate a “factor of safety.” Adams Aff., ¶ 23; Siebecker Aff., ¶ 8. The factor of safety is the ratio of the actual strength achieved in the design to the highest load, under worst conditions expected to be placed on the structure. *Id.* A factor of safety of below 1.0 indicates the structure will fail. *Id.* The higher the Factor of Safety above

1.0, the lower the risk of failure. *Id.*

The solid waste regulations at 310 C.M.R. 19.112 require that landfill berms be designed to an appropriate factor of safety. Adams Aff., ¶ 26. For many support structures, standard engineering practice typically strives for designs meeting a 1.5 safety factor. *Id.* Based on the particular conditions at the Landfill, MassDEP agreed with New Ventures' consultant that 1.3 was an appropriate factor of safety. *Id.*

The Results of the Soil Sampling Required by the Final Judgment

The geotechnical soil sampling investigation required by the Final Judgment revealed an unexpected and very large deposit of soft clay directly underneath the berm. Adams Aff., ¶ 20; Siebecker Aff., ¶ 7. This clay layer deposit is thirty-to-forty (30-40) feet thick, and at least fifty-five (55) feet thick at its thickest point. *Id.* See Figure 2 in Exhibit B to the Adams Aff. This very thick clay strata stretches for more than 900 feet along the entire west side of the Landfill. Adams Aff., ¶ 20. The soil borings demonstrated that this clay was extremely soft. Siebecker Aff., ¶ 8. In addition to the clay layer, the soil sampling investigation also revealed that a seven (7) to ten (10) foot thick layer of soft organic material (decomposing wood fragments) had been placed in or allowed to encroach into the existing earthen berm itself, creating weak pockets directly underneath the area where the MSE berm would be built. Adams Aff., ¶ 22; Siebecker Aff., ¶ 7.

Thus, the assumptions upon which New Ventures' berm design was based (that all organic material had been removed during construction and that the berm rested on a solid bedrock foundation topped with only a shallow soil layer) were refuted by the soil sampling investigation. Siebecker Aff., ¶ 7; Adams Aff., ¶¶ 13, 20-22, 49. The clay layer and decomposing (rotting) organic material introduce a new set of variables and raise new uncertainties concerning the strength of soils underneath the berm, in part because the soft clay

deposits and organic layer in the berm are subject to consolidation and movement. Adams Aff., ¶¶ 28, 38-40; Siebecker Aff., ¶¶ 8, 9. However, it would be impossible to remove the clay layer because of its depth and large expanse, and removing the soft organic material from inside the earthen berm could result in the release of untreated, toxic landfill gas. Adams Aff., ¶ 38.

New Ventures' Perimeter Berm Design Modification Proposal

Despite the radical change in subsurface conditions upon which its original design was based, New Ventures did not redesign the berm or make extensive (and possibly expensive) design changes. Siebecker Aff., ¶ 7, Adams Aff., ¶ 33. Instead, New Ventures attempted to salvage its original berm design by proposing relatively modest measures aimed at providing some additional support for the MSE berm on the Landfill's west side and northwest corner. *Id.* New Ventures proposes that a five foot thick stone cover be placed on top of the earthen berm along a 230 foot section in the northwest corner to add extra support. *Id.* This thicker stone cover would replace the "rip rap" (crushed stone) berm cover in the original design. *Id.* In addition, New Ventures proposed a rock buttress wall to provide extra support to the MSE berm in the southwest corner. Siebecker Aff., ¶ 7. With these modest modifications, New Ventures claimed that its proposed berm design met the minimum 1.30 safety factor. Adams Aff., ¶¶ 27, 28; Siebecker Aff., ¶ 9.

MassDEP's Deficiency Notice for New Ventures' Berm Design Modification Proposal

In accordance with the terms of paragraph 12(a)(v) of the Final Judgment, MassDEP issued to New Ventures a notice of deficiency dated October 6, 2009 for New Ventures' proposed MSE berm design modifications. *See* Adams Aff., ¶ 29, and DEP October 6, 2009 Berm Deficiency Notice attached as Exhibit C to the Adams Aff. Among the most important of the many deficiencies identified in MassDEP's October 6, 2009 notice was the fact that the design proposal failed to "sufficiently justify the assumption [used] relative to the strength of the clay underlying the berm or the settlement of the organic layer within the [earthen] berm."

