

May 17, 2013

BY ELECTRONIC MAIL AND HAND DELIVERY

Elizabeth J. Callahan
Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup
One Winter Street
Boston, MA 02108

**Re: Response to Request for Public Comments
On Proposed MCP Amendments**

Dear Ms. Callahan:

We appreciate the opportunity to provide comments on the public hearing draft of the Department's Proposed Amendments ("Proposed Amendments") to the Massachusetts Contingency Plan ("MCP"). This letter, submitted on behalf of UniFirst Corporation, focuses on key provisions in several topic areas covered in the Proposed Regulations, including (1) Activity and Use Limitations, (2) Vapor Intrusion and Closure, and (3) Nonaqueous Phase Liquid ("NAPL") and Source Control.

We know that you already have received thoughtful and extensive comments from many other individuals and organizations, including NAIOP Massachusetts. Many of the issues that NAIOP Massachusetts has identified in its comments are of equal concern to UniFirst, such as the drift away from risk-based toward prescriptive standards -- particularly for potential vapor intrusion sites -- and instances throughout the Proposed Amendments in which the Department proposes that "violations" by subsequent owners or operators may "invalidate" Permanent or Temporary Solutions. These suggested changes are neither practical nor consistent with the intent of the statute under which the Proposed Amendments are to be promulgated. Rather than repeat the comments you have already received from NAIOP Massachusetts, we refer you to those comments, and reserve the right to rely on them, in any future proceedings, as if they were fully incorporated into this letter.

We are providing our comments in the order in which the topic areas were covered in the public hearing draft of the Proposed Amendments. For convenience, we have repeated the language of the Proposed Amendment on which we are commenting, with reference to the section and page number on which it appears in the "redline strikeout" version. Our comments are written in italics, and suggested changes to Proposed Amendments are indicated by italics or "strike out."

Activity and Use Limitation Amendments

Notice of Activity and Use Limitation, 40.1074(5), P. 27

(5) Incorporation into Instruments of Transfer. Upon transfer of any interest in and/or a right to use the property or a portion thereof that is subject to a Notice of Activity and Use Limitation, the Notice of Activity and Use Limitation shall be incorporated either in full or by reference into all

future deeds, easements, mortgages, leases, licenses, occupancy agreements or any other instrument of transfer. Within 30 days of recording or registering the Notice of Activity and Use Limitation in a deed, a copy of such deed shall be submitted to the Department.

Although we understand that the Department has determined in the course of many audits that deeds frequently do not include reference to previously recorded AULs, as currently required by the MCP, it is not at all clear that imposing an additional notice requirement will alleviate that problem. Worse, having hundreds of new notices sent to the Department is at odds with the overall goal of streamlining procedures and reducing administrative burdens on both the public and the Department. Nevertheless, if the Department does decide to include this notice provision in its final amendments, then it must specify what party bears the obligation to provide notice. We believe the obligation should rest with the party obtaining the new interest in the property, both because that is the party which will have a continuing relationship to the property, and that is the party which the Department wants to ensure has obtained due notice of the applicable land use restrictions. We propose that the language be revised as follows:

Suggested language:

(5) Incorporation into Instruments of Transfer. Upon transfer of any interest in and/or a right to use the property or a portion thereof that is subject to a Notice of Activity and Use Limitation, the Notice of Activity and Use Limitation shall be incorporated either in full or by reference *by the person or entity receiving such interest or right* into all future deeds, easements, mortgages, leases, licenses, occupancy agreements or any other instrument of transfer. Within 30 days of recording or registering the Notice of Activity and Use Limitation in a deed, *the new property owner shall submit* a copy of such deed ~~shall be submitted~~ to the Department.

Violations of a Permanent Solution or Temporary Solution, 40.0020 (2), P.58

(2) If the owner and operator of the property or properties subject to the Permanent or Temporary Solution Statement at the time that the activities, uses, or exposures change, and/or any other person liable under M.G.L. c. 21E for the disposal site who has knowledge of such, fail to comply with 310 CMR 40.0020(1), such violation shall be considered a failure to achieve or maintain a level of No Significant Risk in the case of a Permanent Solution, or No Substantial Hazard in the case of a Temporary Solution, and the Department shall deem the Permanent or Temporary Solution to be invalid.

