

DATE: August 27, 2018

RE: MAPTF Sub-Committee B “Working List” of Recommendations by Category and Priority

I urge the Sub-Committee B to

1. Management Recommendations from PRI Appendix B
“C” Future Management
 - a. RETAIN #3. The following new facilities, sites, units or potential routes must not be located within a delineated recharge area: 1) low level radioactive waste sites; 2) Class V injection wells; 3) municipal solid waste sites; 4) special or hazardous waste landfills.
 - i. These facilities are among the most risky with respect to accidental or unintended releases of contaminants and contain the most dangerous contaminants and pollutants.
 - ii. Even when geologic and engineering studies are made, there remains uncertainty about undetected and unknown paths where contaminants are transported to potable water resources.
 - iii. Areas outside of the sole source aquifers are not so distant as to pose an inconvenience for waste disposal and long term management.
2. Management Recommendations from PRI Appendix B
Future Management
“C” Future Management
 - a. ADD #4. Update current methods and increase training of inspectors to incorporate remote sensing (aerial photography and lidar), geographic information systems (GIS), and database management to guide field inspections of all legacy landfills. This would include
 - b. Prepare georeferenced image maps showing defects such as depressions, erosion, landslides, barren areas, leachate seeps, trees, and vegetation anomalies using lidar and aerial photography and image processing/enhancement for use in field inspections. Georeferenced image maps should be prepared by inspectors (ideally) trained in image processing of remote sensing imagery and GIS, trained technicians, or expert remote sensing specialists.
 - c. Train inspectors to use GIS and remote sensing technology to track defects, structures, appliances, and wells for routine inspection and sustainable management for closed landfills.
 - d. Knowledge and skills of landfill inspectors (by registered geologists and engineers) should be regularly updated to maintain legacy landfills and reduce risk of contamination of surface and ground water.
3. Management Recommendations from PRI Appendix B
Future Management
“C” Future Management
 - a. ADD #5. Collect and archive institutional information about old landfills for present and long term use including manifests and engineering records. This data is available from IEPA, municipalities, counties, solid waste management associations, companies and corporations, and individuals [mainly inheritors of

property owned by family members]. Records should be available for sole use as confidential information by regulatory agencies but not subject to FOIA.

- b. Assemble location information about industries and companies which generate(d) wastes including from historical processes. Information is available from corporations, companies, ISM, ISGS, ISWS, IEMA, FEMA, and universities. Records should be available for use as confidential information by regulatory agencies but not subject to FOIA.
4. ADD #6. Direct the ISGS/ISWS/IEPA to identify legacy landfills for priority inspections using existing, available information available from ISGS, ISWS, PRI, IDNR, IEMA, FEMA, NRCS, and other agencies. Focus further study on those which pose a hazard to surface and ground water resources. Landfills with the following characteristics are of concern:
 - a. Landfills over unsuitable geology (ISGS)
 - b. Landfills over shallow aquifers (ISGS)
 - c. Abandoned landfills (ISGS, IEPA)
 - d. Landfills within or proximity to 500 year floodplain (ISWS, FEMA, IEMA)
 - e. Landfills near dwellings and private wells (NRCS, ISGS, ISWS)
 5. “V. Legislation”

Propose legislation to promote community support for subsequent use and maintenance of legacy landfills where this can be safely done. This can be accomplished by:

 - a. Financial incentives for privately or corporate owned legacy landfills to enter into partnerships with Forest Preserve Districts, Park Districts, and conservation clubs as a means to provide funding for a higher level of maintenance and promote subsequent use of former landfills.
 - b. Financial incentives for publicly owned legacy landfills to enter into partnerships with Forest Preserve Districts, Park Districts, and conservation clubs as a means to provide funding for a higher level of maintenance and promote subsequent use of former landfills.

Abbreviations

- a. HTEM – Helicopter-borne, Time domain, Electromagnetic geophysical survey.
- b. IHPA– Illinois Historic Preservation Agency
- c. IDNR- Illinois Department of Natural Resources
- d. IDOT - Illinois Department of Transportation
- e. IEMA –Illinois Emergency Management Agency
- f. IEPA – Illinois Environmental Protection Agency
- g. ISM – Illinois State Museum
- h. ISGS – Illinois State Geological Survey, Prairie Research Institute, University of Illinois at Urbana-Champaign

- i. ISWS – Illinois State Water Survey, Prairie Research Institute, University of Illinois at Urbana-Champaign
- j. PRI – Prairie Research Institute, University of Illinois at Urbana-Champaign
- k. NRCS – Natural Resources Conservation Service, U.S. Department of Agriculture
- l. FEMA – Federal Emergency Management Agency
- m. MAPTF – Mahomet Aquifer Protection Task Force

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