

## **Masonry Sampling Plan Former Ithaca Gun Facility**

### **Objective**

Collect samples of concrete walls, pillars and floors for reuse/disposal characterization prior to demolition.

### **Assumptions:**

- 3 floors plus a basement are present. Each floor is approximately 30,000 sq ft in size. The basement is approximately 5,000 sq ft in size.
- Perimeter walls will be sampled.
- Interior walls are either wood or wood frame with wallboard and will not be reused.
- Floors will be visually inspected for staining and stained areas will be marked in spray paint prior to sampling. Concrete in these areas will be disposed offsite and not reused.
- Per NYSDEC discussions, reused materials will be characterized at a frequency of 1 sample per 1,000 cu yds.

### **Sampling Frequency**

#### **Upper 3 Floors**

- 2 samples will be collected from the pillars (minimum of 4 pillars composited for each sample)
- 3 floor composites will be collected – each composites will be made up of samples from at least three different areas within a given area.
- 4 wall samples will be collected – the composites will be collected from contiguous walls representing areas of the facility.

#### **Basement**

- The floor and side walls of the shooting range will be sampled once it is broken up for disposal.
- Composite samples will be collected from each wall in the basement for characterization. These samples will be collected once the upper floors have been removed and the mechanical equipment and piping have been removed.

#### **Stained areas**

- Additional samples will be collected of stained areas for disposal characterization analysis. The number of samples will be dependent on the combined size and locations of the stained areas.

### **Sampling Methodology**

- It is estimated that the walls and floors are on the order of 8 inches thick.
- To the extent possible, samples of the full thickness of the floor and walls will be collected. If this is not possible, the penetration depth of the samples will be recorded.
- The pillar samples will penetrate up to 3 inches into the surface or at a depth and frequency that will not impact the integrity of the structure.
- Samples will be collected using a core drill or drill bit.
- Pieces of concrete need to be less than 3/8 inches. The cores and chips will be crushed as needed using a hammer or other means. If needed, cloth or plastic will be wrapped around the sample prior to crushing to control distribution of the pieces.
- Figures showing individual sample locations and composited areas will be recorded by the field crew.
- The laboratory requires 1 4-oz jar and 1 16-oz jar of concrete for the total analyses and an additional 4-oz jar and 16-oz jar for the waste characterization analysis.

**Analysis**

Composted samples will be analyzed for the following:

<i>Total analyses</i>	<i>Waste Characterization</i>
<ul style="list-style-type: none"><li>• Volatile Organic Compounds (VOCs)</li><li>• Semivolatile Organic Compounds (SVOCs)</li><li>• RCRA Metals</li><li>• PCBs</li></ul>	<ul style="list-style-type: none"><li>• To be established by the waste receiver</li></ul>

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