As crafted, the language of this Proposed Amendment suggests that actions of subsequent owners and operators who are unrelated to a party that successfully achieved a Temporary or Permanent Solution in the past may have adverse consequences for that party. That is neither fair nor practical and it would defeat the expectations of every party that completes the entire MCP process in conformity with the rules. Addition of a knowledge qualifier worsens, rather than ameliorates, this problem, because it suggests that a prior performing party that has no current affiliation with a site nonetheless has an ongoing duty to ensure that conditions there do not change. There is no provision in Chapter 21E that imposes such an ongoing duty.

Suggested language:

(2) If the owner and operator of the property or properties subject to the Permanent or Temporary Solution Statement at the time that the activities, uses, or exposures change, ~~and/or any other person liable under M.G.L. c. 21E for the disposal site who has knowledge of such,~~ fail to comply with 310 CMR 40.0020(1), such violation shall be considered a failure to ~~achieve or~~ maintain a level of No Significant Risk in the case of a Permanent Solution, or No Substantial Hazard in the

case of a Temporary Solution, and the ~~Department may deem the Permanent Solution~~ ~~invalid~~ *owner and operator shall be responsible for undertaking all response actions necessary to achieve and maintain a level of No Significant Risk or No Substantial Hazard, respectively.*

Vapor Intrusion and Closure-Related Amendments

Immediate Response Action Completion Reports, 40.0427, P. 67

(1) An Immediate Response Action shall be considered complete when the release, threat of release and/or site conditions which give rise to the need for that Immediate Response Action, as described in 310 CMR 40.0412, have been assessed and, where necessary, remediated in a manner and to a degree that will ensure, at a minimum:

- (a) the accomplishment of any necessary stabilization of site conditions;
- (b) the elimination or control of any Imminent Hazards to health, safety, public welfare and the environment, without the continued operation and maintenance of Active Remedial Systems, pending the completion of any necessary Comprehensive Response Actions; and
- (c) the completion of time-critical measures addressing the elimination, prevention or mitigation of Critical Exposure Pathway(s) as documented with an LSP Opinion concluding that:
 1. the Critical Exposure Pathway(s) have been eliminated using passive measures; or
 2. a feasibility study, as specified at 310 40.0414(3) and (4), supports the conclusion that it is not feasible to eliminate, prevent, or mitigate the Critical Exposure Pathway(s); or
 3. mitigation of Critical Exposure Pathway(s) is continuing by incorporation into the site's Phase IV Remedy Implementation Plan.

Changes that the Department proposes to make to this provision constitute a substantial improvement over existing language. The phrase "pending the completion of..." in this section of the MCP is unclear and has caused substantial debate and confusion in the past. The Department quite properly proposes to eliminate that phrase from 40.0427(1)(c). The same phrase needs to be stricken from 40.0427(1)(b) as well. Literally read, Paragraph (b) may be construed to prohibit closure of an IRA until Comprehensive Response Actions have been completed, where an Active Remedial System has been installed to eliminate or mitigate an Imminent Hazard. Since Comprehensive Response Actions are inclusive of Phase IV, Phase V and ROS, this would mean that the IRA could not be closed even when Phase IV has been completed, and the remedial alternative selected includes an Active Remedial System. Once Phase IV has been completed, any uncertainties about the site, including the nature and extent of contamination and the risk posed by the site, have been addressed. The IRA should be able to be closed and the Active Remedial System operated as part of Comprehensive Response Actions, in accordance with the provisions of 40.0800.

Suggested language:

- (b) the elimination or control of any Imminent Hazards to health, safety, public welfare and the environment, *with or without* the continued operation and maintenance of Active Remedial Systems, ~~pending the completion of any necessary Comprehensive Response Actions; and~~

Proposed new 40.0427(1)(c)(1) and (2) need to be made parallel and consistent, both internally and with the provisions of existing 310 CMR 40.0414, which requires that the Critical Exposure Pathway be eliminated or mitigated to the extent feasible.