Id. Without adequate support and justification for the assumptions underlying the berm proposal, New Ventures could not demonstrate that its berm design proposal met the required 1.3 safety factor. Siebecker Aff., ¶¶ 8, 9, 13; Adams Aff., ¶¶ 28, 30-33, 37, 49.

Between October 2009 and February 2010, New Ventures failed to remedy all of the deficiencies identified in MassDEP's October 6, 2009 notice. Adams Aff., ¶ 29-33, 37; Carrigan Aff., ¶ 10, 31-42. By letter dated March 3, 2010, MassDEP issued a denial of New Ventures' berm design modification plan. *See* March 3, 2010 berm design denial letter attached as Exhibit J to the Carrigan Aff. On April 17, 2010, MassDEP sent New Ventures a "14 day notice" letter pursuant to the terms of paragraph 6(a) of the FAM Trust Agreement. *See* Carrigan Aff., ¶ 39 and MassDEP April 17, 2010 "Notice to Issue Notice and Instructions to Trustee" letter to New Ventures, attached as Exhibit K to the Carrigan Aff. This "14 day notice" informed New Ventures that, because it had failed to submit to MassDEP a modified berm design that "remedies all deficiencies noted by the Department," MassDEP would, after expiration of the 14 day period, send a default notice informing the Trustee that MassDEP is securing control over the transfer, use, and disbursement of funds in the FAM for the purpose of making the necessary berm design stability changes and constructing the berm according to the corrected design. *Id.*

New Ventures' Default on its Remaining Landfill Closure Obligations

By letter to MassDEP dated April 9, 2010, New Ventures admitted that it "will not be able to meet its deadline for completion of the closure under the Settlement Agreement." *See* New Ventures' April 9, 2010 letter to the Commonwealth, attached as Exhibit R to the Carrigan Aff. In addition, New Ventures has repeatedly informed MassDEP that it does not have sufficient funds to perform the remaining closure work. *See* March 25, 2010 Affidavit of MassDEP Northeast Regional Director Richard Chalpin, submitted in support of the Commonwealth March 25, 2010 motion for default, which is on file with this Court and also submitted herewith for the Court's convenience ("Chalpin Aff."), ¶¶ 10-11, 17-19, 21-24.

ARGUMENT

- I. **New Ventures has Defaulted on its Landfill Closure Obligations to Make Safety and Stability Modifications to the Landfill Berm Design and then Construct the Berm According to a MassDEP Approved Design Plan**
 - A. **New Ventures Failed to Address and Remedy all Deficiencies Identified in MassDEP's October 6, 2009, Berm Design Deficiency Notice**

As required by paragraph 12(a)(v) of the Final Judgment, New Ventures submitted for MassDEP approval a MSE berm design modification plan because the soil sampling investigation refuted the assumptions about the strength and stability of the underlying, supportive soils upon which New Ventures' original MSE berm design was based. Adams Aff., ¶ 33; Siebecker Aff., ¶ 7. In accordance with paragraph 12(a)(vi) of the Final Judgment, MassDEP issued to New Ventures a deficiency notice dated October 6, 2009 that identified multiple and serious deficiencies in New Ventures' MSE berm design modification proposal. Adams Aff., ¶ 29. Paragraph 12(a)(vi) of the Final Judgment requires that "New Ventures shall within fifteen (15) days of the Department's deficiency notice submit for Department approval a revised MSE berm modification plan with a safety factor no less than 1.30 that remedies all deficiencies noted by the Department."

