1. Purpose

To outline the method for coning and quartering for a sample.

2. Background Information

Cone and quarter is a method of reducing a bulk sample to a smaller size without changing the composition. Initial quartering of a large sample of material should be carried out to a point where a riffle splitter can be used conveniently.

3. Reference

Learner Guide PMLSAMP400B

4. Safety Information

As safety is paramount, the following PPE is highly recommended. Please refer to the specific instruction for your task or ask your trainer if unsure about the minimum compulsory PPE designated for your work.

- Safety Boots (steel capped)
- Safety Glasses
- Lab coat

5. Definitions

6. Materials/Equipment

- Shovel
- Tray
- Sample
7. Procedure

1. Load the sample onto a large, thick plastic sheet or a large tray placed on the ground.
2. Mix the sample thoroughly with a shovel.
3. Shape the sample pile into a conical-shape with the shovel.

![Conical Sample Pile]

4. Flatten the top of the conical pile with the back of the shovel.

![Flattened Pile]

5. Evenly divide the sand pile into quarters with the shovel.

![Divided Pile]

6. Divide and separate the quarters with a shovel.

![Separated Quarters]

7. Discard opposite quarters, keeping two.

![Kept Quarters]
8. Form a new cone with these two quarters.

8. Clean up
   Remove spillage and dust off the work station
   Wash and dry shovel and tray

9. Additional Information
None

10. Quality
Not applicable

11. Review

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