

Immediate Environmental Concern Technical Guidance

March 2015

List of changes from August 2011 Version

1. Document Date: Changed from August 2011 to March 2015.
2. Document Version: Changed from Version 1.0 to Version 1.1.
3. General: The document was updated to remove confusing language, streamline the narrative and increase the overall readability of the document. These changes are not individually noted.

Significant changes to the document are listed below. The changes are organized by section, and include a brief explanation of why these changes have been made.

Section 1 – INTENDED USE

1. Removed the “Emergency Response vs. Immediate Environmental Concern” section. The significant content of this section was moved to Section 2 – PURPOSE, where it is more appropriate.

Section 2 – PURPOSE

No significant changes.

Section 3 – DOCUMENT OVERVIEW

1. “Identification” was added as a section. Since the initial IEC guidance was released, Department experience has shown that accurately identifying an IEC can be problematic. This section was added to provide additional clarity regarding this matter.
2. “Monitoring and Maintenance” was added as a section. The revised Technical Requirements for Site Remediation (“Technical Requirements,” N.J.A.C. 7:26E, May 7, 2012) added Monitoring and Maintenance requirements, which earlier versions of the Technical Requirements did not include (see N.J.A.C. 7:26E, September 8, 2011). This added section reflects those additional regulatory requirements.

Section 4 – PROCEDURES

4.1 Potable Well IEC Technical Guidance Procedures

Identification

1. The procedures for reporting an off-site source have been significantly modified in order to reflect the Department’s current policy regarding this issue. The most significant change is that when an Investigator reports an off-site source, the Department will begin using public funds to

address the IEC condition once supporting documentation per 7:26E-3.9 is submitted to the Department. Previously, the Department would review the off-site source claim and the Investigator would continue to address the IEC condition until the Department made a decision regarding the merits of the claim.

Initial Notification

No significant changes.

Interim Response Action and IEC Information Submittal

1. The original IEC guidance had two sections named “Interim Response Action” and “IEC Information Submittal.” These two sections have been merged into one section in the revised guidance.
2. The mapping requirements were significantly modified. Previously on the IEC Map, exceedances, detections and non-detects were all identified using circles either filled in, half filled in or empty, respectively. The circle system has been replaced by a “chembox” system.
3. Site location verification by the Investigator is now being requested. This is because this information will now be used to create an IEC layer in the Department’s Geographic Information System (GIS) and it is critical that the location information is correct.

Engineered System Response Action

No significant changes.

Receptor Delineation

No significant changes.

IEC Engineered System Response Action Report

1. The process for submitting a GIS map was modified. The instructions for drawing and submitting the CKE map have been moved from the Source Control section to this section because this is where the requirement first appears. The option for the Department to create the CKE map in GIS was eliminated. The investigator will now follow instructions for creating the GIS CKE map using the new GIS link provided in this section. These modifications make the process more straightforward. The new process is modelled upon the procedures for CEA mapping.

Source Control Report

1. The instructions for drawing and submitting a CKE map were moved to the ESRA report section where this requirement first appears.
2. The option of submitting the Source Control Report simultaneously with the Engineered System Response Action report was added. This modification was intended to help expedite the overall IEC case process at those sites where source control has been historically initiated.

Annual Monitoring and Maintenance (AMM) Report

1. The Annual Monitoring and Maintenance Report will now be submitted to both BCAIN and the IEC Case Manager. Previously, this report was submitted only to BCAIN. The change reflects the need for the Department to have direct oversight of the IEC until a Remedial Action permit is issued, as per the current Technical Rules.

4.2 Vapor Intrusion IEC Technical Guidance Procedures

Identification

1. The procedures for reporting an off-site source have been significantly modified in order to reflect the Department's current policy regarding this issue. The most significant change is that when an Investigator reports an off-site source, the Department will begin using public funds to address the IEC condition once documentation per 7:26E-3.9 is submitted to the Department. Previously, the Department would review the off-site source claim and the Investigator would continue to address the IEC condition until the Department made a decision regarding the merits of the claim.