- B. **New Ventures Has Not Demonstrated That Its Proposed Berm Design Meets the Required Safety Factor and MassDEP Cannot Approve the Design**
 1. **By failing to use appropriately conservative assumptions about the strength of the clay layer and organic materials, and by failing to document its assumptions about consolidation, New Ventures has not demonstrated that its proposed design meets the required safety factor**

Among the many deficiencies identified by MassDEP in its notice of deficiency for the modified berm design proposal was New Ventures' failure to use appropriately conservative assumptions about the strength and stability of the underlying soils. Adams Aff., ¶¶ 30-32; Siebecker Aff., ¶¶ 8, 13. New Ventures also failed to use the best available and more conservative documentation for adjusting the clay sample strength and stability test

results it used in its various safety calculations. *Id.* In addition, New Ventures failed to run strength tests on or otherwise document the assumptions it used about the strength of the organic material found in the earthen berm. *Id.* Finally, New Ventures provided no test data or other supporting information to justify the assumptions it used regarding the extent to which there will be consolidation (settlement) in the clay layer. *Id.* New Ventures' failure to provide test data to justify the assumptions it made about the strength of the weak pockets of rotting organic matter mean that "no one knows what the decomposed, long term strength of the organics will be . . . [and] the long term strength of the berm is highly questionable." Siebecker Aff., ¶ 9. New Ventures has remedied none of these deficiencies. Adams Aff., ¶¶ 30-34, 37, 49; Siebecker Aff., ¶¶ 8, 9, 13. Because of these deficiencies, New Ventures has not demonstrated that its berm design achieves a 1.31 safety factor and has not submitted a berm design that MassDEP can approve. Adams Aff., ¶¶ 37, 49; Siebecker Aff., ¶¶ 8, 9, 13.

New Ventures also failed to successfully demonstrate the sensitivity of its safety factor calculations to reasonably anticipated variations in the underlying assumptions. Adams Aff., ¶ 27. MassDEP requires this type of "sensitivity analysis" where, as here, the design *just* meets the minimum factor of safety, with nearly no margin for error. *Id.*, ¶ 23. New Ventures' analysis did not sufficiently vary the parameters and underlying assumptions. Siebecker Aff., ¶ 8. But even the limited, non-conservative parameters New Ventures used in its sensitivity analysis failed to achieve the minimum required 1.3 safety factor. *Id.*

2. MassDEP cannot approve the proposed rock buttress because New Ventures has not demonstrated that it meets stability requirements and failed to provide detailed design drawings, construction plans, or quality control quality assurance specifications

New Ventures' only modifications of its original berm design is the replacement of a crushed stone cover on the earthen berm in the northwest corner with a ticker stone cover and the addition of a rock buttress wall to help prop up the MSE berm along the Landfill's

southwest corner. Adams Aff., ¶¶ 33, 35; Siebecker Aff., ¶ 10. With regard to the latter, the very heavy rock buttress wall, combined with the very heavy, twenty (20) foot high MSE berm, will place the highest vertical load (that is, exert more pressure) on the underlying, subsurface soils along the southwest corner than at any other point along the Perimeter Berm. Siebecker Aff., ¶ 10. And this maximum pressure load would occur at the part of the Perimeter Berm with the most unstable conditions: the very thick layer of very soft clay. *Id.*

Because the clay layer will consolidate under the MSE berm and rock buttress wall, the design and construction plan for the rock buttress must be fully detailed and fully document that the proposed buttress wall meets the required stability and design specifications. Siebecker Aff., ¶ 10. However, New Ventures has provided nothing more than a simple design drawing. *See Id.*, and drawing inserted to ¶ 10 of the Siebecker Aff. New Ventures' drawing fails to demonstrate or document how the design meets the required specifications. *Id.* In addition, the design fails to use a conservative assumption for the rock buttress' upper limit for strength and stability. *Id.* Moreover, it is not possible to test the non-conservative strength assumptions used by New Ventures because there is no method for testing the sheer strength of the large rocks proposed for the rock buttress' construction. *Id.* Because it has failed to address or remedy any of these deficiencies, MassDEP cannot approve the rock buttress and New Ventures has not demonstrated that its berm modification proposal meets the required safety factor. *Id.*, ¶ 13.