Suggested language:

(c) the completion of time-critical measures addressing the elimination, ~~prevention~~ or mitigation of Critical Exposure Pathway(s) as documented with an LSP Opinion concluding that:

1. the Critical Exposure Pathway(s) have been eliminated *or mitigated to the extent feasible* using passive measures; or
2. a feasibility study, as specified at 310 40.0414(3) and (4), supports the conclusion that it is not feasible to eliminate, ~~prevent~~, or mitigate the Critical Exposure Pathway(s); or

Paragraph (c)(3) clearly states that the operation of an Active Remedial System, previously installed to mitigate a CEP, can be incorporated into the Phase IV RIP and the IRA closed, which is an improvement to the existing regulation. However, the IRA should be able to be closed once the Phase II Comprehensive Site Assessment, inclusive of the risk characterization pursuant to 310 CMR 40.0900, has been completed and has demonstrated a condition of No Significant Risk without the need to implement further mitigation measures. At that point, the "immediate action" period for mitigation or elimination of CEPs to the extent feasible has expired and no longer applies.

Suggested language:

(c)(3) mitigation of Critical Exposure Pathway(s) is continuing by incorporation into the site's Phase IV Remedy Implementation Plan, *if and to the extent necessary to achieve or maintain a condition of No Significant Risk.*

Definition of Active Remedial System, P. 84

Active Remedial System means a type of Remedial System that relies upon the continual or periodic use of an on-site or in-situ mechanical or electro-mechanical device to remove oil or hazardous material from the environment or treat contaminated media or debris. An Active Remedial System may produce waste requiring management and disposal or recycling. The term does not include Active Exposure Pathway Elimination Measures.

The definition of Active Remedial System explicitly excludes Active EPEMs; however, 40.0427(1)(b) explicitly cites Active Remedial Systems used to abate Imminent Hazards, which likely will be Active EPEMs, often without off-gas treatment.

See suggested language above for paragraph 40.0427(1)(b).

Definition of Exposure Pathway Elimination Measure, P. 84

Exposure Pathway Elimination Measure means a remedial action that eliminates exposure to human or ecological receptors or reduces such exposures to meet applicable performance standards. An Exposure Pathway Elimination Measure does not produce waste requiring management and disposal or recycling.

The Department's proposed definition of an Exposure Pathway Elimination Measure (EPEM) as

a remedial measure that does not produce waste requiring management and disposal or recycling is unnecessarily restrictive, particularly given the Department's further proposal that sites with Active EPEMs may be considered to have reached a Permanent Solution, but those with Active Remedial Systems may not. Whether a carbon canister has been included as part of a subslab depressurization system (SSDS), either voluntarily or in accordance with MassDEP policy WSC-94-150 Off-Gas Treatment of Point Source Remedial Air Emissions, has no bearing on whether or not a Permanent Solution has been achieved. An SSDS without carbon treatment is no more or less active or reliable than one with such treatment.

Immediate Notification Upon System Failure, 40.0711(5), P. 87

(5) All Active Exposure Pathway Elimination Measures shall be equipped with remote monitoring technology that will alert the occupants of the building, the party(ies) responsible for maintaining and operating the measure, and the Department, immediately upon failure of the system.

Requiring that Active EPEMs include remote monitoring technology is reasonable and consistent with prevailing practice. Having such systems automatically alert the Department and all building occupants is unprecedented and ill-advised. Immediately alerting system operators ensures that potential problems, and false alarms, can be investigated and addressed promptly by qualified professionals, typically without any risk or upset to building occupants. By contrast, having such alerts transmitted more widely will cause unnecessary confusion and consternation, especially for occupants who have no understanding of how the system works and no obligation to maintain or repair the system. Having no prior opportunity to investigate, the operator will be in no position to respond to occupants' inquiries and explain the problem. Having such alerts apply equally to minor system shutdowns (i.e., during temporary power outages) and longer term disruptions are as likely to upset occupants as to condition them not to respond. Notifications should be limited to prolonged shutdowns that might result in exposure above applicable limits. Furthermore, notifications should be made by professionals, and not automatically by machines, as is the case, for good reason, for all other notifications required under the MCP.

Suggested language:

(5) All Active Exposure Pathway Elimination Measures shall be equipped with remote monitoring technology that will alert ~~the occupants of the building, the party(ies) responsible for maintaining and operating the measure, and the Department,~~ immediately upon *shutdown and* failure of the system. *Within 30 days after such an unscheduled shutdown, the party(ies) responsible for maintaining and operating the measure shall provide written notification to the Department of the cause and duration of the shutdown, and measures instituted both to redress the problem and prevent its recurrence. If the system cannot be restarted within 30 days after such an unscheduled shutdown, such notice also shall be provided to the property owner and to building occupants potentially affected by the shutdown.*

Evaluation of Conditions in the Absence of an Active Exposure Pathway Elimination Measure, 40.0720(1)(c), P. 88

(c) Pursuant to 310 CMR 40.1020, an analysis shall be conducted to evaluate and document the feasibility of continuing to operate the Active Exposure Pathway Elimination Measure in order to achieve or approach background levels of OHM.

