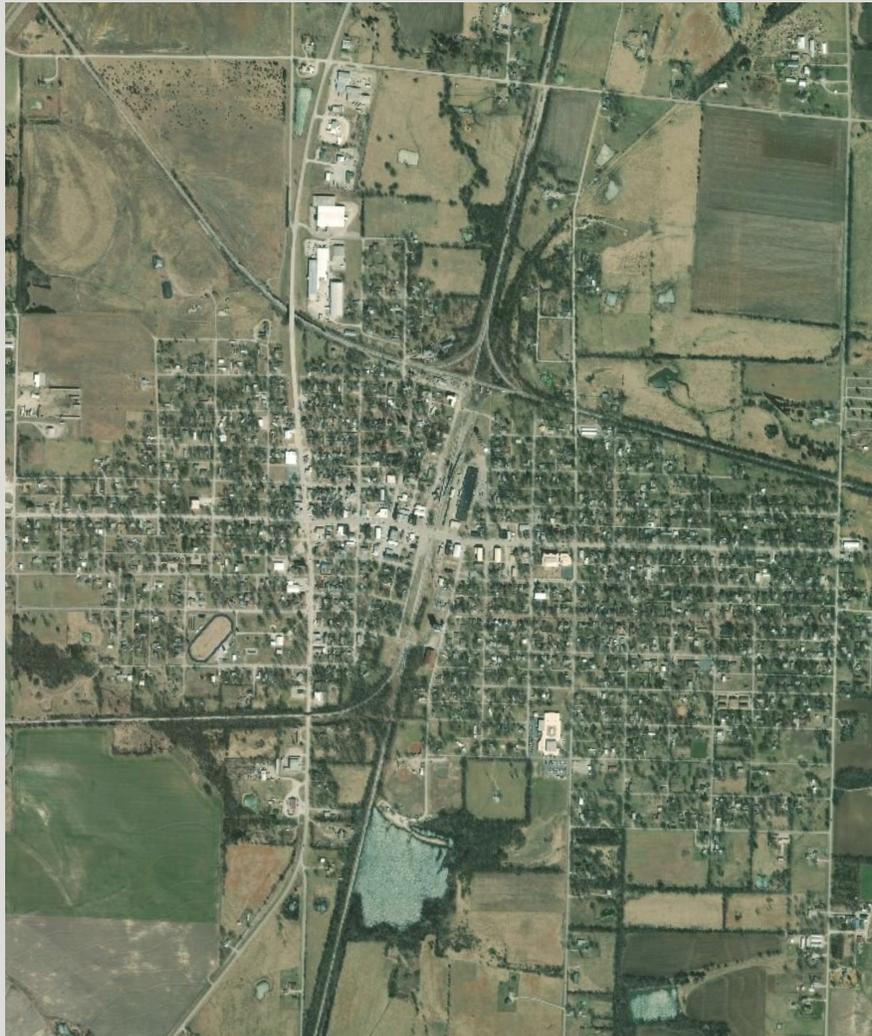


Attachment 2

CITY OF CHERRYVALE

Simple Guide: SRM Management During Excavation Activities



Note to User:

This simplified brochure provides key highlights related to management of smelter residue material and associated impacted soil, collectively referred to as “SRM” during excavation activities, and does not contain comprehensive information and regulatory requirements (e.g., restoration, transportation, disposal, reporting, etc.). Please consult “Required Environmental Provisions for a City Excavation Permit: Quick Reference Guide”, the Soil-Waste Management Plan (SMP) approved by the Kansas Department of Health and Environment (KDHE), and related documents (including referenced City Ordinances) to obtain more complete information and identify and ensure compliance with all additional, applicable requirements.

What general precautions should be followed for SRM disturbance?

General precautions are summarized below for property owners and others who may encounter SRM. Each scenario will likely have unique considerations, and parties shall comply with all pertinent local, state, and federal requirements.

