The client, a pharmaceutical manufacturer, operates a number of sites around the world. Some recent incidents had heightened concerns over their governance arrangements for process safety. The client sought an assessment of their governance arrangements by a reputable 3rd party for process safety, in order to provide an independent view. They wanted a better understanding of their arrangements compared to international good practice.

The client wished to know where their arrangements for managing process safety needed improvement and to develop a long term improvement plan. ABB was selected for the independent review of 4 pharmaceutical manufacturing sites which would encompass all current operations and PSM systems.

ABB were selected because of the clients’ successful experience of an ABB PSM review carried out for a similar site a few years earlier. Also ABB has extensive experience of assisting the operators of major hazard sites to improve process safety at all levels in their organisations.

**Solution**

The review was conducted with a team of experienced consultants, all having process safety auditing expertise and between them bringing a balance of plant operations and integrity management expertise. The ABB team for each review site comprised 3 consultants.

The review was completed in 7 months and was delivered in 5 stages:

1. A preliminary meeting with the review sponsor in order to set the scene for the whole process and build a shared understanding of the overall plan
2. A pre-planning / scoping telephone meeting with each site in advance of a site-based review to ensure the smooth organisation of the site review and to agree the documentation to be provided for review
3. A documentation and site-based review of the arrangements for managing process safety at the 4 sites and how they compared with good international PSM practice. This was in order to establish a baseline and an understanding of key concerns

A global review of PSM arrangements to bring them in line with good practice.
4. A feedback meeting with the review sponsor and other stakeholders covering the overall findings and common themes arising
5. A forward strategy / planning workshop involving a cross-functional team from the client and its global functions to agree and plan an improvement programme

The site reviews were conducted through a programme of discussions and interviews at each site. Relevant documents appertaining to the local operations and process safety were provided by each site for ABB to review prior to the discussions and interviews. Additional documents and computer-based systems were also shown and inspected during the discussions and interviews on site visits.

The review team followed a structured approach to cover key process safety topics from ABB’s PSM assessment toolkit. A series of open questions were used to elicit relevant information appertaining to all of the arrangements in place for managing process safety. Points arising from the discussions, as well as the earlier document review subsequently led the ABB reviewers to focus on particular areas and records for more detailed revision.

The review was undertaken with reference to pertinent areas of good practice in PSM including:

- Relevant parts of UK HSE’s COMAH / safety report assessment manual
- The UK HSE publication on leadership for the major hazard industries
- The learning in PSM and leadership arising from Buncefield, BP Deepwater Horizon / Macondo well and BP Texas City incidents
- The key elements of process safety management systems as described in UK publications
- The broad management requirements of the US OSHA Regulations standard for process safety management 29 CFR 1910.119 and described further in the US CCPS guide to risk-based process safety

Following the final planning workshop a report was produced that provided a summary of the findings from the review.

ABB are working with the client to continue developing and implementing the improvement plan.

**Benefits**

- An independent view of the areas requiring attention with action areas identified and prioritised.
- Compliance with regulations and recognised good practice
- Improved personnel awareness of potential process safety risks on each site
- Efficient delivery of the work
- A holistic approach to PSM covering all essential elements consistently

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**Above: PSM system framework - overseen by process safety leadership.**