If an EPEM is "a remedial action that eliminates exposure," as the Department has defined it, then its function is to prevent exposure, and not to remove OHM from the site in order to achieve

some long-term level of cleanup. Furthermore, Active EPEMs are primarily or exclusively defined as measures to address the indoor air exposure pathway. The Department has stated clearly and repeatedly that there is no such thing as “background” for indoor air. If background does not exist, then it may be “achieved” by doing nothing, or it may not be achievable at all.

Suggested language:

Delete 40.0720(1)(c) in its entirety.

Permits for Active Exposure Pathway Elimination Measures, 40.0750, P. 89 et seq.

The onerous requirements that the Department proposes to establish for Active EPEM permits are fundamentally at odds with their professed purposes. The Department states that its intention is to eliminate procedural burdens and barriers that may discourage performing parties from installing active rather than passive systems. The Department’s larger goal is to streamline administrative requirements and improve efficiency. As written, the requirements that the Department has proposed are lengthy, cumbersome, and onerous. Contrary to the Department’s intent, these requirements will multiply disincentives to install active systems, or to move a site from Remedy Operation Status to a Permanent Solution. The better approach would be to establish a simple, general permit with minimal reporting requirements, similar to the general stormwater permit, or to eliminate the permit requirement altogether. The Department, in fact, has not articulated a rationale or demonstrated a need for importing an entirely new permitting regime, with detailed operating and administrative requirements, into the privatized or semi-privatized MCP system.

Requirements for Active Exposure Pathway Elimination Measures Permit Applications, 40.0752(5), P. 90

(5) The applicant shall establish and maintain a financial assurance mechanism pursuant to 310 CMR 40.0170(6) that provides for the continued availability of an immediate repair and replacement account to be used by the Permittee solely for the immediate repair and replacement of any failing components of the Active Exposure Pathway Elimination Measure(s).

Most Active EPEMs consist of simple radon mitigation systems and do not require expensive equipment, maintenance or repairs. Repair and even replacement of most fan, telemetry or piping constituents in such systems typically cost, at most, several hundred dollars. The administrative costs of establishing and maintaining a financial assurance mechanism are not justified given the relatively small dollar amount that would be required. Imposing a financial assurance requirement uniquely for EPEMs would be inconsistent with the MCP, considered as a whole, and would lend exaggerated importance to a comparatively simple, inexpensive, and routine measure.

Suggested language:

Delete 40.0752(5).

Application of Activity and Use Limitations, 40.1012(3)(c), P. 98

(c) any disposal site or portion of a disposal site for which all applicable requirements of a Permanent Solution have been met pursuant to 310 CMR 40.1040 based upon one or more of the following limitations, assumptions or conditions:

We recommend adding a “condition” that allows a Permanent Solution for a commercial property where soil vapor and indoor air testing results are below residential screening values and threshold values, respectively. The Department has previously expressed concern that soil vapor or indoor air data at a commercial property could not be considered sufficiently protective of future residential use because of the potential for building modification to change a vapor intrusion pathway. This additional “condition” would be limited to instances in which indoor air results have been shown not to pose an unacceptable risk for residential use, and, like other “Permanent Solutions with Conditions,” would provide adequate notice to future land owners of the potential for the vapor intrusion pathway to change if the building were significantly modified in the future.

Suggested language:

(5) indoor air testing results that are less than residential Threshold Values, and soil vapor testing results collected from beneath the slab that are less than the Sub-Slab Soil Gas Screening Values for residential properties.