3. New Ventures has not submitted an approvable berm design because it has failed include a stability monitoring plan

Finally, MassDEP's deficiency notice informed New Ventures that its design proposal failed to adequately address the berm's short and long-term stability. Adams Aff., ¶ 29. In an attempt to remedy this deficiency, New Ventures has proposed stability monitoring of the MSE berm during and after construction. Adams Aff., ¶ 33; Siebecker Aff., ¶ 9.

However, New Ventures has merely agreed that monitoring is necessary; It has not submitted an actual stability monitoring plan and protocol, has not presented any criteria for determining when stability test results indicate that further design changes are necessary, and has not prepared an emergency or contingency plan to further buttress the berm if stability test show that failure or a partial collapse may be imminent. Adams Aff., ¶ 34; Siebecker Aff., 9. Should monitoring detect stability problems, New Ventures simply proposes that they somehow be dealt with then – after the problems crop up. *Id.*

The MassDEP cannot take a “wait and see” approach to berm stability. Adams Aff., ¶34, 37; Carrigan Aff., ¶¶ 11, 12, 18, 81. Waiting for signs of instability or imminent failure that must be addressed with unspecified, unapproved, additional design changes not only fails to address the deficiencies identified by MassDEP’s deficiency notice, it puts the residents living in the vicinity of the Landfill at risk of a berm failure or need for emergency berm alterations that could result in the release of untreated landfill gas into surrounding neighborhoods. Adams Aff., ¶¶ 34, 37, 38-42; Carrigan Aff., ¶ 11. MassDEP cannot and will not approve New Ventures’ berm design as proposed. *Id.*

4. The risk of berm failure and threat to public health, safety, and the environment

With regard to the thick clay layer, New Ventures notes that, over time, consolidation will result in stronger, more compact and stable clay, so the risk of instability will diminish. Siebecker Aff., ¶ 7. However, consolidation of the clay could cause a loss of foundation bearing support for the berm or rock buttress wall, potentially causing the MSE berm to fail and the Landfill side slopes to collapse. Adams Aff., ¶¶ 38, 40; Siebecker Aff., ¶¶ 8, 10.

Unlike the clay layer, the pockets of organic material in the earthen berm will become weaker and less stable over time as the rotting organic matter breaks down. Adams Aff., ¶ 39; Siebecker Aff., ¶ 9. Consolidation of the organic matter could create slip planes within the

berm, causing the berm to behave as a pile of independent blocks rather than the solid, monolithic mass required by the design. Adams Aff., ¶ 39. With sections of the berm moving independently, the berm becomes unstable and incapable of supporting the Landfill mass. *Id.* Consolidation of the rotting organic matter in the earthen berm could also cause the berm to collapse from under the Landfill side slopes, resulting in the failure described in the preceding paragraph. Adams Aff., ¶ 39; Siebecker Aff., ¶ 9. As MassDEP's consultant notes, landfill berm failure can happen and has happened in Massachusetts. Siebecker Aff., ¶¶ 9, 5(e).

Either a catastrophic berm failure or a partial collapse of the side slopes along Landfill's west side would result in berm construction materials, leachate, and solid waste from inside the Landfill to slough into the adjacent wetlands. Adams Aff., ¶¶ 40-42. Moreover, a full failure would cause the release of untreated landfill gas; even a partial collapse would also likely release untreated Landfill gases, including potentially toxic concentrations of hydrogen sulfide, into the ambient air, threatening the health, safety and welfare of residents in surrounding neighborhoods. *Id.*

5. The Berm is already showing disturbing signs of stress and potential failure that demonstrate that the berm design must be finalized and the berm constructed this year

