

DEVELOPING A REPORTING SYSTEM FOR ENVIRONMENTAL COMPLIANCE

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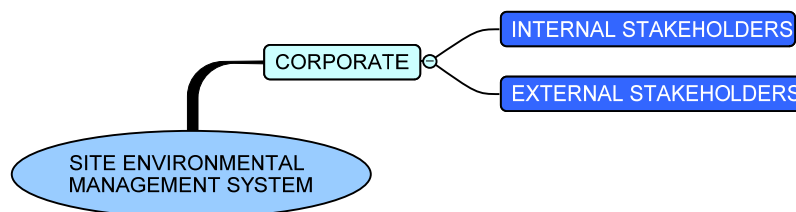
The first step in developing a new environmental compliance reporting system is a detailed analysis of the company's goals and objectives. From this analysis, planners can define project requirements and establish an approach to making the crucial decision of whether to develop a custom application, purchase an off-the-shelf application, or work with a vendor to customize their off-the-shelf application to more closely address the company's needs.

The definition of project requirements may be further refined to identify user needs and system specifications. This paper will focus on a development process that ISP implemented to develop a new environmental reporting system. This paper will include "lessons learned" as well as insights that will be of interest to anyone facing a similar challenge in their organization.

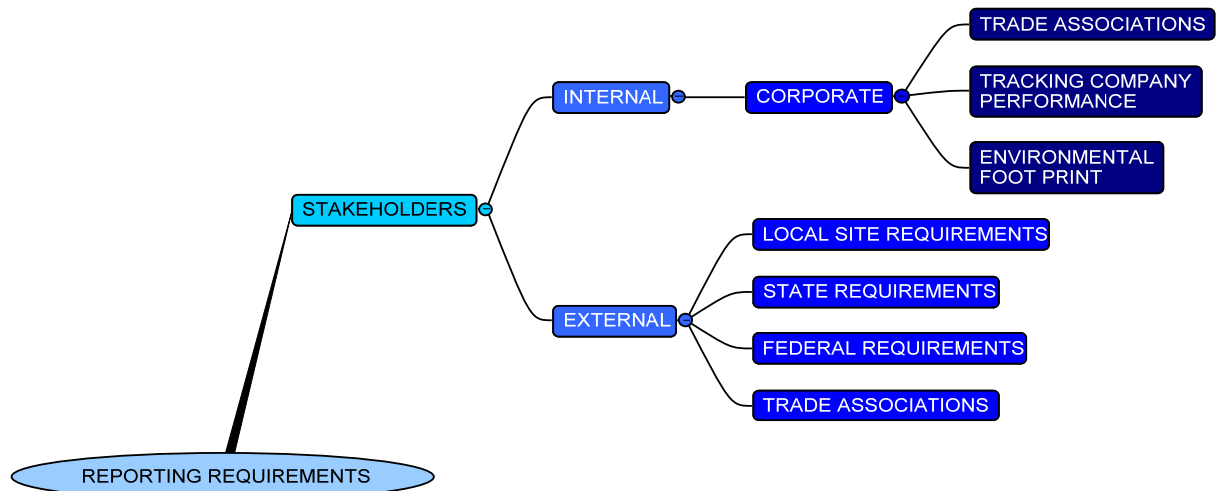
1st Perform a Gap Analysis of the Environmental Data Management System

In order to develop a new Environmental Data Management System (EDMS) to meet stakeholders, corporate and site specific data needs, requirements were analyzed and evaluated in a top-down analysis. This analysis focused on stakeholder's needs, corporate needs, and site environmental management system (EMS) requirements.

- Step 1. Map current data storage and access requirements.



- Step 2. Identify corporate and site-specific environmental reporting requirements.



