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March 12, 2012

Mr. Matthew Ohl
Remedial Project Manager
United States Environmental Protection Agency
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Subject: Respondents Response Document to Engineering Evaluation/Cost Analysis (EE/CA), Revision 4, as Modified and Approved by USEPA; Southwestern Site Area, Waukegan, Illinois

Dear Mr. Ohl:

On behalf of Johns Manville (JM) and Commonwealth Edison Company (ComEd) (collectively, Respondents), AECOM Technical Services, Inc. (AECOM) has developed the attached response document to serve as formal comments to the United States Environmental Protection Agency's (USEPA's) recommended cleanup plan for the Southwestern Site Area in Waukegan, Illinois. In a letter dated February 1, 2012, the USEPA approved, with substantial modification, the April 4, 2011 Engineering Evaluation/Cost Analysis (EE/CA) developed by the Respondents. The USEPA is accepting comments to their plan through March 12, 2012, after which they will select a remedy.

The Respondents appreciate the opportunity to submit comments to the proposed plan and look forward to the agency's response. If you have any questions, please contact me at 630-660-9622.

Sincerely,

William A. Bow, C.P.G.
Vice President

Attachment 1: Respondents Response Document

Copies:
Jan Carlson/US EPA
Mike Joyce/USEPA
Denny Clinton/JM
Brent Tracy/JM
Sharon Neal/ComEd
Peter McCauley/ComEd

Respondents Response Document
EE/CA: Southwestern Site Area
Waukegan, Illinois

March 12, 2012

Introduction

The Southwestern Site Area is located adjacent to the western and southern borders of the Johns Manville (JM) property located in Waukegan, Illinois, and consists of Sites 3, 4/5, and 6. It is the subject of a Settlement Agreement (Agreement) executed between the Respondents (*i.e.,* JM and Commonwealth Edison Company (ComEd)) and the United States Environmental Protection Agency (USEPA) in May/June 2007. Under the Agreement, the Respondents were required to conduct an investigation and develop an Engineering Evaluation/Cost Analysis (EE/CA), which would include both the investigation results and proposed cleanup options.

JM and ComEd submitted the initial EE/CA on June 13, 2008. They developed and submitted subsequent versions of the EE/CA in order to address questions and requests raised by the USEPA with each version. The Respondents submitted the fourth revision on April 4, 2011, which responded to new issues raised by USEPA. In a letter dated February 1, 2012, the USEPA responded to the April 4, 2011 submittal and substantially modified the clean up options proposed by the Respondents. . These USEPA modifications result in significant and material increases in the project scope and cost with only limited or no incremental benefit to human health or the environment. Accordingly, the Respondents are providing formal comments to USEPA's proposed plan, on a site-by-site basis.

Site 3

Overview

Site 3 is owned by ComEd (one of the Respondents) and is located south of the Greenwood Avenue right-of-way and east of North Pershing Road near the southwestern corner of the former JM manufacturing facility. Site 3 was a parking area for the former JM Administration Building operated from the 1950s through approximately 1970. Asbestos-containing pipe was utilized as parking space "bumpers" on the ground surface. Beginning in approximately 1972, the Illinois Department of Transportation (IDOT) constructed a detour road on Site 3 for use during construction of the Amstutz Expressway. In their response to USEPA's request for information regarding Site 3, IDOT disclosed that their resident engineer on the project "recalled dealing with asbestos pipe during the project and burying some of it." Broken pieces of asbestos pipe were subsequently discovered on the surface of Site 3 in December 1998.

Remedy Selection

Respondent's Preferred Remedy

In their EE/CA (Rev. 4), the Respondents propose a preferred remedy (Alternative 2), which consists of placing a two-foot thick soil cover over entire area of Site 3. This remedy is virtually identical to the remedy put in place on the former asbestos disposal area located on the adjacent JM property. This remedy on the former disposal area has been proven to be effective through monitoring over the past 20 years (since 1991). In addition to the proposed soil cover, the Respondents also propose to excavate and dispose off-site, approximately 660 cubic yards of soil affected with asbestos-containing material (ACM) located on the northeast side of Site 3, prior to placement of the soil cover.

USEPA's Proposed Alternative

USEPA's Alternative 5 accepts Alternative 2 as their preferred alternative, but adds the significant obligation of creating "clean corridors" for potential future excavation/repair of known utilities crossing the site and placement of a geotextile layer at the base of the soil cover. Specifically, the USEPA proposes to require the Respondents to excavate and replace soil in a twenty-five (25) foot wide corridor centered over each utility and to a minimum depth of two (2) feet below the line, regardless of whether there is ACM impact to that depth. Under the USEPA's proposed alternative, approximately 10,000 cubic yards of ACM-affected soil would be removed.

Respondent Comments to USEPA's Proposed Alternative for Site 3

ComEd and JM believe that placement of the two-foot think soil barrier and proposed excavation in the northeast corner is an appropriate and protective remedy for Site 3 (Alternative 2). The Respondents object to the creation of "clean corridors" for each utility, as well as the need for geotextile at the base of the soil barrier. As proposed, Alternative 2 is in compliance with regulatory requirements and is, therefore, an acceptable remedy, even without the geotextile. USEPA's additional requirements embodied in their Alternative 5, are excessive and burdensome; and do not provide a material reduction in risk to human health or the environment for the substantial increase in cost – contrary to the remedy selection requirements of CERCLA, the NCP and USEPA guidance.

