SECTION 5

RISK EVALUATION

5.1 PURPOSE

5.1.1 A qualitative risk evaluation process, called Impact Analysis, will be developed working with Rob Wilcox, of the USAESCH Mandatory Center of Expertise and others to define the risk associated with each sector of the site. The developed process will be capable of defining a level of risk associated with the site both for the no further action alternative, as well as the level of residual risk remaining after each of the removal action alternatives evaluated in the EE/CA have been implemented.

5.1.2 The development of the Impact Analysis is part of the JPG work performed under this delivery order. This Work Plan describes the steps that will be taken to develop the process. It should be noted, however, that this process will evolve throughout this delivery order.

5.2 DEVELOPMENT STEPS

5.2.1 The first phase in developing the Impact Analysis process is reviewing other risk processes to determine if they can be adapted wholly or in part for the JPG site. Each identified risk process/framework describes the factors that can be used to qualify or quantify risk associated with a site. These processes/frameworks will be evaluated to determine commonly defined risk factors that can be used in the JPG process. After a group of risk factors has been developed the factors will be fully defined for the JPG risk process. As part of this definition process a weighting factor will be assigned to each factor. Weighting factors are used to increase or decrease the relative contribution of any factor in the final determination of risk at the site.

5.2.2 The four main factors currently being considered for inclusion in the risk analysis process include:

?? UXO Density (using *UXO Calculator*) and Depth of OE

?? Physical Characteristics of the Site including,
- topography,
- vegetation,
- climate, and
- soil type

?? Site Use including,
- number of people using the site,
- activities at the site,
- accessibility of property

?? Category of OE (using the current USAESCH OE ranking values of 0 to 3).

5.2.3 These four factors can be divided into two categories: probability of encounter and severity of encounter. Density/Depth, site use and physical characteristics contribute to the probability of an encounter occurring, while the type of OE contributes to the severity of encounter. After the factor list is determined and defined the next step will be to create risk categories and scales to model the risk factors. For example, the depth risk factor may be broken into the following categories, surface, 1 ft, or greater than 1 ft. The proposed methodology will use a series of questions to guide the user of the process and gather the necessary data to determine a qualitative level of risk.

5.2.4 The risk process will be completed for each site sector for the no action plan. The risk process will also be completed for each removal action alternative evaluated in the EECA. This method will allow for a qualitative comparison of risk reduction between alternatives. The differential risk results will be incorporated into the final decision process for choosing an alternative for the sector.