

Vapor Intrusion Technical (VIT) Guidance Change Log

List of Significant changes from Version 3.1 (March 2013) to Version 4.0 (August 2016)

1. Cover Page: Changed date from March 2013 to August 2016.
2. Cover Page: Changed Version from 3.1 to 4.0.
3. Chapter 1, Introduction: Added a section on variances specific to vapor intrusion investigations that the Department will find acceptable. These are changes the Department has implemented and will be reflected in the next update to the Technical Requirements, N.J.A.C. 7:26E. The 5-Stage Vapor Intrusion Investigative Strategy has been replaced with a 6-step approach with the addition of Petroleum Vapor Intrusion Screening (new Step 2).
4. Chapters 2 and 3 have been reorganized to assist the reader in following the 6-Step Vapor Intrusion Investigative Strategy. The revised titles of both chapters reflect this reorganization.
5. Chapter 2, Receptor Evaluation and Screening (Steps 1 & 2): Portions of the old Chapters 2 and 3 have been moved to Chapter 2 as they relate to Step 1 and the new Step 2.
6. Chapter 3, Vapor Intrusion Investigation (Step 3): Portions of the old Chapters 2 and 3 have been moved to Chapter 3 as they relate to Step 3. New sections on Access and Field Analysis have been added to the Chapter.
7. Chapter 4, Multiple Lines of Evidence and Data Evaluation: no major changes have been made to this Chapter. Table 4-1 and the related case example have been removed.
8. Chapter 5, Petroleum Hydrocarbons: The most significant changes in the Vapor Intrusion Technical Guidance are contained in this chapter. A new approach to screening petroleum vapor intrusion (PVI) sites using vertical screening distance - developed by the Interstate Technology & Regulatory Council (ITRC) and the USEPA - has replaced the Gasoline Exclusion Criteria.
9. Chapter 6, Vapor Intrusion Mitigation: no major changes have been made to this Chapter. A new section on Proactive Mitigation has been added to the Chapter. The Mitigation Methods section has been streamlined to remove educational information not essential in the Vapor Intrusion Technical Guidance.
10. Appendix A: Modified to incorporate the new Step 2 (Petroleum Vapor Intrusion Technical Screening).
11. Appendix B: Minor changes
12. Appendix C: No Change
13. Appendix D: Streamlined survey/form
14. Appendix E: No Change
15. Appendix F: No change
16. Appendix G: *Background Volatile Levels in Homes* has been moved to the NJDEP Vapor Intrusion Website. New Appendix G is *Derivation and Application of Vapor Intrusion Screening Levels*. Most of this appendix was formerly included in the main text of the March 2013 Vapor Intrusion Technical Guidance.

17. Appendix H: *Common Background Indoor Air Sources* has been moved to Appendix I. New Appendix H is *QA/QC for Sub-Slab Soil Gas and Indoor Air Sampling*. Most of this appendix was formerly included in the main text of the March 2013 Vapor Intrusion Technical Guidance.
18. Appendix I: *Simple Smoke Visualization Test to Assess Backdrafting* has been removed. *Common Background Indoor Air Sources* has been moved to Appendix I with minor updates.
19. Appendix J: *Installation Procedures of Permanent Sub-Slab Probes for Monitoring VI Mitigation Systems* has been moved to the NJDEP VI Website. New Appendix J is *VI Mitigation System Checklist for Diagnostic Testing and Design*. This is a new checklist intended to assist the Investigator.
20. Appendix K: The March 2013 version of Appendices K and L have been combined into a new updated appendix titled *Determining Air Pollution Control Permit Requirements for VI Mitigation Systems*.
21. Appendix L: The March 2013 version of Appendix M has been moved to Appendix L and given a slightly modified name change. *The Vapor Intrusion Mitigation System & Installation Checklist* has been streamlined to focus on the key issues.
22. Appendix M: The March 2013 version of Appendix P (*Electrical Cost Estimates for VI Mitigation Systems*) has been moved to Appendix M with no changes.
23. Appendix N: *Subsurface Depressurization Monitoring Form (Large Blower)* has been removed. New Appendix N is *Monitoring & Maintenance Checklist*. This is a new checklist intended to assist the Investigator.
24. Appendix O: *Subsurface Depressurization Monitoring Form (Small Blower)* has been removed. *Glossary* has been moved to Appendix O with additional terms.
25. Appendix P: *Acronyms* has been moved to Appendix P with additional acronyms included in the list.