ARARs

The USEPA has posited that the Respondent's preferred alternative for Site 3 may not comply with Applicable or Relevant and Appropriate Requirements (ARARs) (see USEPA revisions to Table 10 and Section 5.2.1.2), principally on the grounds that (i) "[a]reas subject to utility easements will be disturbed during maintenance and other purposes and at such times the asbestos disposal area would not be considered "inactive" and (ii) that "it is unknown if the utilities will agree to the provisions in the Environmental Covenant, which requires handling and disposal of all excavated soils that contain ACM off-site in a licensed facility in accordance with the Asbestos Soil Management and Asbestos Health and Safety Plan." For these two reasons, the USEPA proposes creating clean utility corridors. ComEd and JM disagree with these assertions regarding compliance with ARARs.

USEPA regulations at 40 C.F.R.§ 61.141 defines an *Inactive Waste Disposal Site* as "any disposal site or portion of it where *additional* asbestos-containing waste material has not been *deposited* with the past year." It is clear that no ACM has been "deposited" on Site 3 within the past year (the parking area was constructed in the 1950s). The USEPA has, in this case, apparently determined that "disturbance" during a hypothetical future utility excavation is the functional equivalent of "deposit" from a regulatory perspective, without regard to the requirement for any material to be "additional." By stretching the definition of "depositing" to include "disturbing," the USEPA supports its proposal to compel the creation of a "clean corridor" for each utility. However, there is no regulatory basis for this interpretation. The use of a soil cover (commonly known as an "engineered barrier"), whether over a utility or not *(i.e.,* Alternative 2) does not violate ARARs, is entirely appropriate, and is used at thousands of sites across the United States, even where utilities are present.

The USEPA also opines that Alternative 2 does not comply with ARARs because affected utilities may not comply with Environmental Covenants regarding excavated soil. Environmental Covenants, including those which require management of excavations or, for example, off-site disposal of all wastes in accordance with an Asbestos Soil Management and Asbestos Health and Safety Plan, are legally binding documents. The Respondents agree to inclusion in the Environmental Covenants of a requirement that, if ACM-impacted soil is excavated as part of utility excavations, it will be properly disposed off-site, and the cover restored to its original condition. Therefore, an

alternative that incorporates executed covenants does not violate ARARs and is entirely appropriate.

Illinois Beach State Park

Site 3 is located approximately one mile from Illinois Beach State Park (IBSP), where there is the well documented presence of ACM on the public beach, in a manner and distribution virtually identical to the ACM found at Site 3. In response to the presence of ACM on the public beach, the USEPA conducted activity-based air monitoring in September 2007 to determine whether its presence was potentially harmful to human health. The Agency for Toxic Substances and Disease Registry (ATSDR) reviewed the activity-based sampling results and, in a health consultation report dated March 10, 2009, concluded that recreational use of the beach was not expected to be harmful to human health, despite the presence of the surficial ACM. The ATSDR recommended periodic beach sweeps to remove ACM and to educate users of the IBSP as to the hazards of ACM. USEPA relied on the ATSDR report and is implementing the recommendations as the IBSP remedy.

The limited presence of surficial and subsurface ACM on Site 3 is virtually identical to that found on IBSP, but Site 3 is private property not visited by the general public. Nonetheless, ComEd and JM have proposed a much more protective remedy for Site 3, placing a two-foot thick cover over the entirety of Site 3, virtually precluding any surficial exposure. Moreover, the Respondents would erect fencing with asbestos signage surrounding the site to virtually eliminate casual access by the public. In addition, to protect potential exposure to utility workers, the utility companies who hold easements, would be required to execute an environmental covenant with the Respondents and USEPA requiring that any excavations beneath the cover be conducted in accordance with applicable regulations (*e.g.,* OSHA) and a Soil Management Plan and Asbestos Health and Safety Plan developed specifically for the Site.

The Respondents' EE/CA proposal provides layers of protection against potential exposures on Site 3, which is a private property, unlike the very public Illinois Beach State Park. It is difficult to reconcile allowing unrestricted access on one site (the public beach) while requiring a two-foot cover, clean utility corridors, and a locked fence at significant cost on a private property.

Safety

The USEPA estimates that approximately 10,000 cubic yards of soil will be excavated and disposed off-site to create the "clean corridors" for each utility. This will result in 1,500 to 2,000 truck trips through the city streets (each truck first arriving empty and then leaving full), thus creating unnecessary traffic and an increased safety hazard. The Respondents believe that this is an unnecessary risk.

The Respondents acknowledge that USEPA has indicated that the soil could be used as fill in the Industrial Canal or Pumping Lagoon, thereby eliminating the need for truck traffic to and from the landfill. However, filling of the Industrial Canal and Pumping Lagoon has not been approved by USEPA and that project is highly unlikely to be ready for implementation prior to completion of the Site 3 excavation.

JULIE

In addition to the proposed environmental covenants with existing utilities, the Respondents will enroll as a voluntary member of the Joint Utility Locating Information for Excavators (JULIE). As such, a map of Site 3 will be registered on that system. Therefore, if JULIE receives a call requesting a utility locate on or near ACM-affected soil at Site 3, they will notify the Respondents or their designated contractor (a virtually universal practice by utilities such as the easement holders)

of the proposed excavation and the Soil Management Plan and Asbestos Health and Safety Plan developed specifically for the Site can then be communicated to the parties.