- Step 3. In order to evaluate the EDMS and identify core requirements, a gap analysis of the company's EDMS was performed. Based on this analysis, it was determined that the company's current EDMS was idle because plant personnel were not properly trained on utilizing this system and all users reported that it was difficult to implement. In addition, there were issues with data validation, data gathering, ability to create reports, lack of system support, and difficulty on connecting with other data libraries in the enterprise.

2nd Evaluate the Environmental Data Management Systems at Each Facility

ISP evaluated what each individual facility was doing in order to comply with their stakeholder's requirements and how their environmental data was being gathered and processed. The gap analyses determined that each facility was:

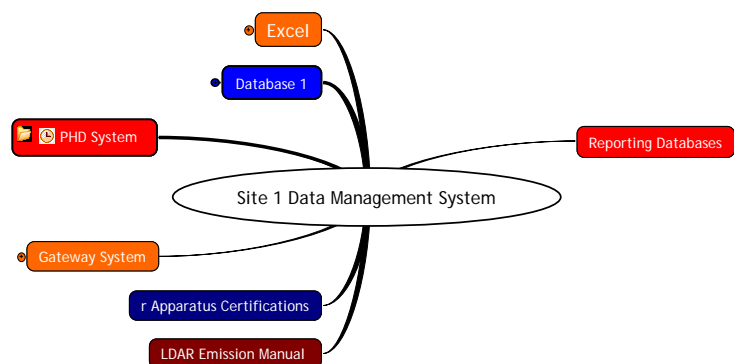
- Manually collecting data
- Excessively using excel sheets
- Manually entering data into excel and access databases
- Multiple handling of data
- Use of excel for data calculation
- Additional head count for data handling
- Numerous hours on data validation and reports generation

Based on the above information each method or form of data gathering and processing was map. These methods were essentially utilized by the facility in order to meet the stakeholder requirements and be in compliance with all local, state and federal regulatory requirements. By mapping each facility data handling, it allowed ISP to determine what kind of data management system the facility would benefit from.

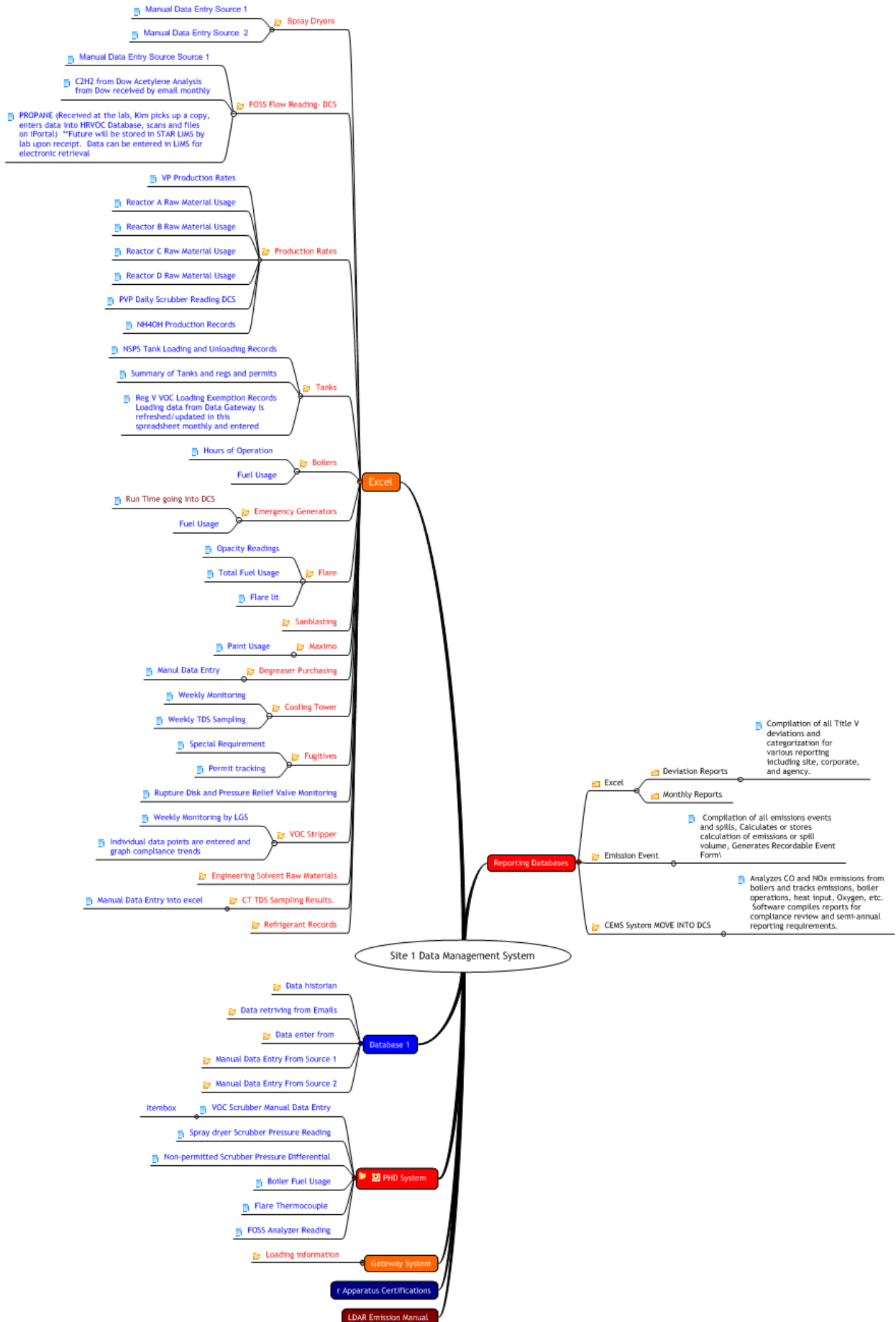
The following data analysis was performed:

- What goes into MS Excel?
- What data is manually entered?
- What data is saved in compliance databases?
- What compliance reports are manually done?
- How much time goes into preparing reports and entering data?

Step 1.



Step 2.



3rd Identify a new Environmental Data Management System

After identifying the EDMS gaps at each facility, the following options were evaluated:

- Create a pilot study utilizing current EDMS by using an outside consultant firm
- Develop a EDMS system from scratch that could satisfy the Site needs
- Look for new data management systems
- What environmental data management systems are other companies using
- Cost Analysis of the new EDMS vs. Pilot study

Based on the above evaluation it was determined that the pilot study and developing a new data management system from scratch was going to be too expensive, so we decided to look for other options.

After contacting different industries we came across Process Data Control Corp. (PDC)'s and their software products (COMPASS Emission Inventory and Calculations, TaskTrakker, IntelliRegs, and Waste Modules), and decided to contact them. PDC's solutions were evaluated and found to be superior to EDMS tools and techniques that were currently in use, and they also offered a straightforward implementation strategy.

What PDC is currently doing for our facility is to streamline the data management process and minimize repetitive data handling and processing.

4th Define and Undertake Next Steps to Implement the New EDMS

After determining how to approach the need for a new EDMS at each facility, and for the corporate staff, the following strategy was developed:

- Roll-out the PDC Waste Module to other ISP facilities
- Identified the other PDC Modules that could be implemented in ISP facilities that would improve efficiency and effectiveness of environmental reporting
- Develop a platform that will allow corporate to track individual site compliance, and help to determine the Company's Environmental Performance

Conclusions

Developing an effective EDMS takes a lot of time and resources. It also requires focus on the issues related to compliance with applicable rules and permits. These issues cover a broad range of concerns, from high-level processes such as deviation reporting and review, to detailed issues such as personnel assignments to compliance tasks, recordkeeping, and audits. However, once the new EDMS implementation is completed, there is no better satisfaction than having a system that actively supports the attainment of key goals such as achieving compliance, minimizing the redundant handling of data, and reducing opportunities for error.