Subject: Riverwalk Commons - MSHDA Environmental Review issues

All:

Below is a comprehensive overview of the environmental review/NEPA issues MSHDA has identified for Riverwalk Commons.

Attached is the health risk evaluation MSHDA requested be conducted of the Riverwalk Commons development (3.1 acres, aka "subject parcel") and the associated surrounding property, the Water Street Redevelopment Area (WSRA). For context, the WSRA is a 38-acre, vacant brownfield that would surround Riverwalk Commons for a significant distance in all directions. Hamp, Mathews, and Associates (HMA) was subcontracted through PM Environmental (PME) to conduct the analyses. Both firms provided concurring opinions. The information provided for this evaluation consisted of the draft DDCC report, historical data and figures, and supporting documentation submitted by the City of Ypsilanti's consultant, AKT Peerless, for the WSRA, and reports submitted by the developer's consultant, ASTI, for the subject parcels, including Phase I, Phase II, due care and conceptual site model reports. Soils and groundwater within the WSRA remain contaminated from over one-hundred years of industrial and commercial use with PCBs, PNA's, VOCs, and several metals, including lead, arsenic, cadmium, and mercury above DEQ Part 201's generic residential cleanup criteria (GRCC).

HMA's risk evaluation report and PME's subsequent review support a cautious approach to the redevelopment of the WSRA, citing, most particularly, the inability to reliably estimate the health risk to future residents. This inability stems from several open questions regarding existing contamination within the WSRA. Solutions presented to these problems include additional soil sampling to increase confidence in the contamination situation and with that the ability to reliably estimate health risks and acceptable due care measures (Incremental Sampling methodology seems well suited to this task), the installation of exposure barriers/covers, and reliably restricting access of residents to the off-property WSRA brownfield site.

Issues:

PCB and Lead Removal Areas

Two soil removal areas--a six-acre PCB Removal Area and the north-adjoining lead removal area—appear to have no verifying documentation to support their having been completed, such as manifests, soil volumes, photographs, fill documentation, VSR results, etc. AKT's draft DDCC, seems to accept the completion of this remediation as part of the basis for their analyses (AKT Peerless, DRAFT-Ypsilanti Water Street DDCC Text, Section 3.1; Figures 2-6). Contradicting this is a February 4, 2015, Brownfield Plan available from the City of Ypsilanti's website, and also prepared by AKT Peerless for the Washtenaw County Brownfield Redevelopment Authority where, in Attachment C "Remaining Areas of Contamination," the same removal areas are identified as having remaining PCB and lead contamination remaining, albeit the PCB contamination (0'-4' BGS) is noted as being below DEQ GRCC. But if these areas had truly had soil remediated down to 4' BGS, it is unclear why any contamination should exist. As a corollary, it is also unclear how it can be stated that the PCB contamination that does (somehow) remain in the PCB removal area is below DEQ GRCC, as stated in Attachment C, if the removal action cannot be verified and the samples prior to removal showed results exceeding those standards.

Such contradictions contribute to the general lack of confidence regarding the contamination situation within the WSRA. Additional evidence will be required for MSHDA to consider the remediation of these areas as more than supposition.

Contamination boundaries

Clearly delineated areas are depicted on many of the maps and figures of all reports. These purport to show boundaries of areas where specific contamination of any significance begins and ends. Confidence in these boundaries is key toward estimating risk and choosing the best due care measures. There are indications that the contamination concerns cannot be so neatly defined in an area as large and with as many decades of industrial use as the WSRA. The confidence of these boundaries is called into question by both recent and historical sampling. For example, the 2014 Phase II sampling conducted by ASTI on the Riverwalk Commons Parcel, which is outside of any denoted "PCB area", found PCB contamination above direct contact criteria. One sample (42 ppm @ SB-1) exceeded MDEQ GRCC (4 ppm) by over tenfold and TSCA. "high density" standards (1 ppm) by fortyfold. A second sample from this same data set (SB-6) also exceeded both standards. Looking through the historical dataset, there are detections of PCBs above GRCC and/or TSCA high density at locations east of the subject parcel (29-7B (33 ppm) and 29-8B (1.6 ppm)), which are well outside of the areas delineated "PCB areas". This demonstrates significant contamination outside designated boundaries. Going the other way, where contaminants are found within what is stated as a removal area for that same contaminant, 2014 sampling showed soil lead concentrations exceeding DC GRCC by several times in the western portion of the subject parcel, which appears to overlap the reported lead removal area.