Emergency Excavations

The Respondents believe that the executed covenants with the utilities and the presence of a locked fence and asbestos-signage at the site will prevent so-called "emergency excavations" outside the legal requirements of the existing and proposed environmental covenants. However, should these occur despite efforts to prevent them, the USEPA's activity-based monitoring of virtually identical material on IBSP showed no similar concern for public safety, let alone potential exposure at occupational levels applicable to utility workers. Moreover, occupational air sample results collected by the Respondents from personnel present, adjacent to, and within the excavations during the investigation did not exceed the permissible exposure limit (PEL) for asbestos. Therefore, even if there is an excavation conducted without the benefit of the management requirements in the Soil Management Plan and Asbestos Health and Safety Plan, existing representative air sampling data from the site do not indicate that an unacceptable exposure to utility workers would occur. Thus, existing sample data collected during relevant site activity suggest that a so-called "emergency excavation" would not result in unacceptable worker exposure to asbestos. Further, potential exposure to the public during an emergency excavation is not applicable, as it is not reasonable to assume the public would be present near or within the excavation, especially given the presence of the fence surrounding the site.

Geotextile

The Respondents were also requested to install a geotextile as part of the two-foot thick soil cover. According to the USEPA, six inches of non-asbestos containing sand would be placed on the existing ground surface, followed by the geotextile, atop which would be placed 15 inches of native clayey soil, three inches of topsoil, and a vegetated cover. The geotextile, added to Alternative 2 at USEPA demand, would serve as a visible marker layer to delineate the transition downward into the underlying ACM-affected soil. Accordingly, work beneath the marker layer would need to be performed in accordance with the Soil Management Plan and Asbestos Health and Safety Plan. However, installation of the geotextile adds approximately $35,500 in material costs. The Respondents believe a less expensive material, such as plastic construction fence, could be substituted and serve the same function as the geotextile for a much lower cost (approximately $8,300). USEPA's modifications recognize that the cover design for the Johns Manville site, equal in cover depth to that proposed here but which does NOT include a geotextile, is sufficient to prevent upward migration of ACM due to freeze-thaw cycles.

Schedule

The Agreement stipulates that the Respondents will submit a Remedial Action Work Plan within 120 days of receiving USEPA's notice to proceed. Moreover, the Agreement stipulates that the Work Plan will provide an "expeditious schedule" for completing the work. While the USEPA acknowledges that their Alternative 5 is "complicated" by the presence of subsurface utilities at Site 3, the Respondents believe that USEPA has vastly underestimated the potential complications and associated impacts to the project schedule. These utilities include telephone, natural gas, fiber optic, water, and electrical lines that serve Midwest Generation and the ComEd substation. Potential service disruptions to the utility and the associated substation are not insignificant "complications," in addition to addressing safety concerns related to working with high voltage electricity (14,000 volts) and high pressure natural gas. These issues will require a significant timeframe to address and will have a material effect on the overall project schedule.

Seeding with Little Bluestem (*Schizachyrium scoparium)*

To the extent that Little Bluestem thrives on the proposed cover, Respondents have no objection to its use. However, as this species does well in less fertile soil and somewhat drier conditions, the Respondents reserve the right to propose an alternative non-invasive species if (i) use of clay soil for the cover or (ii) highly saturated conditions (*e.g.,* low areas of Site 3) precludes its successful application.

Cost

According to the USEPA, implementing the USEPA's proposed "clean utility corridors" would result in excavating and handling more than 10,000 cubic yards of ACM-affected soil at an estimated cost of $2,196,000. The Respondents independently estimated the cost of USEPA's Alternative 5 to be approximately $3,438,000. This estimated cost represents an increase of between $1,500,000 and $2,800,000 over the Respondents' proposed alternative without providing a commensurate benefit to human health or the environment, contrary to CERCLA, the NCP and USEPA guidance on the cost effectiveness element of remedy selection. See "Guidance on Conducting Non-Time-Critical Removal Actions Under CERCLA" OSWER Directive 9360.0-32, (1993). See also the authorities cited in USEPA's Quick Reference Fact Sheet, "The Role of Cost in the Superfund Remedy Selection Process," OSWER Publication 9200.3-23FS (1996).

Summary

The Respondents comments regarding USEPA's proposed Alternative 5 for Site 3 can be summarized as follows:

1. The Respondent's preferred alternative is in compliance with ARARs. Site 3 is inactive, and has been since it was constructed in the 1950s. No *additional* asbestos waste materials have been deposited on that site in over 50 years, save for IDOT's activities that made functional wheel stops into waste materials. In addition, the proposed environmental covenants requiring notice of access and management of any excavation in accordance with a site-specific Soil Management Plan and Asbestos Health and Safety Plan are appropriate legal instruments to address potential exposure to utility workers. Thus the Respondents preferred alternative (Alternative 2) is in compliance with ARARs and the language of the proposed environmental covenant in Appendix N.2 of the EE/CA should be revised to:
   - Exclude the requirement to create clean utility corridors.
   - Include a requirement to conduct all excavations in accordance with the *Soil Management Plan and Asbestos Health and Safety Plan* developed specifically for the Site.
   - Include in the Environmental Covenants of a requirement that, if ACM-impacted soil is excavated as part of utility excavations, it will be properly disposed off-site, and the cover restored to its original condition.