2. An additional example scenario was added. This scenario involves situations where the presence of PCE from an active dry cleaner prevents attaining compliance with the Department's Indoor Air Screening Levels (IASLs) for tetrachloroethene (PCE). Non-compliance under this scenario is deemed acceptable. This change was made to reflect the Department's recent experience with cases involving active dry cleaners in strip malls.

Initial Notification

No significant changes.

Interim Response Action and IEC Information Submittal

1. The original IEC guidance had two separate sections, "Interim Response Action" and "IEC Information Submittal." These two sections have been merged into one section in the revised guidance.

2. The mapping requirements have been significantly modified. Previously on the IEC Map, exceedances, detections and non-detects, were identified using circles either filled in, half filled in or empty, respectively. The circle system has been replaced by a "chembox" system.

3. Site location verification by Investigator is now being requested. This is because this information will now be used to create an IEC layer in the Department's Geographic Information System (GIS) and it is critical that the location information is correct.

Engineered System Response Action

1. The option for collecting confirmatory samples and the averaging process of up to three total samples prior to installing an engineered system response was removed from the IEC guidance. In order to streamline the process, the current guidance states that any exceedance of a Department Rapid Action Level (RAL) will require an engineered response. This change was

considered appropriate to reduce the time that the public could potentially be exposed to contaminated air.

Receptor Delineation

No significant changes.

IEC Engineered System Response Action Report

1. The GIS Mapping requirement was removed. The GIS Map is no longer needed, since it has been replaced by the Department's GIS layer that was generated at the time of the IEC Information submittal.

Source Control Report

1. The option of submitting the Source Control Report simultaneously with the Engineered System Response Action report was added. This modification was intended to improve the efficiency of the overall IEC case process at those sites where source control has been historically initiated.

2. The GIS Mapping requirement was removed. The GIS Map is no longer needed, since it has been replaced by the Department's GIS layer that was generated at the time of the IEC Information submittal.

Annual Monitoring and Maintenance Report

1. Significant additions were made to this section, including detailed monitoring requirements for a sub-slab depressurization system, determining if a subslab depressurization is protective, appropriate responses to data excursions, a monitoring and maintenance checklist, and instructions for updating the IEC/VC Spreadsheet. These additions were needed to comply with the Technical Requirements and the Vapor Intrusion Technical Guidance (VITG).

2. The Annual Monitoring and Maintenance Report will now be submitted to both BCAIN and the IEC Case Manager. Previously, this report was submitted only to BCAIN. The change reflects the need for the Department to have direct oversight of the IEC until a Remedial Action permit is issued, as per the current Technical Rules.

4.3 Direct Contact IEC Technical Guidance Procedures

Identification

1. The procedures for reporting an off-site source were significantly modified in order to reflect the Department's current policy regarding this issue. The most significant change is that now when an LSRP reports an off-site source, the Department will immediately begin using public funds to address the IEC condition. Previously, the Department would review the off-site source claim and the LSRP would continue to address the IEC condition until the Department made a decision regarding the merits of the claim.

Initial Notification

No significant changes.

Interim Response Action and IEC Information Submittal

1. The original IEC guidance had two sections named Interim Response Action and IEC Information Submittal. These were merged into one section in the revised guidance.
2. The mapping requirements were altered to use “chemboxes” to be consistent with the format used for other IECs.

Engineered System Response Action

1. The requirement for placing Institutional Controls for all contaminants remaining with concentrations above unrestricted use soil standards was removed. It was decided that this requirement would be more appropriately addressed as part of the overall site remediation process and not specifically tied to the IEC process.

Receptor Delineation

No significant changes.

IEC Engineered System Response Action Report

1. The GIS Mapping requirement was removed. The GIS Map is no longer needed, since it has been replaced by the Department’s GIS layer that was generated at the time of the IEC Information submittal.

Source Control

No significant changes.

Annual Monitoring and Maintenance Report

1. The Annual Monitoring and Maintenance Report will now be submitted to BCAIN and the IEC Case Manager. Previously this report was submitted only to BCAIN. The change reflects the need for the Department to have direct oversight of the IEC until a Remedial Action permit is issued, as per the current Technical Rules.