

IMPROVEMENT OF CHEMICAL REAGENT ORGANIZATION

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AQS Trained ISO9001:2000 Lead
Auditor

5s SORT

Sort a group having similar qualities; a crowd or flock.

Batch a group or collection of persons or things of the same kind, taken or made at the same time.

Lot Specifically, a quantity of material all of which was manufactured under identical conditions and assigned an identifying lot number.



5s SORT

Separate Chemicals by Class

- | Explosives
- | Flammable Gas
- | Flammable Aerosols
- | Oxidizing Gases
- | Gases Under Pressure



5s SORT

Separate Chemicals by Class

- | Self-Heating Substances
- | Substances which on Contact with Water Emit Flammable Gases
- | Oxidizing Liquids
- | Oxidizing Solids
- | Organic Peroxides
- | Substances Corrosive to Metal



5s SORT

NON ACID-RATED



ACID-RATED



5s STRAIGHTEN

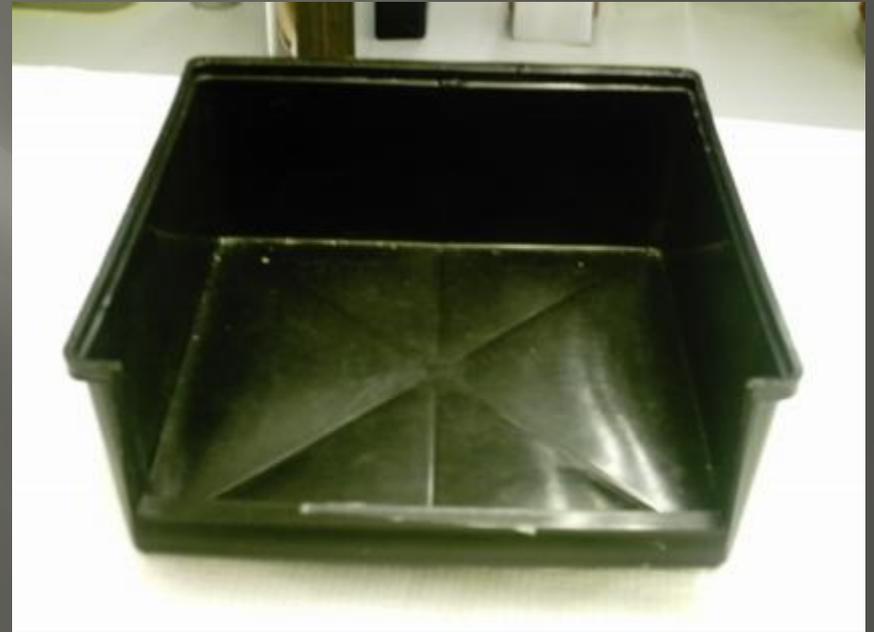
Set In order:

To put into a desired position or condition; to adjust; to regulate; to adapt.



5s STRAIGHTEN

The use of these black bins to separate chemical classes by test made the reorganization easy for everyday use.



5s SHINE

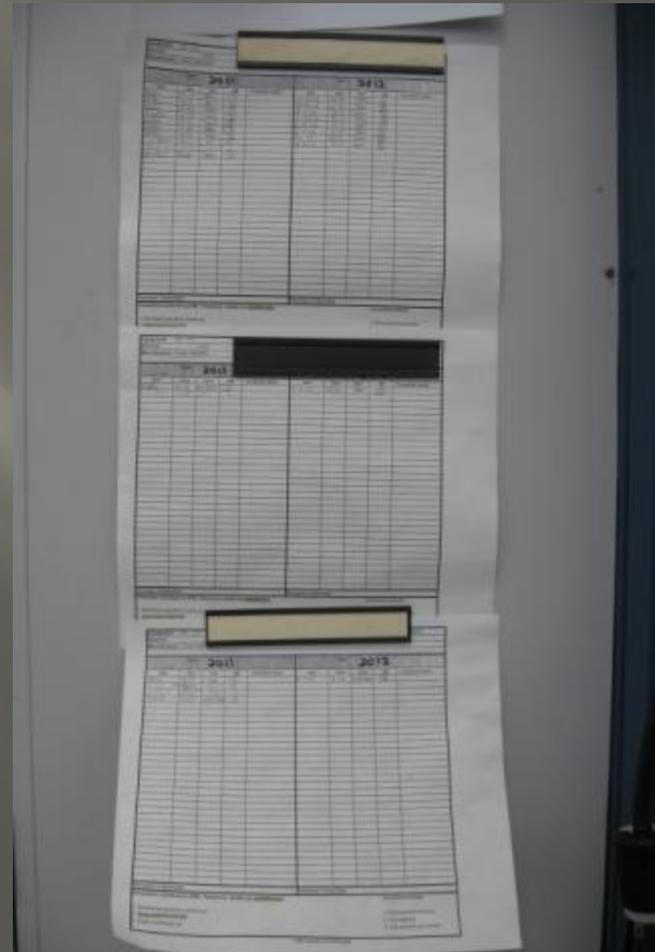
Shine:

- to be eminent, conspicuous, or distinguished;
- to perform extremely well;
- to have a bright glowing appearance;
- to be conspicuously evident or clear.



5s SHINE

Currently the radiochemistry laboratory has checklists in place for cleaning of hoods and centrifuges. These should be expanded to include all work spaces, i.e. bench top.



5s STANDARDIZE

Standardize:

to make or become standard.



5s STANDARDIZE

LEFT SIDE



RIGHT SIDE



5s STANDARDIZE

- Fill reagents before placing into storage container at end of day. Like throwing out milk jug when finished, not returning to the refrigerator empty.
- Placing empty reagent bottles on counter as a reminder to replenish if needed.
- Clean reagent bottles, by rinsing outside and inside depending on need.
- Replace illegible labels.

5s STANDARDIZE

This is where I encountered my first hurdle due to my position in the laboratory. It required management involvement to get other team members on board. Due to workload and time constraints, management has not been able to standardize both work spaces.

5s STANDARDIZE

We made new reagent bottles with different colored labels for the different reagents to aide in the reduction of erroneous use.

This is an example of a Poka-Yoke.

This was the most well received improvement.



5s SUSTAIN

Sustain:

to keep (a person, the mind, the spirits, etc.) from giving way, as under trial or affliction;

to keep up or keep going, as an action or process.



5s SUSTAIN

- This is where another hurdle was encountered, usually during this step checklists are created. Due to my position in the laboratory, checklists could not be created without management involvement, and due to workload and time constraints this has not been accomplished.

5s COMPARISON

BEFORE



AFTER



5s COMPARISON

BEFORE



AFTER



5s COMPARISON

BEFORE



AFTER



5s CONCLUSIONS

- The radiochemistry laboratory requires more acid storage than what is in place currently.
- Management involvement is crucial to project success.
- People will surprise you.
- Workload and time play a crucial role in improvement projects.