2. There are no material differences between the presence of ACM on IBSP and Site 3. The USEPA and ATSDR concluded that the presence of ACM on the public beach was not expected to be harmful to human health. Thus, periodic surficial ACM removal would appear to be an appropriate response action for Site 3 (*i.e.,* Alternative 3). By proposing a two-foot cover over the entire site (Alternative 2), the Respondents have arguably gone beyond the protections being required by USEPA on the nearby beach for the same material (*i.e.,* requiring periodic surficial pickup of the ACM).

3. The Respondents believe that the 1,500 to 2,000 truck trips through the city streets needed to dispose of the "clean corridor" soil creates unnecessary traffic and is a safety hazard, a concern noted by residents at the public hearing.
4. The Respondent's enrollment as a voluntary member of the Joint Utility Locating Information for Excavators (JULIE) provides an additional level of excavation control and notice of the potential asbestos hazard.
5. The presence of a locked fence with signage indicating the potential exposure to asbestos during excavations is appropriate access control and hazard communication for any so-called "emergency excavations" that could hypothetically occur in the future (*i.e.,* no 48-hour notice is given to ComEd). Moreover, existing air sampling data has not shown that an unacceptable exposure to utility workers would occur.
6. Plastic construction fence is an adequate substitute for geotextile as a visible marker layer. EPA's modifications acknowledge a geotextile is not necessary for ACM containment.
7. The Respondents believe that USEPA has vastly underestimated the potential impacts that creation of the "clean corridors" for each utility will have on the project schedule.
8. To the extent that Little Bluestem thrives on the proposed cover, Respondents have no objection to its use. However, as this species does well in less fertile soil and somewhat drier conditions, the Respondents reserve the right to propose an alternative non-invasive species if (i) use of clay soil for the cover or (ii) highly saturated conditions (*e.g.,* low areas of Site 3) precludes its successful application.
9. The Respondents believe that the incremental increase in cost of more than $1,500,000 to implement USEPA's Alternative 5 over the Respondents' preferred alternative without providing a commensurate benefit to human health or the environment is neither appropriate nor necessary, and is contrary to CERCLA, the NCP and USEPA guidance.

Site 4/5

Overview

Site 4/5 is owned by ComEd and is located adjacent to the western boundary of JM's former manufacturing facility. Site 4/5 consists of an upland area and a low lying swale area between the upland area and a railroad right-of-way to the west. In October 2000, ACM was noted in excavation soils during activities related to decommissioning of a natural gas line (this action defined Site 4). Site 5, located several hundred feet directly north of Site 4, was identified in 2002 following a study of asbestos impacts to soil conducted by the Waukegan Park District. As both Sites 4 and 5 were both located in the area adjacent to JM's western property line, the two were combined for convenience.

Remedy Selection

Respondent's Preferred Remedy

The Respondent's preferred remedy is identified in the EE/CA (Revision 4) as Alternative 2 and consists of placing a two-foot thick soil cover over the area of ACM impact identified in the EE/CA. It also includes placing rip-rap or equivalent material along the western edge of the soil cover to limit erosion during periods of high water in the drainage swale along the western boundary of the Site. The soil cover would create a two-foot high berm along the eastern side of Site 4/5. Storm water drainage pipe would be installed through the berm to convey storm water from the former JM parking lot to the swale. Wetland areas affected by construction of the barrier would be restored following construction.

USEPA's Proposed Alternative

USEPA has accepted Alternative 2 as their proposed alternative, with the addition of:

- Either submitting a fully executed environmental covenant with the North Shore Sanitary District (NSSD) that is substantially in the form of Appendix N.3 or excavating and replacing soil in a twenty-five (25) foot corridor centered over the utility and to a minimum depth of two (2) feet below the line.
- Either disconnecting and abandoning the North Shore Gas Company (NSGC) natural gas transmission line at Greenwood Avenue and submitting a fully executed environmental covenant with NSGC that is substantially in the form of Appendix N.4 provided by USEPA or excavating and replacing soil in a twenty-five (25) foot corridor centered over the utility and to a minimum depth of two (2) feet below the line.
- Placing a soil cover over the area specified in Alternative 2, as well as filling "wet areas" above the seasonal high water level. Under the USEPA's proposed alternative, the size of the soil barrier would increase from 3.2 acres to 5.9 acres.

Respondent Comments to USEPA's Proposed Alternative for Site 4/5

The Respondents agree with installing the 3.2-acre cover of the area identified in the EE/CA (Revision 4). However, the Respondents disagree with the need to install a soil cover over the additional 2.7 acres of "wet areas" referred to by the USEPA. USEPA has not specifically identified the location of this "wet area," though presumably it is some variant of the area of surface water located towards the west. In addition, clarity is needed from the USEPA with respect to the proposed environmental covenant with North Shore Sanitary District (NSSD).

