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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

THOMAS V. SKINNER, DIRECTOR

217/782-6762

March 7, 2000

Mr. Brad Bradley, SR-6J  
Remedial Project Manager  
U.S. Environmental Protection Agency  
77 West Jackson Blvd.  
Chicago, Illinois 60604

Re: 0971900014--Lake County  
Johns-Manville Corporation/Waukegan Additional Sites 2 and 3  
Superfund/Technical Reports

Dear Mr. Bradley:

This will reply to your verbal request for comments from Illinois EPA on Johns-Manville's ("JM") proposed voluntary removal action at Waukegan Additional Sites 2 and 3.

The relevant facts for Additional Sites 2 and 3, as I understand them, are as follows:

1. A subsurface investigation for asbestos-containing material ("ACM") was conducted at Sites 2 and 3 to the 3 foot depth on behalf of JM by ELM Consulting, L.L.C. The results were summarized in the February 3, 1999 "Surface and Subsurface Characterization Draft Summary Maps and Data". The type of material found included raw material, transite, roofing, gasket, and insulation.
2. At the locations where ACM material was found, JM proposed excavation and backfill to the 2 foot depth. This is based on the August 1999 submittal by JM, "Additional Sites 2 and 3-Waukegan, IL, Summary of Remedial Alternatives and Estimated Costs, Cost Summary Sheet".
3. It is likely that ACM material will remain at Additional Sites 2 and 3 below the 2 foot depth after the removal action.
4. Additional Sites 2 and 3 will be incorporated into the formal designation of the JM Superfund site.

Please refer to the attached Summary Sheet for ARAR Review, and memorandum dated February 23, 2000, which states that 35 Il. Adm. Code Part 807 landfill requirements apply for areas where ACM material would remain subsequent to the removal action. Under Part 807, the minimum

Johns-Manville Corp.  
Additional Sites 2 and 3  
Page 2

landfill cover requirement is 2 feet of compacted clay, plus a 6 inch vegetative layer. Additional requirements under Part 807 could include surface water drainage control, groundwater monitoring, post closure activities for 3-15 years duration, and closure and post closure plans and financial assurance and notification provisions, as outlined in the memorandum.

Based on the above information, it would appear that JM's proposed voluntary removal action for ACM material from the surface to the 2 foot depth would not be entirely consistent with State regulatory requirements. To meet the State requirements, the cover should consist of 2 feet of compacted clay with a 6 inch vegetative layer maintained on top of the cover. Additional requirements for closure and post closure activities could include installation of a surface water drainage control system, conducting groundwater monitoring, filing a plat with the appropriate county land recording authority, providing financial assurance, and conducting quarterly post closure inspections for 3-15 years duration, in accordance with closure and post closure plans.

Illinois EPA will be pleased to provide a more complete listing of ARARS requirements, at your request.

Please feel free to contact me at 217/557-3199 if you have any questions on the contents of this letter.

Sincerely,

*Sandra Bron*

Sandra Bron, Project Manager  
National Priorities List Unit  
Federal Sites Remediation Section  
Bureau of Land

enclosure: Summary Sheet for ARAR Review, and Memorandum, dated February 23, 2000

cc: Elizabeth Wallace, IAGO, with enclosure  
Terry Ayers, NPL Unit, with enclosure  
Bureau File

cc address:

Office of Illinois Attorney General  
Environmental Bureau, Attn: Elizabeth Wallace  
100 West Randolph, 11th Floor  
Chicago, Illinois 60601



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THOMAS V. SKINNER, DIRECTOR

**SUMMARY SHEET FOR ARAR REVIEW**

**FACILITY NAME & NUMBER:**

0971900014 -- Lake County  
Johns-Manville  
Superfund/Technical File  
(LP52-195)

**RPMS CONTACT PERSON:**

Sandra Bron  
557-3199

**TITLE OF DOCUMENT:**

Memo requesting identification of applicable permit and landfill design requirements.

**DATE OF DOCUMENT:**

January 14, 2000

**DATE RECEIVED IN PERMIT SECTION:**

January 14, 2000

**DATE COMMENTS DUE TO COORDINATOR:**

**February 7, 2000**

**DATE COMMENTS DUE TO RPMS:**

February 7, 2000

**DATE COMMENTS SENT TO RPMS:**

February 23, 2000

**PERMIT SECTION REVIEWERS:**

**(Review Time)**

RCRA Unit:	Rob Watson	2.0 hrs
Corrective Action Unit:		
Disposal Alternatives Unit:		
Solid Waste Unit:	Kenn Smith	6.0 hrs
Groundwater Unit:		
RCRA/CERCLA Coordinator:	Jerry Kuhn <sup>JK</sup>	1.0 hrs

**Route all comments through your unit manager or lead worker.  
Indicate the time spent on your review next to your name.**

cc: Bureau File (with attachment)  
 Joyce Munie (with attachment)  
 Chris Liebman (with attachment)  
 Jerry Kuhn (with attachment)  
 Rob Watson (with attachment)  
 Kenn Smith (with attachment)

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## Memorandum

**To:** Sandra Bron, BOL/FSRS/NPL Unit  
**From:** <sup>HES</sup> Kenneth E. Smith, BOL/Permit Section/Solid Waste Unit  
**Date:** February 23, 2000  
**Subject:** 0971900014--Lake County  
Johns Manville/Waukegan  
Superfund/Technical File

I've completed a review of your request for ARARs, dated January 14, 1999. The request was made in regard to Sites 2 and 3 at the John-Manville (JM) property in Waukegan.