Short of the berm failure scenarios described above, berm instability may cause the Landfill's nearly vertical side slopes to slump forward, causing the solid waste in the Landfill to stretch and tear the FML cap, which could damage the Landfill's gas collection system or, if left uncorrected, lead to a partial collapse. Adams Aff., ¶ 43; Siebecker Aff., ¶ 11. As demonstrated by the photographs attached as Exhibit D to the Adams Aff. and Attachment 4 to the Siebecker Aff., this slumping and straining of the FML cap is already occurring along the Landfill's northwest corner. Adams Aff., ¶ 43; Siebecker Aff., ¶ 11. The strain is readily apparent from the bulge and stretching of the FML cap in this area. *Id.* The strain has become so great that the FML cap has begun to fail by ripping and tearing along stress points. *Id.* If a

safe and stable berm in not constructed soon, this tearing could progress to the point of collapse in the Landfill's northwest corner. *Id.*

6. In the expert opinion of MassDEP and its consultant, New Ventures has not demonstrated that its berm design meets the required safety factor and even New Ventures' consultant has not given an unqualified opinion that the proposed design meets the safety factor

For the reasons discussed above and further elaborated in paragraphs 7-12 of the Siebecker Aff., it is the professional opinion of MassDEP's consultant that:

the berm design plans submitted by GEOCOMP on behalf of New Ventures are inadequate and that they do not demonstrate that the proposed berm on the west and north west sides of the landfill will be structurally sound. I believe that the stability analysis provided by GEOCOMP to date does not provide sufficient justification that a stability factor of safety of 1.3 will be achieved by the currently proposed design. This statement is based upon: 1) a review of site specific stability parameters by Shaw's geotechnical specialist, 2) a lack of sufficient documentation for some of the critical design calculations, and 3) the lack of a contingency plan in the event monitoring indicates berm movement either during construction or post construction.

Siebecker Aff., ¶ 13. Likewise, it is the professional opinion of MassDEP's engineer that:

New Ventures has not satisfactorily demonstrated that the design of the berm as proposed meets a minimum Factor of Safety of 1.3. New Ventures' initial berm design proposals assumed substantially different site conditions than are now known to exist at the site. As late as 2008 site conditions were believed to provide a base of firm soils, with shallow bedrock, capable of supporting large vertical and horizontal loads. The 2009 investigation revealed the presence of, thereto unknown, thick soft clay deposits with very limited strength to support the loads of the berm.

Adams Aff., ¶ 44. *See also* Adams Aff., ¶¶ 30-35, 37.

Furthermore, New Ventures' consultant, Geocomp, has not offered an unqualified opinion that the proposed design meets the minimum 1.3 safety factor because it admits that consolidation of the clay and rotting organics demand that the berm be monitored during and after construction for drift caused by settlement, and that further design changes or additional buttressing may be necessary should monitoring detect instability or threat of collapse:

Geocomp caveats their calculation of the Factor of Safety by acknowledging that their opinion does not fully address the potential impact of consolidation of the deep clay layer under the berm, or the impact of poorly defined weak organic layers within the berm.

Adams Aff., ¶ 28.

II. New Ventures Has Defaulted on its Remaining Landfill Closure Obligations

New Ventures admits that it is in default of its obligations to complete the Landfill's closure. Because it has refused to address and remedy the deficiencies in its proposed berm design modification plan, New Ventures admits it "will not be able to meet its deadline for completion of the closure under the Settlement Agreement." *See* Carrigan Aff., ¶ 69, 73 and New Ventures April 9, 2010 letter attached as Exhibit R to the Carrigan Aff. The Final Judgment requires that the sand drainage layer be constructed and loam cover and grass seed be placed over the Landfill cap by May 30, 2010, and finish construction of the stormwater system by June 14, 2010. New Ventures will not meet any of these deadlines and has not even started work in an attempt to meet these deadlines. *Id.*; *See* Final Judgment, ¶ 12(h), (i) and (j).

