

5.9 SUMMARY

This chapter addressed several key attributes of COO (dividing them into attributes that span an entire organization and attributes that relate primarily to people, process, and plant) and the relationship between PSM systems and COO. Adopting each attribute should be beneficial, but some will have a much greater risk benefit than others. Moreover, not all of the attributes will apply to any given facility.

Readers should review each attribute listed in Table 5.1 and consider the COO gaps that might exist at their facility. Armed with that information, along with the descriptions of the COO attributes in this chapter and the OD attributes in Chapter 6, readers should determine improvement objectives and take steps to establish a new COO system or improve an existing one.

TABLE 5.1. Summary of COO Attributes

Foundations	<ol style="list-style-type: none"> 1. Understand risk significance 2. Establish standards that support the organization's mission and goals 3. Understand what can be directly controlled and what can only be influenced 4. Provide the resources and time necessary to complete tasks within standards 5. Ensure competency across the organization 6. Perform critiques and take corrective action
People	<ol style="list-style-type: none"> 1. Clear authority/accountability 2. Communications 3. Logs and records 4. Training, skill maintenance, and individual competence 5. Compliance with policies and procedures 6. Safe and productive work environments 7. Aids to operation – the visible plant 8. Intolerance of deviations 9. Task verification 10. Supervision/support 11. Assigning qualified workers 12. Access control 13. Routines 14. Worker fatigue/fitness for duty
Process	<ol style="list-style-type: none"> 1. Process capability 2. Safe operating limits 3. Limiting conditions for operation
Plant	<ol style="list-style-type: none"> 1. Asset ownership/control of equipment 2. Equipment monitoring 3. Condition verification 4. Management of subtle changes 5. Control of maintenance work 6. Maintaining the capability of safety systems 7. Controlling intentional bypasses and impairments