Such discrepancies may indicate a wider distribution of contaminants than is currently considered. Additional sampling would answer this concern. Incremental Sampling methodology appears well suited here. Also see note on TSCA vs Part 111/201 standards, below.

Fugitive dust

Fugitive dust concerns, whereby disturbed contaminated soil becomes airborne and transported offsite, remain a significant challenge here. The city's draft DDCC does not address fugitive dust directly, but calls for maintaining vegetative cover, which is not uniform, and for the use of erosion controls when soil is disturbed. The draft DDCC may also be considering fugitive dust when it makes the repeated statement that all necessary due care becomes the responsibility of future owners. While perhaps true, this is unspecific and would rely on future entities with unknown experience and intent to execute a critical function in keeping Riverwalk Commons safe.

If the WSRA enjoys the future development that is hoped for over the next few years, it is fair to say that the area will be an active construction and remediation zone, on and off for the next several years. So, it is not a far-fetched scenario to imagine children from Riverwalk Commons playing outside their homes, downwind and only yards from where a building foundation is being dug in the known PCB or TCE area, a roadway is constructed through the old foundry property, pipes are being laid, and contaminated soil is being characterized for disposal. Any successful plan will need a plan that fully contemplates and accounts for such a scenario, and asks if that is actually possible; a plan whose requirements would be imposed on any future owners of WSRA property close enough to impact the Riverwalk Commons site. As all these events are foreseeable and reasonable, the proper place for that plan would seem to be the DDCC.

Perhaps most significantly, the location of the proposed site, toward the southern-middle of the WSRA, closest to the area of remaining (denoted) PCB and lead contamination, greatly exacerbates the fugitive dust concern. It may, in fact, not be possible to satisfactorily address fugitive dust concerns such as is described in the paragraph above in the current location. A safer approach would be to develop first around the north and western perimeters, particularly the west, and work inward, instead of placing units of your most sensitive population before all else and in the center, nearest the highest areas of contamination.

MSHDA requests that the Riverwalk Commons site be moved north, closer to Michigan Avenue, and as far west, to get ahead of prevailing winds, as feasible within the WSRA. In addition, the city's DDCC must include an adequate soil management plan whose requirements will be mandatory for future purchasers of property that may impact the Riverwalk Commons site, regardless of where it is eventually sited.

TSCA, Part 111/RCRA, or Part201 authorities

PCB contamination may invoke differing authorities. HMA's report and PME's review indicate that the PCB contamination within the WSRA appears to most correctly fall under the provisions of TSCA, though elements of Part 111/RCRA and Part 201 may also apply. The report recommends that the owner of the property employ a "Coordinated Approval" process, as described in the report handouts.

MSHDA is asking that the city obtain a written opinion from DEQ regarding the applicability of TSCA or Part 111/201 authorities as they apply to the PCB contamination at the WSRA.

Access restrictions

The current draft of the city's DDCC, which provides for no fencing, seems more geared to an occasional visitor to the WSRA property (i.e., TSCA low-occupancy criteria) than a year-round resident (TSCA high occupancy criteria). While the current DDCC may be perfectly adequate for occasional public access, the exposure profile of an occasional pedestrian differs greatly from that of the full time residents, many of them children, that can be expected at Riverwalk Commons. Without greater confidence in the contamination characterization, as described, restricting off-site access to the WSRA is prudent. Fencing the development would still allow adults and older children to "walk around" and thereby access the WSRA, while still providing a prudent barrier to small children, who are more susceptible to contamination, likely to play in the dirt, not wash their hands, ingest, etc.

Section 7a(c) of Part 201, requires the owner or operator of contaminated property to "Take reasonable precautions against the reasonably foreseeable acts or omissions of a third party and the consequences that foreseeably could result from those acts or omissions." It is entirely foreseeable that the residents of Riverwalk Commons will leave their homes to explore and play in the large, vacant land surrounding them (or that workers constructing a walking path, building foundation, or detention pond might disturb contaminated soil).