Covenants

In Section 3(a)(i) of Attachment 1 to USEPA's letter dated February 1, 2012, the USEPA specified that the Respondents had the option of submitting a fully executed covenant with the NSSD substantially in the form of Appendix N.3 or creating a clean soil corridor for the NSSD sanitary line if the covenant was not submitted within 90 days following USEPA approval of the Removal Action Work Plan (Work Plan). However, Section 5.B and Section 7 of the proposed covenant (Appendix N.3) require the Respondents to create a clean utility corridor by removing asbestos containing material to create a clean utility corridor for the NSSD sanitary line. Thus, Appendix N.3 provided by USEPA contradicts Section 3(a)(i) of USEPA's letter by requiring installation of a clean utility corridor. The Respondents object to the excavation of ACM-affected soil associated with the NSSD sewer line (as required by the current language in the proposed covenant) as excessive and unnecessary. Any future breach of the cover to conduct maintenance or repair to the sewer line can be managed in accordance with applicable regulations and the Soil Management Plan and Asbestos Health and Safety Plan in the area of the excavation. If the language in the covenant was not USEPA's intent, the Respondents request that it be modified to reflect such. As USEPA recognized in the modifications, the sewer line is not likely to have regular maintenance, and the particular estimated date, even if it could be estimated, is of no consequence if the management controls are in place in the covenant. Thus, Respondents request the reference in the proposed covenant to a specific date of the next maintenance be removed.

Cover Area

In Section 3(e) of USEPA's February 1, 2012 letter, the USEPA modified the aerial extent of the soil barrier by adding the requirement to "fill wet areas to allow for cap construction above seasonal high water level to prevent potential erosion in the long term." According to USEPA's revision to Table 5, this results in a 2.7 acre increase in the area of the soil barrier. USEPA justification for this substantial increase is not appropriate, as Alternative 2 had already proposed the use of rip-rap

armoring along the western embankment of the soil cover to address potential erosion during periods of high water. Therefore, the Respondents object to the increase in the cover area as unjustified and unnecessary.

The increase in cover area to include the "wet areas" may also have a detrimental effect on stormwater drainage. This area conveys stormwater from the City of Waukegan to the Illinois Nature Preserve located to the north of the site (*i.e.,* the reason it is "wet"). The consequences to any changes in the surface elevation of this area (*i.e.,* placement of a two-foot cover in the "wet areas") have not been evaluated with respect to potential erosional impacts to the railroad line or flooding of City of other property located hydraulically upgradient (*e.g.,* west of the railroad line).

Wetlands Restoration

In the EE/CA (Revision 4), Alternative 2 included full restoration, post construction, of the current extent of wetlands adjacent to Site 4/5 (4.09 acres). Of concern was the western edge of the soil cover and its potential encroachment into the wetlands. In its Alternative 5, the USEPA has proposed putting a soil cover over "wet areas" encompassing 2.7 acres, all of which is assumed to be within the existing wetlands. Yet, the requirement to restore the wetlands to their original 4.09 acres remains in USEPA's Alternative 5. USEPA has not specified how it is possible to restore wetlands when the objective of their additional soil cover in this area is to prevent erosion during periods of high water. Placing a soil cover over wet areas to presumably bring their elevation above standing water in order to avoid erosion is contradictory to maintaining the area as wetlands. As the Respondents already object to the additional soil cover area, restoring the wetlands in the absence of the additional cover is feasible. It is not possible to restore wetlands in an area that is being filled specifically to avoid the presence of standing water. If the additional soil cover is required, the Respondents object to the requirement to restore the wetlands.

JULIE

In addition to the proposed environmental covenants with existing utilities, the Respondents will enroll as a voluntary member of the Joint Utility Locating Information for Excavators (JULIE). As such, a map of Site 4/5 will be registered on that system. Therefore, if JULIE receives a call requesting a utility locate on or near ACM-affected soil at Site 4/5, they will notify the Respondents or their designated contractor (a common practice) of the proposed excavation and the Soil Management Plan and Asbestos Health and Safety Plan developed specifically for the Site can then be communicated to the parties.

Geotextile

The Respondents were also requested to install a geotextile as part of the two-foot thick soil cover. According to the USEPA, six inches of non-asbestos containing sand would be placed on the existing ground surface, followed by the geotextile, atop which would be placed 15 inches of native clayey soil, three inches of topsoil, and a vegetated cover. The geotextile, added at USEPA demand, would serve as a visible marker layer to delineate the transition downward into the underlying ACM-affected soil. Accordingly, work beneath the marker layer would need to be performed in accordance with the Soil Management Plan and Asbestos Health and Safety Plan. However, installation of the geotextile adds approximately $36,000 in material costs. The Respondents believe a less expensive material, such as plastic construction fence, could be substituted and serve the same function as the geotextile for a much lower cost (approximately $8,000). USEPA's modifications recognize that the cover design for the Johns Manville site, equal in cover depth to that proposed here but which does NOT include a geotextile, is sufficient to prevent upward migration of ACM due to freeze-thaw cycles.

Seeding with Little Bluestem (*Schizachyrium scoparium)*

To the extent that Little Bluestem thrives on the proposed cover, Respondents have no objection to its use. However, as this species does well in less fertile soil and somewhat drier conditions, the Respondents reserve the right to propose an alternative non-invasive species if (i) use of clay soil for the cover or (ii) highly saturated conditions (*e.g.,* low areas of Site 3) precludes its successful application.

