UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

Via Email
February 21, 2012

To: Tom Fox, National Tube Holding
James Tolbert, AECOM
David Mursch, Geotechnical and Environmental Engineer

From: Michelle Kaysen, US EPA
Bhooma Sundar, US EPA

Re: Prairie Ronde Realty (National Copper Products)
Dowagiac, Michigan
Draft Indoor Air Sampling Plan for On-Site PRR Building, 2/13/12

EPA has reviewed Prairie Ronde Reality's (PRR) Draft Indoor Air Sampling Plan, submitted on February 13, 2012, for the on-site PRR industrial building. This sampling plan was submitted as a response to EPA comments on PRR's Corrective Measures Proposal (CMP) during our January 17, 2012 project meeting in Chicago. These comments address components of the indoor air sampling methodologies, analytical and sampling quality assurance, and appropriate decision criteria also to be addressed in the final CMP. EPA is also providing to PRR the final groundwater-to-indoor air screening criteria calculated from site-specific information at MW 05-14. That information can be found at the end of these comments.

Please revise the Indoor Air Sampling Plan accordingly and incorporate those relevant portions into the final CMP.

1. The draft work plan does not appear to include paired sampling that involves simultaneous collection of sub-slab and indoor air. The advantage of paired sample analysis includes site specific determination of sub-slab to indoor air attenuation factor as well as distinguishing background sources from indoor vapor intrusion. This was discussed during the January 17th meeting and should be incorporated into the revised work plan.

2. The work plan proposes to collect indoor air samples where vapor monitoring points are located; however, the worker occupancy does not appear to have been assessed at this point. The building adjacent to VMP-10 is not included in the sampling plan and it is not clear if the building is currently occupied. The work plan should be revised to address this discrepancy and if needed, a sub slab port should be installed in the building adjoining the building in which VMP-10 is placed.

3. The approved 2009 indoor air mitigation work plan provides the SOP for construction and installation of permanent sub-slab soil gas wells. Steps should be taken to ensure that the existing monitoring points are comparable to the above mentioned SOP and compatible for collection of soil gas using a Summa canister. Furthermore, port integrity must be established. Leak tests should be conducted to ensure that ambient air does not enter into the sub-slab soil gas. Quantitative leak testing data should be provided to EPA for quality assurance purposes. Please include a duplicate sample in the sampling plan.

4. An ambient air sample should be collected to evaluate indoor air vapor intrusion using a multiple lines of evidence approach. The sample should be collected outside and upwind concurrent with the indoor air sampling.

5. Please note that EPA recently revised the toxicity values for Trichloroethylene (TCE) and Tetrachloroethylene (PCE) which are available at: http://www.epa.gov/iris/subst/0199.htm, http://www.epa.gov/iris/subst/0106.htm.

   Based on the revised toxicity data, the clean up criteria for the industrial indoor air for TCE and PCE are 8.8 and 175 ug/m3 respectively. Please refer to the EPA RSL table to derive the screening criteria for other chlorinated VOCs found in groundwater. The laboratory detection limits and reporting limits should be verified to be below the target screening/clean up criteria. For screening purposes, a soil gas attenuation factor of 0.1 should be applied to the indoor air target clean up criteria. The building indoor air clean up decision is dependent on exceedance of sub slab soil gas criteria and /or indoor air clean up criteria.

6. The work plan states the indoor canisters will be individually certified. Sub-slab canisters may be "batch" certified, but ensure the laboratory labeling is clear when deploying the canisters.

7. Please revise the work plan to indicate how the analytical findings will be used either to update the human health risk assessment or CMP for the facility. This sampling plan, the results, and corresponding decision criteria should be included in the final CMP.

EPA is also providing to PRR the final groundwater-to-indoor air screening criteria calculated from site-specific information at MW 05-14. This final remedial goal should be incorporated into the CMP. The screening groundwater concentration targeting a screening concentration of 0.43 ug/m3 in residential indoor air is 5.95ug/l or 6 ug/l . Therefore, the final remedial goal for groundwater protection to residential indoor air receptors is 6 ppb.

EPA looks forward to facilitating the indoor air sampling event and finalizing the corrective measures proposal.