



APPROVED

1/20/15 H.B.

December 12, 2014

Ryan Weiser
Holly Burke
Kansas Department of Health and Environment
1000 SW Jackson
Topeka, KS 66612-1367

PNL Project 07-119.400

RE: National Zinc Cherryvale, Kansas, Phase II Removal Site Evaluation Status Report. Prepared on behalf of United States Steel Corporation and Citigroup Global Market Holdings, Inc. (collectively the "Respondents" under Consent Order No. 03-E-0022, as amended.)

Holly and Ryan,

Please find attached a summary of the work through December 12, 2014.

General Work Status

Project Navigator, Ltd. (PNL) continued to obtain access agreements for properties within the city of Cherryvale and work is continuing to define smelter residue material (SRM) classification for residences, ditches and alleys. Sampling of residences to fulfil the initial work plan objectives has been completed. Additional work to complete remaining samples for alleys, ditches and gradients as per the work plan is ongoing. Sampling at 4 daycare center facilities was completed. Follow-up sampling was performed at 3 daycare facilities to better define previous sampling results. SRM observations for residential properties, alleys and ditches are nearly complete and the information is being compiled and reviewed for consistency.

Access Agreement Status

To date, access agreements have been secured for inspection or sampling of 106 properties.

Community Relations

The community is aware of the activities in Cherryvale. The locally employed staff continues to work within the community to obtain access agreements locations needed for SRM observations and sampling. As our presence becomes more widely known, we continue to obtain access for residents requesting inspection of their property. Staff from the City of Cherryvale has not reported any resident complaints to PNL staff. Residents have been cooperative and no complaints have been expressed directly to PNL.

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Cherryvale Phase II RSE Update

Agency Interaction

Agency interaction has included telephone calls to Holly Burke at KDHE regarding work status. KDHE has observed the work in the field and sample splits of selected samples were collected by KDHE for laboratory analysis. As per the email request on 12-4-2014, we are performing laboratory verification on sample splits collected by KDHE that will be submitted along with the XRF QA/QC samples. Results should be received in January 2015. The split results received from KDHE will be tabulated and compared with XRF results. Requested revisions to the school survey report have been completed and will be submitted to KDHE for review. Other interactions with the City have been routine.

Notable Observations

Observations from residential properties indicate that elevated soil values for lead coincide with occurrences of SRM either used as driveway topping or fill material. Stressed vegetation, dark gray or black colored soil and green moss are usually observed with SRM. In a few areas, SRM has been observed in the subsurface without the characteristic vegetation stress. In these instances, additional soil cover or sod apparently has been added. On closer inspections, fill areas are evident and observations have been added to include possible filled-in areas that may not show SRM indications at the surface. Some additional sampling of these filled in properties is being considered to refine the SRM classification methodology.

Observations in ditches on both the east and west side of town show a range of SRM classes with most in the C and D-class category. Many ditches are grass-filled with soil only observed at the culverts. In these instances, the ditch classification is being refined to note observations both in the main ditch and at the exposed drainage culverts. Where ditch sidewalls are exposed and SRM base under the road is observed, these ditches are interpreted as A-class. Since there are many more C and D-class ditches which have been undisturbed for some time, we plan to look more closely at the gradients in these areas and shift some focus on ditch gradient sampling from the A-class ditches to C and D-class ditches. This approach should give us a better picture of how the ditch materials may extend beyond the right of way and also what may be expected if ditches are excavated.

Additional gradient sampling at sidewalks has been performed and we are analyzing the information to understand the metal distribution away from the sidewalks where brick is intact, damaged or removed. Measurements at several locations indicate SRM under brick sidewalks is only a few inches thick, confirming other observations where brick is exposed in ditch cuts. So far our brick sidewalk observations indicate SRM is primarily directly under the brick. While the gradient sampling so far does not indicate SRM migration above regulatory limits within the gradient sample area, we are looking in more detail at the potential for SRM to disperse at the surface where disturbed, broken or missing brick is observed.

Task Status

Over 500 individual XRF sample analyses have been made to date as part of the field sampling program. Of the scheduled sampling, the following tasks remain.

Cherryvale Phase II RSE Update

Category	Remaining to complete	Note
Residences	Complete	Consider adding 2 or 3 properties of D class with possible fill.
Alley	1 of A and B, 2 of D Class	Select to cover areas to east.
Ditches	2 of B and C, 3 gradients	Add or change focus on A class ditch gradient to C and D.
Gradients	2 alleys, 1 sidewalk, 4 driveways	Completion of driveway gradient done following completion of property SRM observations.
School / Park	Logan Park, Ballfield on S Galveston by Lake Tanko	Prepare proposed sampling map and submit letter plan for KDHE prior to start. Tentative focus on play areas.
Other	Additional sample in air deposition area	Additional sample requested by KDHE in area north of Front St.
SRM Classification	Review classes and refine	

- Continue work to obtain access agreements for selected property needed to complete observations and sampling.
- Continue XRF analysis of collected samples.
- Complete laboratory confirmation sampling to cross check X-ray analysis
- Continue to refine SRM classification methodology as per the work plan.

Schedule

Field work will be done to complete remaining sampling during December until the holiday. Field work by the sampling crew will resume on or about January 5th. All of the scheduled field sampling as per the work plan for this phase of work, weather permitting, should be completed by the end of January 2015. A schedule update is forthcoming.

Should you have any questions, please contact me at 713-539-3636 or by email at mlandress (at) projectnavigator.com

Regards,
Mark Landress, P.G.

/s mlandress

Project Navigator, Ltd.