The primary contaminant in SRM is lead. Other contaminants include arsenic, cadmium, and zinc. People may be exposed during SRM handling by touching it (dermal contact), and incidental ingestion, and inhalation of particulates (dust).

- Wear disposable gloves when picking up and containerizing SRM.
- Dispose of gloves immediately following use in a trash receptacle.
- Do not clean and reuse disposable gloves. Disposable equipment is not intended to be cleaned and reused.
- Avoid eating, drinking, and smoking when handling SRM.
- Dampen soils and SRM to limit dust formation in the work area.
- Avoid working on windy days when dust can be mobilized.
- Wear a dust mask if conditions are dusty, resulting in airborne particulates from SRM and soil.
- Remove residual SRM from reusable equipment (e.g., shovel) by dry brushing, and reuse or dispose of the residual in the same manner as the removed SRM.
- Keep children and pets away from the work area when SRM is exposed.
- Wash hands thoroughly after removing and disposing of gloves.
- Wash work clothes that may have contacted SRM in a separate, individual load. Do not mix with other laundry.

- Remove shoes after work is completed and before entering a residence or work place. Dry scrub and/or wash shoes to avoid tracking SRM into indoor spaces.
- Restore areas of SRM disturbance as discussed above.
- See the simplified flowchart shown in Figure 1 below, “Management of SRM generated from excavation activities flowchart”. Dispose of SRM only by placing it back in the excavation hole, or at a disposal location approved by KDHE and designated by the City for this specific waste (initially the Waste Deposition Area located at 598 West Martin Street in Cherryvale, Kansas [at the corner of West Martin and North School Streets]), following procedures set forth above. SRM and soils containing SRM cannot be reused in any other manner and cannot be disposed of or moved to another location without the prior approval of KDHE. Note that City Ordinances allow residents who discover SRM on the surface of private property to collect the SRM, place it in special collection bins with lids to be provided by the City, and place the bin or bins at the curb for pick-up by the City. This curbside pick-up is only available to residents for projects that do not require an Excavation Permit.
- Granular black sand SRM underlying bricks cannot be reused under Action 1 shown in the flowchart, and disposal must be by Action 2 shown in the flowchart. For this reason, it is strongly recommended that disturbance of brick sidewalks and driveways and the black sand SRM beneath them be avoided, and that small or partial disturbances of the brick (less than 20 square feet) be repaired without removal of the SRM and instead the missing brick be replaced either with brick or with a concrete patch.
- Contact KDHE or the City with any questions or concerns regarding SRM handling.

What environmental protections are required for SRM disturbance?

Applicants will identify and implement controls, as appropriate, to protect the environment and reduce exposure to SRM during management of these materials. This typically includes, but is not limited to the following (see the flowchart in Figure 1):

- Minimize soil excavations and areas of vegetation removal.
- Control all SRM and soils containing SRM in a manner that will minimize or prevent dust formation and erosion.

Example: Load into a lined and covered truck, or, if temporarily stockpiling, cover with clean soil, plastic, blankets, or similar materials that are secured in place.

- Suppress/control dust during excavation, which may include spraying water onto the ground during work.
- Wear appropriate personal protective equipment (PPE) during handling and management.

Includes disposable gloves to prevent contact at all times when handling SRM and soils containing SRM, a dust mask during dry and windy conditions, and other equipment. Remediation contractors and workers conducting ongoing excavation work with potential exposure to airborne dust may need to employ respirable dust monitoring in the work area using a portable field monitor.

- Employ appropriate best management practices (BMPs) to avoid stormwater pollution. A stormwater permit may be required; the party conducting work is responsible for identifying and obtaining all required permits.

In general, take precautions to avoid 1) water accumulation in excavations, 2) disturbances of drainages (e.g., clogging), and 3) degradation of water quality (exposure to SRM). BMPs should be used if deemed necessary, and, as allowed or required by law, may include diversion ditches, dikes, silt fences, settling ponds, or other features.