Risk Assessment and MCP Standards

Method 3 Human Health Risk Characterization, 40.0993(5)(b), P. 124

(b) When identifying toxicity information for Method 3 risk assessments, preference should be given to sources of toxicity values in accordance with the following hierarchy:

1. Toxicity values identified by the Department for risk assessment;
2. Toxicity values listed in United States Environmental Protection Agency’s (US EPA’s) Integrated Risk Information System (IRIS) database;
3. US EPA’s Provisional Peer Reviewed Toxicity Values (PPRTVs);
4. Other US EPA and non-US EPA sources, including but not limited to MRLs published by US Agency for Toxic Substances and Disease Registry (ATSDR), values published by California Environmental Protection Agency, and values published in US EPA’s Health Effects Assessment Tables (HEAST). In selecting a source of information for toxicity values, there shall be a preference for assessments that have been peer reviewed by scientists with expertise in toxicology; are clearly and appropriately documented; consider the quality of studies used; corroborate data among pertinent studies; make the best use of all available science; and are publicly available. There shall also be a preference for values that are consistent with the duration of human exposure being assessed.

The proposed change would elevate standards and guidance published by the Department above values painstakingly derived by federal regulators and national scientific advisory panels, including those published in the Integrated Risk Information System (IRIS) database. This turns on its head the approach currently prescribed in the MCP and diverges from prevailing practice across the country. There can be no doubt that USEPA, the National Research Council, the Agency for Toxic Substances and Disease Registry, and other federal authorities have resources that are far greater than those available to the Department. Enlarging the Department’s role in reassessing toxicity values derived by the federal government is fundamentally at odds with the Department’s stated goals of reducing duplication, complexity, and costs.

NAPL and Source Control Amendments

General Comments

The introductory “Note to Reviewers,” on page 154, explains that the Department’s Proposed Amendments on the topics of NAPL and Source Control “reflect a more accurate understanding of the behavior of LNAPL in the subsurface, consistent with updated science and the recommendations of the MassDEP LNAPL Workgroup” (emphasis added). Another “Note to Reviewers,” on page 167, states, “Corresponding amendments to NAPL related definitions in 310 CMR 40.0006, the Phase I and II site characterization requirements, and in the source elimination or control provisions at 310 CMR 40.1003(5) are intended to more accurately reflect actual LNAPL behavior and regulatory concerns regarding NAPL sites” (emphasis added). We would urge the Department not to merge LNAPL and DNAPL into one set of definitions and performance standards.

Any technical or policy conclusions that the Department may have reached with respect to LNAPL behavior, characterization, and remediation cannot be applied readily to DNAPL, which behaves very differently, and therefore requires different investigation and remediation approaches, and expectations, than LNAPL. Chlorinated solvent DNAPLs – which are the most commonly encountered DNAPLs – typically come to rest quickly in the subsurface. Particularly when compared to LNAPLs, such DNAPLs may be considered “stable,” albeit persistent, “sources.” Once in the subsurface, chlorinated solvent DNAPLs also are notoriously difficult to remove. In fact, investigation and remediation methods that may be feasible and appropriate for LNAPLs and dissolved contaminants not only may be inadequate, but may destabilize chlorinated solvent DNAPLs and further spread contamination.

The statement, in the “Note to Reviewers” on page 168, that “Sites with any type of NAPL must demonstrate the reduction of NAPL through remedial and/or recovery measures to reduce NAPL volumes to the extent feasible” oversimplifies the complex problem of DNAPL remediation and suggests, contrary to the risk-based approach adopted in Chapter 21E and implemented in the MCP, that mass removal, in and of itself, is a performance standard. We would encourage the Department to take a second look at every instance in the Proposed Amendments in which it proposes to adopt new requirements for “NAPLs.” We also would encourage the Department to give special consideration to the very great differences between LNAPL and DNAPL behavior, risks, and remediation.

Source Elimination or Control, 40.1003(5), P. 169

310 CMR 40.1003(5) establishes a minimum performance standard applicable to all sites, and to both Temporary and Permanent Solutions. Consistent with the risk-based MCP, the existing performance standard focuses specifically on whether or not there is a discrete source that continues to release OHM into the environment, resulting in increased or expanded potential risks at a site. The requirement is that there not be an “uncontrolled source.” This minimum requirement should not and cannot be expanded to the point that it overwhelms all other risk-based requirements in the MCP. By proposing to delete the existing limitation in 310 CMR 40.1003(5), however, the Department is threatening to do just that. The Department should not abandon the essential purpose of the original performance standard for source elimination or control: “oil and/or hazardous material which is resulting or is likely to result in an increase in concentrations of oil and/or hazardous material in an environmental medium, either as a consequence of a direct discharge or through intermedia transfer of oil and/or hazardous material.” This existing language should be retained in 310 CMR 40.1003(5).