### Background Information

The facts on Sites 2 and 3, as I understand them from the background information which you provided, are as follows:

- Site 2 was a former shooting range. A series of berms and trenches were constructed to a depth of 8 feet. They were leveled. The berms contained ACM.
- Site 3 is a parking lot constructed on Commonwealth Edison property. The parking lot was used by JM employees. ACM was used as a sub-base for the parking lot.
- A sub-surface investigation was conducted at Sites 2 and 3 to a depth of 3 ft. ACM was found extending from the ground surface to the 3 foot depth. ACM found consisted of raw material, transite, roofing material, gasket and insulation.
- Both sites are partially off JM property. Disposal was undertaken at both sites prior to Sept. 1992.
- At locations where ACM has been found, JM has proposed to remove the ACM to a depth of 2 ft. and backfill. It is likely that ACM shall remain below the 2 foot depth after the removal action by JM.
- Sites 2 and 3 are to be incorporated into the Consent Decree for the existing JM Superfund site prior to any activity taking place at Sites 2 and 3.

### Scope of Review and Replies

The requested scope of review was, and the specific reply to each question is, as follows:

1. **What are the state requirements applicable to Sites 2 and 3?**

Provided: 1) only asbestos waste was disposed at Sites 2 and 3; and 2) disposal ceased before Sept. 18, 1992, Part 807 would be applicable. However, not knowing the size of the disposal areas at each site, proximity of the groundwater table to the waste, proximity of the lake to the waste, and future land use and /or land use restrictions, it may be appropriate and relevant to apply the Part 811 landfill requirements.

Assuming the waste is only asbestos, and disposal operations ended prior to September 18, 1992, it is my opinion that application of the Part 807 landfill regulations can meet the criteria of being protective of human health and the environment. See the reply below to question 4 for closure requirements under Part 807.

**2. Would Part 807 or Part 811 landfill requirements apply to the ACM left behind at Sites 2 and 3?**

See the above reply to question 1.

**3. Is asbestos waste exempt from Part 807 or 811 landfill regulations?**

No.

**4. Would the project be subject to : cover requirements, leachate collection, surface water drainage control, groundwater modeling, groundwater monitoring, closure plan, post closure care, financial assurance?**

All of the above closure items are relevant under the Part 807 landfill regulations, with the exception of groundwater modeling.

Part 807 contains a provision for 2.0 ft. of final cover. See 35 IAC 807.305(c). The Permit Section as a matter of policy, has required a 6 inch vegetative layer atop the 2 foot cover. Therefore, a 2.0 feet of compacted cover and a 6 inch vegetative layer is the appropriate final configuration pursuant to Part 807.

Although Part 807 does not *specifically* require installation and operation of a leachate collection system, vertical extraction systems have been required and installed at 807 landfills as part of a remediation measure, and conventional collection/drainage systems were required to be installed at new landfills beginning in the late 1980s. Based on the information provided, I would not recommend installation of a leachate extraction system.

Design and maintenance of a surface water control system is a closure and post closure requirement for 807 landfills. The landfill operator is required to provide the design of the system that will prevent run-on and run-off from impacting the closed unit during the post closure care period. Permit Section closure/post closure application form requires an operator to provide a map showing the drainage and erosion control system design for control of run-on and run-off.

Although Part 807 does not *specifically* require installation and operation of a groundwater monitoring system, the vast majority of 807 landfills which I have been associated with had/have a

groundwater monitoring system. I will defer to others as to whether a groundwater monitoring system is needed for Sites 2 and 3.

Closure and post closure plans are required under the Part 807. See 35 IAC 807.503 and 807.523, respectively. The closure activities generally consist of: applying final cover, installation of leachate extraction wells and/or groundwater monitoring wells as necessary, installation of the surface water control system, seeding and mulching the vegetative layer of the final cover system and filing a plat with the appropriate county land recording authority (35 IAC 807.318c). The plat should note that ACM has been disposed. Post closure activities generally consist of quarterly inspections of the landfill and the systems installed during closure, maintenance of the final cover systems and other installed systems, and sampling of groundwater wells and leachate extraction wells. The minimum post closure care period of 807 landfills varies and is dependent on when a site ceased accepting waste and completed closure. It can vary in length from 3 to 15 years, again, dependent on when waste acceptance ceased and closure completed.

Financial assurance requirements can be found at Subpart F of Part 807. On-site landfills are exempt from the financial assurance requirements pursuant to 35 IAC 807.601(a). The financial assurance requirements of Part 807 would be applicable to the off-site disposal areas.