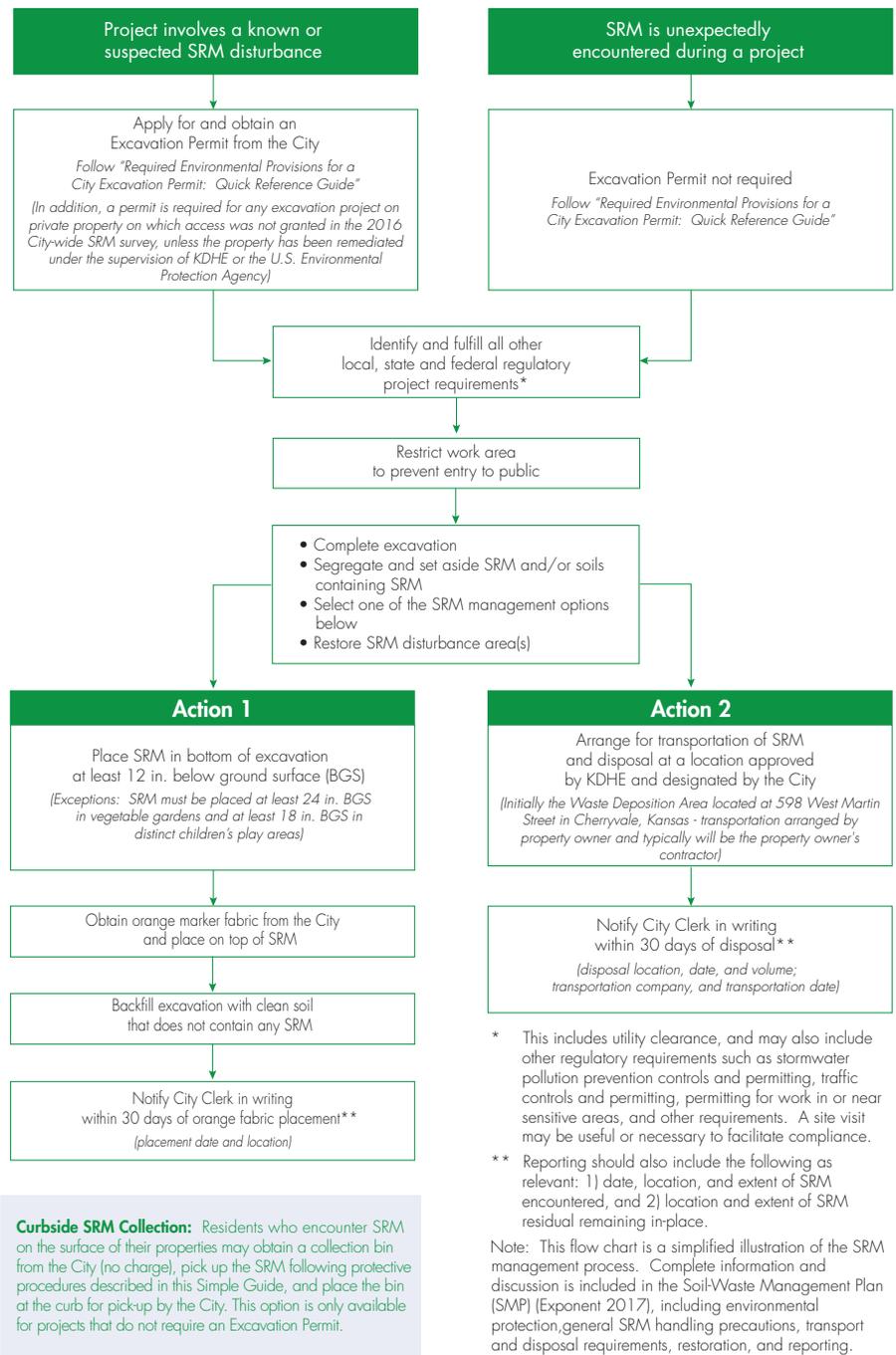


Figure 1. Management of SRM generated from excavation activities flowchart