New Ventures attempts to blame the Commonwealth for its failure to meet the Final Judgment deadlines, arguing that MassDEP's disapproval of New Ventures' proposed berm design modification plan – and alleged refusal to meet in an attempt to resolve the dispute – have prevented it from working to finish closing the Landfill.¹ *Id.* New Ventures' position is disingenuous at best. The dispute over the berm design does not prohibit New Ventures from working to meet other closure deadlines. *Id.* The only part of the Landfill that must wait for loam cover and grass seed placement is the area around the uncompleted Perimeter Berm in the northwest corner and along the Landfill's south and west sides. *Id.* At this time, nothing

¹ As the Commonwealth noted by letter to New Ventures dated April 16, 2010, there is no reason to meet because the precise ways in which New Ventures' berm design modification plan failed to address and remedy all deficiencies identified by MassDEP and what is required to remedy those deficiencies has already been made abundantly clear in MassDEP's October 7, 2009 deficiency notice, subsequent communications between MassDEP and New Ventures about the berm design in October and November, 2009, and MassDEP's March 3, 2010 berm design denial letter. *See* Commonwealth's April 16, 2010 letter, attached as Exhibit U to the Carrigan Aff.

prevents New Ventures from placing loam and grass seed on top of a large portion of Landfill's completed cap, and New Ventures has not even attempted to meet the Final Judgment's deadline for completing this portion of the Landfill. Moreover, to the extent that loam and seed placement cannot be completed along all of the Landfill's south side until the unreinforced earthen berm has been built along the southern perimeter, there is nothing holding up construction of this portion of the berm. *Id.* The stability dispute over New Ventures' proposed design modifications is limited to the Landfill's west side and northwest corner. Adams Aff. ¶¶ 20, 30-35. In fact, in November 2009, MassDEP emphasized that New Ventures can and should proceed with construction of the MassDEP approved earthen berm on the Landfill's south side. *See Carrigan Aff.*, ¶ 37 and email to New Ventures dated November 18 attached as Exhibit I to the Carrigan Aff.

III. Because New Ventures Has Further Defaulted, This Court Should Order that, Pursuant to the Trust Agreement, MassDEP is Authorized to Control the Direction and Disbursement of the FAM Funds to Pay Contractors to Make the Necessary Stability Design Changes to the Berm, Build the Berm According to the Corrected Design, and Perform All Remaining Closure Work

On repeated occasions, New Ventures has informed MassDEP that it lacks the revenues to fund any further closure activities, including those required by this Court's Final Judgment, and has requested that MassDEP authorize disbursements for those activities from the FAM. *See Chalpin Aff.*, ¶¶ 10-11, 17-19, 21-24. New Ventures suggests that it is ready to carry out the necessary work, provided it is allowed to draw funds from the FAM to pay for the work. But the FAM is a performance bond, not the primary funding mechanism for closure and post-closure work. The FAM is intended to be held in reserve, to act as a fall-back in case the owner or operator defaults on its obligations, and to ensure that funds will be available should MassDEP find that it must itself contract for the necessary work. New Ventures therefore cannot access the FAM to fund work it is required to do under the Final Judgment, and its failure to do that work on schedule and in accordance with the Final

Judgment's requirements and MassDEP approved plans puts it in default under the terms of the FAM Trust Agreement and in violation of the Judgment.

Under the terms of the Trust Agreement and 310 C.M.R. 19.051, MassDEP and its contractors may be reimbursed for any repair work or corrective action MassDEP performs to bring the Landfill back into compliance with any orders issued by MassDEP including, the Final Judgment's requirements. In addition, the Trust Agreement provides that if New Ventures fails in whole or in part to carry out any corrective action work or perform its Landfill closure obligations, it is in default and MassDEP may take exclusive control over the use and disbursement of the FAM to pay contractors to perform all remaining closure and post-closure work. Paragraph 6(a) of the Trust Agreement provides that:

If [New Ventures] has failed in whole or in part to carry out its corrective action, closure and/or post-closure maintenance obligations in accordance with approved plans or has otherwise failed to cure any corrective action, closure or post-closure related condition contained in any notice to [New Ventures] from the Department, including any notice concerning the existence, modification, addition, replacement or failure to replace any financial assurance mechanism, the Department may send written notification (a "Default Notice") to the Trustee of [New Ventures'] failure, after first giving [New Ventures] fourteen days written notice of the Department's intention of doing so, along with written instructions to draw against the Trust Fund Property. Upon Receipt of a Default Notice and instructions from the Department to draw upon the [FAM], the Trustee shall, in accordance with such instructions, draw upon the [FAM] . . . and make such payments from the Trust Property, or any portion thereof, all as the Department may at that time *or thereafter* direct in writing. *[New Ventures] shall thereupon lose all right, title and interest in the Trust Fund property in an amount equal to the cost incurred to perform or have performed all tasks the Department deems necessary to complete proper corrective action, closure and/or post-closure, maintenance and monitoring of the [Landfill]*

Trust Agreement, paragraph 6(a) (emphasis added).