Cost

The USEPA's cost estimate for Alternative 5 is $1,468,000, a substantial increase in cost over Respondents' preferred alternative (Alternative 2), without providing a commensurate benefit to human health or the environment, which is contrary to CERCLA, the NCP and USEPA guidance on the cost effectiveness element of remedy selection. See "Guidance on Conducting Non-Time-Critical Removal Actions Under CERCLA" OSWER Directive 9360.0-32, (1993). See also the authorities cited in USEPA's Quick Reference Fact Sheet, "The Role of Cost in the Superfund Remedy Selection Process," OSWER Publication 9200.3-23FS (1996). The Respondents independently estimated the cost of Alternative 5 to be approximately $1,975,000. This additional incremental cost of between approximately $600,000 and $1,375,000 over Alternative 2 is neither justified nor necessary. The soil cover in Alternative 2 would be protected from erosion during periods of high water by the rip rap planned for placement along the western embankment of the soil cover. Alternative 2 has the added advantage of being able to maintain the wetlands area at their original extent of 4.09 acres.

Summary

The Respondents comments regarding USEPA's proposed Alternative 5 for Site 4/5 can be summarized as follows:

1. The Respondents object to the proposed covenant in USEPA's Appendix N.3 and respectfully request that it be revised to be consistent with the USEPA letter dated February 1, 2012 and the comments herein.

2. The Respondents object to the additional 2.7 acres of soil cover proposed in USEPA's Alternative 5. The rip-rap proposed in Alternative 2 accomplishes the objective of protecting the soil cover from erosion during periods of high water.

3. The Respondents object to the requirement of full wetlands restoration if the USEPA requires that the "wet areas" be covered with two-feet of soil. It is not possible to restore wetlands in an area that is being filled specifically to avoid the presence of standing water. If Alternative 2 is selected, the Respondents have no objection to the requirement to restore the wetlands.

4. The Respondent's enrollment as a voluntary member of the Joint Utility Locating Information for Excavators (JULIE) provides an additional level of excavation control and notice of the potential asbestos hazard.

5. Plastic construction fence is an adequate substitute for geotextile as a visible marker layer beneath the soil cover.

6. To the extent that Little Bluestem thrives on the proposed cover, Respondents have no objection to its use. However, as this species does well in less fertile soil and somewhat drier conditions, the Respondents reserve the right to propose an alternative non-invasive species if (i) use of clay soil for the cover or (ii) highly saturated conditions (*e.g.,* low areas of Site 3) precludes its successful application.

7. The Respondents believe that the incremental increase in cost of between $600,000 and $1,375,000 to implement USEPA's Alternative 5 over the Respondents' preferred

alternative (Alternative 2) without providing a commensurate benefit to human health or the environment is neither appropriate nor necessary, and is contrary to CERCLA, the NCP and USEPA guidance.

Site 6

Overview

Site 6 is located adjacent to the southern boundary of JM's former manufacturing facility, consists of the Greenwood Avenue right-of-way, and thus is owned by the City of Waukegan. Site 6 extends east from the eastern end of the Greenwood Avenue elevated approach to Pershing Road to the western boundary of Site 2. Samples from an unpaved portion of the road shoulder collected as part of a 2002 Waukegan Park District Study indicated impacts from ACM in the near surface soils.

Remedy Selection

Respondent's Preferred Remedy

The Respondent's preferred remedy is identified in the EE/CA (Revision 4) as Alternative 3. It includes excavation of 2,400 to 3,300 cubic yards of ACM-affected soil and placement of a soil cover over a limited area (0.2 acres) along the southern shoulder of Greenwood Avenue at the western end of Site 6 (*i.e.,* from approximately Station 1S to 9S). Alternative 3 also incorporates the existing pavement found on the northern shoulder of Greenwood Avenue in the area of Station 28N to 42N. The overall objective of Alternative 3 is to remove as much ACM-affected soil as possible without impacting the existing utilities (water, telephone, high pressure natural gas, and high voltage electric). This is presumed possible in all areas, with the exception of the area adjacent to Site 3 (where a cover is proposed) and the area along the northern shoulder where there is existing pavement that eliminates the potential for exposure.

USEPA's Proposed Alternative

USEPA's Alternative 5 would require removal of all ACM-affected soil at Site 6 located outside the main pavement of Greenwood Avenue, regardless of any potential complications related to existing utilities. Under the USEPA's proposed alternative, the amount of ACM-affected soil to be excavated and disposed off site would be approximately 5,200 cubic yards. USEPA estimates the cost of this alternative to be approximately $1,869,000, an increase of approximately $1,400,000 over Alternative 3.

Respondent Comments to USEPA's Proposed Alternative for Site 6

The Respondents agree that removal of as much ACM-affected soil at Site 6 without impacting high risk utilities (*e.g.,* natural gas, water, high voltage electric, and fiber optic) is appropriate. As such, the Respondents preferred alternative (Alternative 3) proposes excavation as the main remedy in all areas except for the western end adjacent to the south side of Greenwood Avenue. In this area, it is known that ACM-affected soil extends beneath the likely depth of the utilities, therefore, a soil cover has been proposed, after any excavation necessary to place the cover without affecting stormwater drainage from Greenwood Avenue. Over the remainder of Site 6, excavation and removal of all ACM-affected soil was proposed as Alternative 3, provided it did not extend into and below the existing utility lines in a way that unduly complicated excavation. For those areas where complete removal was not possible, appropriate agreements or procedures would be implemented to prevent uncontrolled excavations.