The proposal to compel eradication of every instance in which “any DNAPL constituent concentration

greater than 1 percent of its solubility limit” is wholly inappropriate. This “1 percent” criterion is an old rule-of-thumb that has been used as one line of evidence to determine whether there is or has been DNAPL at a site. It has no bearing on whether or not there is an “uncontrolled source” at a site, which is the operative question here. For purposes of this performance standard, it is sufficient to require that there not be Non-Stable NAPL at a site. As noted above, as compared to NAPLs, DNAPLs tend to come to rest quickly and then persist as stable sources. It typically is not feasible to remove them from the subsurface. Requiring that DNAPLs be removed in every case, without regard either to feasibility or to any unacceptable risk to human health or the environment, is to demand the impossible. Proposed new 310 CMR 40.1003(5)(4) should be stricken in its entirety.

A steady state plume that is not expanding is not a discrete “uncontrolled source,” regardless of whether it inevitably will result, to some degree, in ongoing “intermedia transfer.” For that reason, the existing performance standard states that “the downgradient leading edge of a plume of oil and/or hazardous material dissolved in and migrating with groundwater shall not, in and of itself, be considered a source of oil and/or hazardous material.” There likewise is no good reason to eliminate this existing provision, as the Department apparently now proposes to do. This existing language should be retained in 310 CMR 40.1003(5)(d).

It is important that “uncontrolled source” not be construed to include every instance of intermedia transfer, such as occurs from groundwater to soil gas, or soil gas to indoor air. While groundwater and soil gas may be media affected by a “source,” they should not be considered sources themselves, as they are neither discrete nor spatially limited. The manner in which the United States Environmental Protection Agency defines a source is instructive:

An area where a hazardous substance may have been deposited, stored, disposed, or placed. Also, soil that may have become contaminated as a result of hazardous substance migration. In general, however, the volumes of air, groundwater, surface water, and surface water sediments that may have become contaminated through migration are not considered sources.

See Guidance for Performing Preliminary Assessments under CERCLA, U.S. EPA, 1991 (emphasis added). The Department should follow U.S. EPA’s example and clarify the definition of source by adding a new subsection to 310 CMR 40.1003 (310 CMR 40.1003(5)(e)), as follows:

Suggested language:

(e) For the purposes of 310 CMR 40.1003(5), oil and/or hazardous material dissolved in groundwater or present in soil gas that results in intermedia transfer shall not, in and of itself, be considered a source of oil and/or hazardous material.

The Department should clarify those circumstances in which a “source” has been controlled by adding a new subsection to 310 CMR 40.1003 (310 CMR 40.1003(5)(f) (assuming that 310 CMR 40.1003(5)(e) suggested above also is adopted)), as follows:

(f) For the purposes of 310 CMR 40.1003(5), if it can be demonstrated that a groundwater plume is at a steady state condition and is not expanding, the source shall be considered controlled.

Remedial Air Emissions, 40.0049(3)(a), P. 177

(3) Notwithstanding the provisions of 310 CMR 40.0049(2), except where specifically required in writing by the Department based upon its review of proposed or ongoing response actions, treatment of point-source remedial air emissions is not required at a disposal site if the untreated

emissions:

(a) are from a sub-slab depressurization system installed at residential dwellings, schools, or commercial buildings, to prevent the migration of subsurface vapors into living/working spaces, provided the total air emission rate of all volatile contaminants is less than 100 pounds/year; or

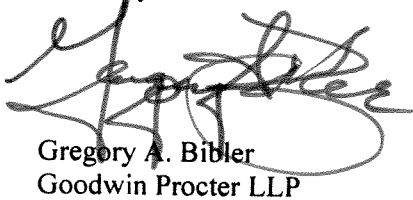
The regulation should be explicit that the 100 pounds/year threshold applies to each individual point source at a disposal site and is not cumulative for all point sources across a disposal site if multiple systems have been installed.

Suggested language:

(a) are from a sub-slab depressurization system installed at residential dwellings, schools, or commercial buildings, to prevent the migration of subsurface vapors into living/working spaces, provided the total air emission rate of all volatile contaminants is less than 100 pounds/year *from each individual system installed at a disposal site*; or

We hope these comments assist the Department in finalizing the amendments to the MCP.

Sincerely,



Gregory A. Bibler
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