Pursuant to Paragraph 6(a) of the Trust Agreement, New Ventures' failure to remedy all berm design deficiencies identified by MassDEP, construct the berm according to a MassDEP approved design, and perform all remaining Landfill closure work, including meeting the loam and seed deadlines in the Final Judgment, constitutes default because New Ventures "has failed in whole or in part to carry out its corrective action, closure and/or post-

closure maintenance obligations . . . or has otherwise failed to cure any corrective action, closure or post-closure related condition contained in any notice to [New Ventures] from [MassDEP].” Trust Agreement, paragraph 6(a). Upon such a default, paragraph 6(a) of the Trust Agreement authorizes MassDEP to issue a “default notice” and then instruct the Trustee to make payments from the FAM “ . . . as [MassDEP] may at that time or thereafter direct in writing,” at which point New Ventures shall “*lose all right, title and interest in the Trust Fund property in an amount equal to the cost incurred to perform or have performed all tasks the Department deems necessary to complete proper corrective action, closure and/or post-closure*” work. Trust Agreement, paragraph 6(a) (emphasis added).

Over the long course of the Landfill’s closure, New Ventures has time-and-again violated the Commonwealth’s solid waste and air pollution control laws, MassDEP administrative orders, and orders of this Court, resulting in nuisance conditions that threatened the health and welfare of residents living near the Landfill. *See Carrigan Aff.*, ¶ 6, and paragraphs 15-17, 38-46 and 79-84 of the Carrigan Affidavit dated July 27, 2007 submitted in support of an injunctive motion seeking an order that New Ventures implement several measures to stop gas releases and odors at the Landfill. *See also* paragraphs 16-21 of the Carrigan Affidavit dated November 3, 2008, submitted in support of a November 2008 Contempt Complaint filed in this case. Both the 2007 and 2008 Carrigan Affidavits are on file with the Court. New Ventures has a long history of failing to operate the Landfill in a manner that prevents the release of noxious Hydrogen Sulfide and other Landfill gases. *Id.*

Because New Ventures has failed to make the necessary stability changes to the berm design and construction plan, construct the berm, and meet the closure deadlines in the Final Judgment, this Court should declare that New Ventures has further breached the Trust Agreement and further defaulted on its Landfill closure obligations. Pursuant to the terms of the Trust Agreement, this Court should also declare that MassDEP is authorized to direct the use and disbursement of the remaining trust funds to assure that the berm is completed

promptly and safely and remaining Landfill closure work are performed fully and properly in a manner that minimizes the risk of noxious Hydrogen Sulfide and other landfill gas releases.

CONCLUSION

For all the foregoing reasons, the Commonwealth respectfully requests that this Court issue an order supplementing its March 30, 2010 default order and declaring that New Ventures has further defaulted on its Landfill closure obligations and breached the Trust Agreement. Because New Ventures has further defaulted, this Court should also declare that, pursuant to the terms of the Trust Agreement, MassDEP is authorized to control and direct the use and disbursement of all remaining trust funds to reimburse contractors performing all further Landfill closure work, including making the necessary berm design safety and stability changes and constructing the berm in accordance with that corrected design plan.

Respectfully submitted,

COMMONWEALTH OF MASSACHUSETTS
MARTHA COAKLEY, ATTORNEY GENERAL



Matthew C. Ireland, BBO # 554868
Assistant Attorney General
Environmental Protection Division
One Ashburton Place
Boston, Massachusetts 02108
617-727-2200, ext. 2434
matthew.ireland@state.ma.us

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