The USEPA contends that Alternative 3 is not compliant with ARARs or protective of human health or the environment. Therefore, the USEPA's Alternative 5 proposes to remove all ACM regardless of depth or impacts to the utilities, with the exception of the area beneath Greenwood Avenue,

where an environmental covenant substantially in the form of Appendix N.1 would be put in place to address ACM potentially beneath the surface of Greenwood Avenue. The agency is also proposing to require placement of asbestos-warning signage, up to every 100 feet along the road. Inherent in Alternative 5 is an opinion on the part of the USEPA that, while an environmental covenant may be applied to the area beneath the surface of an asphalt roadway, it is not appropriate to apply it to a two-foot soil cover on the shoulders of the road. The Respondents object to this arbitrary determination of covenant applicability and use. As proposed, Alternative 3 is in compliance with regulatory requirements and is, therefore, an acceptable remedy. USEPA's additional requirements embodied in their Alternative 5 are therefore excessive and burdensome; and do not provide a material reduction in risk to human health or the environment for the substantial increase in cost contrary to remedy selection requirements of CERCLA, the NCP and US EPA guidance. The Asbestos NESHAP requires signage in areas where ACM is present and a soil cover is not used. As there will be no areas in Site 6 with known ACM remaining that will not have a cover meeting the NESHAP standards, Respondents do not believe signage is required on Site 6 by any ARAR. And, as noted in the JULIE section below, Respondents believe there are other ways to provide notice to those who might excavate in Site 6 or the paved roadway.

ARARs

The USEPA has posited that the Respondent's preferred alternative for Site 6 does not comply with ARARs (see USEPA revisions to Table 10), principally on the grounds that "the public has unlimited access to the shoulders of Greenwood Ave and, thus this asbestos disposal area is not "inactive" (see USEPA modifications to Section 5.2.1.2). As to the issue of whether or not a disposal site may be considered "inactive," 40 C.F.R.§ 61.141 defines an *Inactive Waste Disposal Site* as "any disposal site or portion of it where *additional* asbestos-containing waste material has not been *deposited* with the past year." While it is clear that no *additional* ACM has been "deposited" on Site 6 within the past year, the USEPA has, in this case, determined that "disturbance" from snowplows, during a hypothetical future utility excavation or catastrophic vehicle accident that penetrates a two-foot cover is the functional equivalent of "deposit" from a regulatory perspective. Therefore, in USEPA's opinion, the site is no longer "inactive" and the soil cover remedies in 40 C.F.R. § 61 and 35 Illinois Administrative Code Part 807 are not available for areas where such "deposition" could occur. By stretching the definition of "depositing" to include "disturbing," the USEPA is then able to compel the removal of all asbestos. The use of a soil cover (commonly known as an "engineered barrier"), whether over a utility or remaining portion of a road shoulder *(i.e.,* Alternative 3) does not violate ARARs, is entirely appropriate, and is used at many sites across the United States. Site 6 is not unique and therefore, unique remedies should not be arbitrarily applied.

USEPA also contends that the "unrestricted access and unrestricted use of the shoulders of Greenwood Avenue would not be in compliance with the use restrictions of 35 IAC 807 and 40 C.F.R.§ 61.141, which require an ***undisturbed*** (emphasis added) cover on an inactive asbestos disposal area." The Respondents acknowledge that the regulations require that a cover be "maintained" (*e.g.,* C.F.R. § 61.151(2) and (3)), but that is not the functional equivalent of "undisturbed." Maintaining a cover would ensure compliance with ARARs and is a simple matter of periodic inspection and repair, as well as replacement of the cover following utility maintenance, as is done at countless sites across the United States.

Covenants

Site 6 is owned by the City of Waukegan. The USEPA's position that Alternative 3 does not comply with ARARs is also predicated on USEPA's inconsistently applied opinion that the City of Waukegan's system of managing access to their rights of way is not adequate to address appropriate notice to any party with a planned excavation within Site 6. While USEPA feels that their proposed covenant is adequate to address the area beneath the Greenwood Avenue pavement, they do not apply the same judgment to the shoulders of Greenwood Avenue. It is the Respondent's opinion that the covenant is appropriately applied to both the pavement and the

shoulders. Alternative 3 does comply with ARARs. To assert without evidence that legally-binding covenants cannot be put in place or enforced presumes that the parties would willfully violate the law. Therefore, an alternative that incorporates executed covenants does not violate ARARs and is entirely appropriate.

JULIE

In addition to the proposed environmental covenants with existing utilities, the Respondents will enroll as a voluntary member of the Joint Utility Locating Information for Excavators (JULIE). As such, a map of Site 6 will be registered on that system. Therefore, if JULIE receives a call requesting a utility locate on or near ACM-affected soil at Site 6, they will notify the Respondents or their designated contractor (a common practice) of the proposed excavation and the Soil Management Plan and Asbestos Health and Safety Plan developed specifically for the Site can then be communicated to the parties. Using JULIE should eliminate the need for signage in areas where ACM is not known to be present (such as under the paved road surface and other paved areas of Site 6).

