

June 10, 2011

**Upper Big Branch:  
The April 5, 2010 explosion: a failure of basic coal mine safety practices**

**ERRATA SHEET**

**p. 4**, the title "Foreward" should be spelled "Foreword"

**p. 18**, in the sidebar "In WV the Dangers are Double," the first sentence in paragraph 3 should read:

A study by the U.S. Mine Safety and Health Administration concluded that during the period 1991 -1996 70 miners were killed on the job in southern West Virginia, resulting in 28 percent of all U.S. mining fatalities in an area that employs just 13 percent of the nation's miners.

**p. 82**, column 1, paragraph 5: "his supervisor" should be "a supervisor"

**p. 96**: The sidebar "Lessons learned or forgotten" about the 1992 explosion at the Westray mine in Plymouth, Nova Scotia, Canada was mistakenly left out of the print version of the report. It should appear after Chapter 11 "The Massey Way" on page 96.

**p. 100**, column 1, paragraph 4: "intimated" should be "intimidated"

**p. 113**, Recommendation #52 should read "..the permissible exposure limit (PEL) for coal mine dust to 0.9 mg/m<sup>3</sup> "

# The Westray Mine Disaster

## *Lessons learned or forgotten?*

On May 9, 1992, sparks from the cutting bits of a mining machine ignited methane gas and an explosion propagated by excessive coal dust rocked the Westray coal mine in Plymouth, Nova Scotia, Canada. Twenty-six miners, aged 22-56 were killed in the blast. The bodies of 15 men were recovered but 11 men remain forever entombed deep in the mine. A memorial to the 26 men declares "Their light shall always shine."

The Nova Scotia provincial government convened a public inquiry to investigate how and why the 26 men died. In his report, Justice K. Peter Richard wrote: "Regardless of the theories, philosophies, and procedures that management espoused on paper, ...management, through its actions and attitudes, sent a different message: Westray was to produce coal at the expense of worker safety."<sup>1</sup> He noted the source of the ignition was less relevant than the overall conditions in the Westray mine. "Had there been adequate ventilation, had there been adequate treatment of coal dust, and had there been adequate training and an appreciation by management for a safety ethic, those sparks would have faded harmlessly."<sup>2</sup> Justice Richard addressed the potentially competing forces of safety and production, saying they "must be so harmonized that they can co-exist without doing harm to each other. It is here that the regulator must assume the role of monitor and aggressively ensure that the balance is understood and maintained."<sup>3</sup>

The Inquiry observed: "The foremen and overmen at Westray ...had little or no say in the day-to-day operation of the mine and were expected only to carry out the orders of Westray mine manager Gerald Phillips as delivered to them by him personally or through his underground manager, Roger Parry."

Mine operators are required to "clear or treat coal dust to render it non-explosive. ...management failed to order and enforce sufficient and systematic stone dusting underground at Westray."

"Generally, the regulating, control, and monitoring of the main airflow was inadequate and poorly planned. ...the ventilation system in the North Mains and Southeast sections of the mine was haphazard, reflecting little or no planning."

"This company demonstrated a disdain for any regulatory regime, whether the regime concerned the safe design of the mine or the safe operation of that mine."

Several top Westray officials, including the former company president and the chairman of the mining company, refused to testify before the Inquiry. Manslaughter and criminal negligence charges were filed by Canadian prosecutors against two of Westray's mine managers, but those charges were stayed in 1998 by the Supreme Court of Canada. Family members of the Westray miners and co-workers were infuriated that no one was held accountable for the loss of the 26 coal miners---deaths that investigators said were preventable.

After nearly a decade of effort by the United Steelworkers, along with family members and other labor advocates, Canada's criminal code was amended to address corporate negligence. The law now places a legal duty on those who direct the work of others, including taking reasonable steps to prevent bodily harm to any person arising from such work.<sup>4</sup>

<sup>1</sup> The Westray Story: A predictable path to disaster. Report of the Westray Mine Public Inquiry, Justice K. Peter Richard, Commissioner, 1997. <http://www.gov.ns.ca/lwd/pubs/westray/>

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

<sup>4</sup> Department of Justice, Canada. Criminal liability of organizations, (Bill C-45, adopted October 2003). See Sections 22.1, 217.1, and definition of senior officer at <http://laws.justice.gc.ca/PDF/Readability/C-46.pdf>