

could result when waterborne patrols are engaging in dangerous interdictions and when accidents occur.

During vessel operations there is a potential for accidents and injuries to CBP personnel and the general public. As patrols increase, the risk of accidents also increases, although an increase in patrols does not guarantee any specific increase in accidents or injuries. Since OAM and USBP agents engage in high-speed pursuit on water, CBP's accident rates may be higher than they are for recreational boating.

To minimize the occurrence of vessel accidents and injuries, CBP takes certain steps with its vessel operators. To become a CBP OAM marine or USBP riverine interdiction agent, one must have additional training, and it is preferred that one have marine/law enforcement experience (USDHS, 2010f).

Because of the training OAM and USBP agents receive, no major, adverse impacts would occur. Minor to moderate, adverse impacts on HH&S could occur from waterborne patrols. The amount of training that CBP personnel receive would help reduce the number of accidents caused by waterborne patrols.

Use NII Technology—Because CBP uses several different NII technologies that have similar impacts, **high-energy inspection systems** and gamma-imaging inspection system programs are used as an example for the overall impacts caused by NII technology.

As radiation-producing devices, these systems could have long-term, negligible, adverse impacts to HH&S. Exposure to high levels of radiation would increase a person's probability of developing cancer and hereditary genetic damage (HPS, 2004). Beneficial impacts would also occur because the use of these technologies results in interdictions across the northern border.

Use HEXRIS Technology—The HEXRIS employs advanced high-energy digital X-ray imaging technology that has been used successfully in various industrial applications such as field inspection of structures like bridges and buildings. These systems are subject to review by radiation protection authorities, but they are not subject to state regulation because they are operated by a Federal agency.

Under the No Action Alternative, CBP would continue the deployment and operation of HEXRIS at POEs in the United States. Four different HEXRIS models are available for this

Human Exposure—All maintenance personnel who maintain the linear accelerator (linac) and X-ray source components are employees of the equipment manufacturer. By the nature of their jobs, they have the potential to be exposed to a higher level of radiation than the system operators and members of the general public. Maintenance of the linac and X-ray source components have to comply with the EPA, OSHA, and states' (where applicable) strict dose standards for radiation workers. For a more detailed discussion of dose standards, see the Programmatic EA for Deployment and Operation of HEXRIS at Sea and POEs (USDHS, 2010e).

Exposure Pathways—The radiation exposure pathway for all personnel and the general public is created from exposure to scattered radiation from the X-ray source during scanning operations. However, in all cases, the radiation dose does not exceed 0.1 rem in a year (USDHS, 2010e).