MSHDA recommends a fence to restrict off-site access be a part of the Riverwalk Commons project. In addition, a dedicated 1 to 2 acre park or play area with a clean soil cap and maintained ground cover, adjoining Riverwalk Commons and provided by the city within the fenced area, should be considered as a means to provide a reliably safe, outdoor environment

The situation at Riverwalk Commons, where risks cannot be reliably estimated due to the incomplete characterization and the area surrounding the proposed site is a contaminated brownfield that is fully anticipated to be active with construction and redevelopment over the next several years, intractable off-site exposure issues such as fugitive dust and direct contact become bona fide Environmental Justice concerns that will need specific answers. The Environmental Justice language cites "avoidance" as one of the strategies to be considered in avoiding adverse impacts. This speaks to MSHDA's request for the site to be relocated more north and west on the subject property, but may also be interpreted by HUD itself, as meaning alternate locations in and around the City of Ypsilanti that have fewer environmental issues.

The Environmental Justice portion of the NEPA report for federal funding, for Riverwalk Commons, will need to

Summary

MSHDA has a long history of successfully partnering on the redevelopment of brownfield properties and creating safe, affordable housing situations where none had existed prior. The Riverwalk Commons proposal is unique in the challenges presented because it is a development proposed as an island of developed land within a large tract of undeveloped, vacant brownfield with industrial contaminants, including PCBs, PNA's, chromium, and lead. For such a proposal to be successful and move forward, will require an active and invested approach from all parties, particularly the owner of the surrounding brownfield.

Without confidence in the characterization, it is difficult to approve the Riverwalk Development as planned. HMA's Health Risk Evaluation and our own review of the data do not support a conclusions that the city's draft DDCC is adequate. The report draws wide-ranging conclusions about risk from a dataset that was largely not designed for assessing exposure. The available historical dataset was, understandably, more geared toward answering questions of extent, fate, and transport, and so many samples are taken from quite deep below ground. With few actual shallow-soil samples, and a large part of the area not systematically sampled, questions regarding direct contact have been loosely surmised. MSHDA strongly recommends additional sampling using Incremental Sampling methodology of shallow soils be done to address this uncertainty.

Of greater complexity still is the potential for fugitive dust concerns. This would be a concern of not only contaminated shallow soils, but also deeper contaminated soils, which would be disturbed, tracked, transported, characterized, and removed during construction. The potential negative outcome of families complaining of dust and having that dust tested and shown positive for contamination

Options/Recommendations

- 1) Relocate the proposed site as far north and west as possible. This moves the site away from the areas of most (indicated) PCB and lead contamination, improve marketing, and increases the chances that Riverwalk Commons is upwind of any future development. The problem of fugitive dust is particularly intractable in the current location.
- 2) **Restrict access to off-site properties.** Insufficient data exists to reliably estimate the health risk to future residents. As a result, a fence to prevent easy access to the off-site property, particularly by smaller children, is required.

- 3) Redraft the off-site DDCC The current draft of the city's DDCC does not adequately account for, or imagine, all the reasonably foreseeable actions by third parties.
- 4) **Fugitive Dust** a rigorous soil management plan to address the issue of contaminated soils being disturbed by workers, tracked, and becoming airborne must be included. Compliance with the plan must be made a condition upon any future owners of property where redevelopment activities could potentially impact the eventual Riverwalk Commons site, anticipating the dispersive action of winds, machinery, and other actions involving the soil.
- 5) Additional data, employing Incremental Sampling methods, particularly of shallow soils, would provide much needed clarity and confidence, despite perhaps having to re-draw the contamination maps.
- 6) A 1 to 2 acre park with a clean soil cap, adjoining the Riverwalk Commons site at its eventual location would provide a safe play area for development children to play. The only city parks within easy walking distance of the WSRA appear to be to the north, across Michigan Avenue, or to the south, across the Huron River, neither of which appear from aerial photos to contain a play area or seem likely parent-approved destinations for small children.

I hope the enclosed information is helpful and defines both the concerns and opportunities for Riverwalk Commons. MSHDA is available to hear comments and have further discussions on how to move the proposal forward.

Daniel Lince
Environmental Manager
Michigan State Housing Development Authority
Ph 517.335.0183
www.michigan.gov/mshda