

Development of a Refinery GIS – A Collaborative Process Case Study

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ABSTRACT:

Site investigation data from the hazardous waste investigations at the Former Casper, Wyoming BP/ Amoco Refinery were integrated into a desktop GIS that guided analysis and decision making in a collaborative process. Requirements of the GIS were defined in four technical work groups, with representation from each of the major stakeholders: the regulatory agency, the community, and the property owner. The GIS was used to define data usability, assess data adequacy, formulate sampling work plans and investigate remedial alternatives based on risk-based action levels. Additionally, it was used in public information meetings to convey the scope and goals of the project, display the data, and demonstrate data adequacy and uncertainty. By collaboratively designing the GIS, data analysis were more readily accepted by all of the stakeholders throughout the accelerated schedule site investigation and remedy agreement negotiations.