

C&C report past examples

Ciii. Communicating ideas and plans by report writing and oral presentations

Example 1

For the majority of my projects I produce a Process Investigation Report. This describes the processes currently installed onsite, the current performance, the new standards the works must meet, details the options for improvement, design criteria and calculations used. This document is used by the key stakeholders to decide which option will go forward. It is also used by other disciplines for design information and acts as a record of process decisions made. I also often present on process decisions made at design meetings and project reviews.

I have contributed to the Solution Scope Book on several projects. This is the specification the design team hands over to construction partners who carry out the detailed design and construction. In this document I have written process descriptions, control philosophies, commissioning plans and testing procedures.

The design calculations I complete must be presented in a way which can be checked and understood, therefore I produce them on company standard Excel spreadsheets. I have also developed standard calculation templates which are used by others.

Whilst working on the 2009 water industry Price Review I contributed to meetings where the strategy for the company's investment plan was set. For a series of management meetings I was responsible for recording the minutes to ensure all actions were correctly assigned and an audit trail was in place.

For the project described in question Aiv I used specialist biological modelling software to design the aeration control system for an activated sludge plant. I presented this work at a user's group meeting attended by representatives from other water companies and engineering consultants as an example of best practise.

I am experienced in giving oral presentations having presented regularly at team meetings, company knowledge sharing seminars, to university students at careers events, and I am also a volunteer speaker for the charity WaterAid.

cample 2

To satisfy the requirements for the award of a PhD, I wrote and orally defended a 300-page research thesis to a committee of world-class researchers and obtained an award for the best chemical engineering thesis at my university in the 2006 academic year. Subsequently, I have written articles for four reputable international journals and delivered oral presentations at three international conferences and contributed to three others.

As a process engineer with an EPC contractor, I wrote several technical reports for the approval of external clients and company management. As part of my PhD, I gave quarterly progress presentations to a consortium of project sponsors, which included major energy companies. My role as a project technologist at an oil refinery has required me to lead project kick-off meetings involving discipline engineers to explain the background to and deliverables for design work and write scouting reports to obtain support from project stakeholders.



I wrote a site Standard Operation procedure (SOP) for carrying out a work equipment risk assessment at design and purchase phases. I am responsible for coordinating that assessments are carried out in all areas on site. I trained my EHS colleagues on the new procedure and I am responsible for training mechanical engineers, automation engineers and process engineers in carrying out the assessment when required, as they are the experts responsible for those work equipment. Other EHS staff are now able to train out the procedure to other departments on site. Majority of the work equipment on site have now been risk assessed and prevents the risk of the Health and Safety Executive (HSE) prosecution.

I trained staff in various departments on the accident investigation team on the procedure. I developed the procedure, training materials and presentation from the corporate tool, which was very difficult to navigate. The accident investigation team are now well equipped to carry out accident investigations appropriately and to enable accidents to be dealt with by introducing corrective actions to prevent future occurrences and to prevent HSE notices

I wrote a procedure (SOP) for carrying out hazardous area assessments in conjunction with the site Electrical Engineer, to comply with DSEAR 2002 regulations and to ensure that site areas where production activities take place are protection from explosions.

I sometimes visit manufacturer sites to carry out EHS assessments after a line or equipment has been built, prior to Factory Acceptance Test (FAT) to ensure it has been built to comply with the company's corporate EHS standards and EHS regulatory requirements.

I am currently developing a new project risk assessment procedure to provide project managers and project engineers with a clearer procedure to enable every phase of a project, from conceptual design through to commissioning considers EHS implications adequately.

I led the project on identifying and reviewing all critical safety systems on site, which involved senior managers on site. I wrote a summary of what had been done and explained further work required. I then presented the findings to senior managers and those staff that helped out with further reviews. I also produced reports on the findings, which ensured the safety of critical safety systems and if there is need for extra safety measures, such as, more frequent maintenance on a system is needed to ensure it is safe to use.

Example 4

I regularly have to create clear well-defined scope documents and URS documents to allow control of project scope and cost when reviewing with the production teams. In creating the URS document for the process rationalisation works described elsewhere, I had to be sufficiently detailed in key process sections to ensure that the alterations that would be made would match our requirements exactly, without making the document overly complicated.

I have regularly presented project proposals, status updates and production KPI performance to senior management (including director level).

I am part of a team reviewing the process and documentation in use for managing engineering projects on our site to ensure that they are more user-friendly and fit for purpose. Specifically, I have redrafted the template used for initial proposal and scope definition of engineering projects and developed a checklist for key signoff documentation for completion prior to project handover.

I have created flowsheets and flowcharts of production processes, at various levels of complexity. This includes very detailed process flows for use by my project teams in specification compilation, root cause investigation, FMEA studies, and operator training packages; and simple block diagrams such as those for use in regulatory submissions, where only the most critical parameters and aspects are identified in order to give maximum capability for future process development.

While managing a packaging area, I updated and adapted the Excel-based production line efficiency reporting system in order to give an improved template for to the line teams to detail their daily and weekly downtime losses and trends. I had to adapt and rewrite several macros that had become corrupted due to additional cells and calculations being added to the spreadsheets over time. I also created a new sheet which automatically produced a simplified set of graphs to give detail to the teams of which minor stops were increasing in frequency over the week. I later adapted the system to provide some basic downtime reporting tools for the processing area to use, and trained key persons in completing the data and updating their improvement plans accordingly.