Emergency Excavations

The Respondents believe that executed covenants with the utilities and the JULIE enrollment will prevent so-called "emergency excavations." However, should these occur despite efforts to prevent them, the USEPA's activity-based monitoring of material on IBSP showed no similar concern for public safety, let alone potential exposure at occupational levels applicable to utility workers. Moreover, occupational air sample results collected by the Respondents from personnel present, adjacent to, and within the excavations during the investigation did not exceed the permissible exposure limit (PEL) for asbestos. Therefore, even if there is an excavation conducted without the benefit of the management requirements in the Soil Management Plan and Asbestos Health and Safety Plan, existing representative air sampling data from the site do not indicate that an unacceptable exposure to utility workers would occur. Thus, existing sample data collected during relevant site activity suggest that a so-called "emergency excavation" would not result in unacceptable worker exposure to asbestos. Further, potential exposure to the public during an emergency excavation is not applicable, as it is not reasonable to assume the public would be present near or within the excavation.

Paved Area along North Shoulder of Greenwood Avenue

Regarding the north shoulder of Greenwood Avenue, the USEPA is proposing to require the Respondents to excavate material beneath the paved portion of the shoulder extending from Station 28N to 43N. This area was not required to be investigated by USEPA as part of the Agreement, yet the agency is now requiring remediation without evidence of impact from ACM. The Respondents do not believe the USEPA has provided justification for removal of the paved surface and underlying soil, particularly when the eastern end of this area (*i.e.,* east of Station 43N) did not contain ACM-affected soil. The Respondents assert that the paved surface and underlying soil should be left in place and the paved surface utilized as an "engineered barrier" against potential exposure to asbestos (the presence of which is not even confirmed in this area), a practice used at thousands of sites nationally under various regulatory programs. Moreover, similar to the barrier proposed on the south side of Greenwood adjacent to Site 3, the Respondents believe that the current pavement and annual inspections/repairs, in addition to execution of an environmental covenant (or equivalent) with the City of Waukegan and registering the area with JULIE are appropriate safeguards against planned or emergency excavations.

Cost

The USEPA's cost estimate for Alternative 5 is $1,869,000, a substantial increase in cost over Respondents' preferred alternative (Alternative 3), without providing a commensurate benefit to

human health or the environment, which is contrary to CERCLA, the NCP and USEPA guidance on the cost effectiveness element of remedy selection. See "Guidance on Conducting Non-Time-Critical Removal Actions Under CERCLA" OSWER Directive 9360.0-32, (1993). See also the authorities cited in USEPA's Quick Reference Fact Sheet, "The Role of Cost in the Superfund Remedy Selection Process," OSWER Publication 9200.3-23FS (1996). The Respondents independently estimated the cost of Alternative 5 to be $3,559,000. This additional incremental cost of between approximately $1,400,000 and $3,100,000 over Alternative 3 is neither justified nor necessary.

Summary

The Respondents comments regarding USEPA's proposed Alternative 5 for Site 6 can be summarized as follows:

1. The Respondent's preferred alternative (Alternative 3) is in compliance with ARARs. Site 6 is inactive, and potential exposure to asbestos can be managed through placement and maintenance of a soil cover, registration of the area with JULIE, and the proposed environmental covenant. Alternative 3 is an appropriate remedy as proposed

2. The proposed environmental covenant (or equivalent) with the City of Waukegan for the area between Station 01S to Station 09S, the paved area from Station 28N to 43N, and any other area of Site 6 where complete removal was not practicable would require:
    - Registration of the area(s) with JULIE;
    - An agreement with the City of Waukegan, through an enforceable covenant, that intrusive work would be performed in accordance with the Soil Management Plan and Asbestos Health and Safety Plan;
    - For Station 01S to Station 09S and any other areas where complete removal of ACM was not conducted, installation of a visible marker layer (*i.e.,* construction fence) to delineate the base of the soil barrier; and
    - Annual inspection and repairs, as necessary to maintain the integrity of any barrier and pavement.

3. The Respondent's enrollment as a voluntary member of the Joint Utility Locating Information for Excavators (JULIE) provides an additional level of excavation control and notice of the potential asbestos hazard.
4. Executed covenants with the utilities and the JULIE enrollment is appropriate access control and hazard communication for any so-called "emergency excavations" that could hypothetically occur in the future. Moreover, existing air sampling data has not shown that an unacceptable exposure to utility workers would occur.
5. Requiring the Respondents to excavate material beneath the paved portion of the shoulder extending from Station 28N to 43N is neither necessary nor appropriate. The Respondents assert that the paved surface and underlying soil should be left in place and the paved surface utilized as an "engineered barrier" against potential exposure to the possibility of ACM (the presence of which is not even confirmed in this area), a practice used at thousands of sites nationally under various regulatory programs. The Respondents believe that the current pavement and annual inspections/repairs, in addition to execution of an environmental covenant (or equivalent) with the City of Waukegan and registering the area with JULIE are appropriate safeguards against planned or emergency excavations in this area.
6. The Respondents believe that the incremental increase in cost of between $1,400,000 and $3,100,000 to implement USEPA's Alternative 5 over the Respondents' preferred alternative (Alternative 3) without providing a commensurate benefit to human health or the environment

is neither appropriate nor necessary, and is contrary to CERCLA, the NCP and USEPA guidance.