U.S. CHEMICAL SAFETY BOARD NEWS CONFERENCE SILVER EAGLE REFINERY JANUARY 30, 2009 10:00 AM MST STATEMENT BY INVESTIGATIONS SUPERVISOR DONALD HOLMSTROM

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Good morning, and welcome to the Chemical Safety Board's – the CSB's – news conference. The CSB is an independent federal agency charged with investigating chemical accidents at fixed facilities. We are modeled after the National Transportation Safety Board, and our offices are located in Washington, D.C. We have a professional staff of engineers and other specialists with industry and government experience.

My name is Donald Holmstrom, Supervisory Investigator for the CSB. This morning we will be providing you with an update on our investigation into the January 12 fire at the Silver Eagle Refinery in Woods Cross, Utah.

As most of you know, two refinery operators and two contractors were engulfed by the flame front and suffered serious burns. All four were hospitalized and are now recovering.

Since arriving in Utah the investigation team has conducted over 40 interviews, gathered process samples, collected hundreds of pages of refinery records and extensively examined the accident scene.

To date, our investigation has found that on the evening of January 12, 2009 at approximately 5:20 pm a large vapor cloud was released from an atmospheric storage tank, known as tank 105, which contained an estimated 440,000 gallons of light naphtha.



Witness interviews state that vapor was seen escaping from atmospheric vents on the west side of the tank.



Atmospheric vent on roof of Tank 105.

Through an examination of the damage to the area surrounding the tank the CSB has determined that the vapor cloud found an ignition source – for example a utility room with a gas heater or an electrical outlet connected to a conventional refrigerator – and the ensuing flash fire spread up to 230 feet west of the tank farm.

Two structures were damaged as a result of this fire, a shed and a lab facility located approximately 140 feet and 160 feet respectively, from the site of the release.

On the day of the incident, tank 105 was receiving up to three different streams of hydrocarbon liquids from the refinery, including "light" or low-boiling substances. The primary feed into tank 105 had been sent from the #1 crude unit pre-flash accumulator for approximately three weeks prior to the incident. Feeding tank 105 directly from this unit was a recent process change and the feed from this unit had undergone a different form of processing. Workers were also purging equipment with nitrogen to remove flammable liquid, with the intent to pressure the liquid into tank 105.

We have established sampling protocols, taken samples from storage tanks and from process vessels, and will be instituting the appropriate testing procedures.

The CSB is investigating reports from plant personnel indicating a history of vapor leaks from tank 105 both prior to and following tank repairs.



CSB investigators examine equipment at Silver Eagle refinery.

The CSB will be investigating if the floating roof on tank 105 was equipped with the appropriate seal for use in the storage of light hydrocarbons of the type sent to the tank. Our investigation will examine possible failures within tank 105 such as gaps between the seal and the inner tank wall, the integrity of the seal, and the design and structural integrity of the tank.

Currently the CSB has identified two additional issues that are of particular interest to our ongoing investigation. The first is an examination of changes to the process unit sending liquid to tank 105 and possible effects that these changes had on the incident.

We will also review facility siting issues relating to this release and fire. Specifically, the occupied lab was affected by the flash fire. This structure is located in close proximity to operating process units.

The CSB's investigation into the March 2005 explosion and fire at BP Texas City examined facility siting of portable work trailers. All of the fifteen contract workers killed in that incident had been working in or near portable trailers located near hazardous process equipment. As a result of our findings, the CSB issued an urgent recommendation to the American Petroleum Institute to update their guidelines for portable work buildings such as trailers.

Today, the CSB investigative team is returning to Washington, D.C. to brief agency officials and analyze the information we have gathered during our visit to the site. Depending on the course of the investigation, we expect to return periodically to Woods Cross to gather more information.

The CSB's investigations seek to identify the root cause of an accident. As new information becomes available, we will keep the community, public officials and the

industry informed. We do all this, of course, in an effort to prevent serious chemical and refinery accidents that cause injuries, destroy property, and jeopardize public safety.

Our ultimate product will be safety recommendations designed to prevent a recurrence of this type of accident, here or at refineries located in cities across the country.

Thank you for attending today, and we will be happy to answer your questions.

For more information, please contact Hillary Cohen at (202) 446-8094 cell or Daniel Horowitz at (202) 261-7613.