

Cooperative Extension Service

Extensionn Grain Science and Industry Shellenberger Hall Manhattan, Kansas 66506 913-532-6161

GRAIN DUST EXPLOSIONS UP SLIGHTLY IN 1985

Twenty-two dust explosions were reported in the U.S. according to data compiled by Ralph Regan, FGIS Safety Director and Robert W. Schoeff, Extension Marketing and Safety Specialist, Kansas State University. This compares to 20 in 1984 and a 10 year average of 21 explosions.

There were 4 fatalities and 20 injured. Property damage was lower than previous years ranging from minor for seven of the firms to severe for four of 22 firms with one elevator a total loss.

The cause of the primary explosion is still unknown in 9 out of 22 cases. Fire from various causes and bearing failure were major probable causes. Welding and electrical shorts were also identified.

Legs were identified as the location of the primary explosion in 12 cases.

Corn was being handled when 14 of the 22 explosions occurred, sorghum in 2, corn gluten meal 2, corn starch, barley and rice in one each and one elevator was not operating.

A breakdown by type of facility shows 18 occurred in elevators, 2 in corn processing plants, 1 each in a feed mill and rice mill.

Nebraska and Illinois suffered the most explosions in 1985 with four each followed by Indiana, Minnesota, Ohio and Iowa with two each and 6 states with one.

KSU, County Extension Councils and U.S. Department of Agriculture Cooperating.

All educational programs and materials available without discrimination on the basis origin, sex, or handicap. Appreciation is expressed to the many persons who helped provide these data and cooperation of the entire grain storage and processing and allied industries is solicited in building a more accurate data base on grain dust explosions.

> Robert W. Schoeff Extension State Leader Dept. of Grain Science & Industry Shellenberger Hall Kansas State University Manhattan, KS 66506 February 4, 1986



Cooperative Extension Service

Extension Grain Science and Industry Shellenberger Hall Manhattan, Kansas 66506 913-532-6161

REPORTED GRAIN DUST EXPLOSIONS, U.S. - 1985

NUMBER	DATE	FIRM AND LOCATION	FACILITY	DAMAGE*	KILLED	INJURED
1	Jan. 2	Farmers Co-op Bus. Assn. Shelby, NE	Elevator	Severe	0	2
2	Jan. 17	Farmers Co-op Grain Assn. Stromsburg, NE	Elevator	Minor	0	0
3	Jan. 25	Bunge Inc. Shawneetown, IL	Elevator	Minor	0	0
4	Feb. 6	Early & Daniel Industries, Inc. Cincinnati, OH	Elevator	Moderate	0	0
5	Feb. 18	Comstock Farmers Elevator Comstock, MN	Elevator	Severe	0	3
6	March 12	Farmers Cooperative Elevator Muleshoe, TX	Elevator	Severe	0	0
7	April 2	Davenport Grain Co. Davenport, NE	Elevator	Moderate	0	2
8	May 3	Martin Grain Co. Taylor Ridge, IL	Elevator	Severe	0	0
9	May 15	Shickley Grain Co. Shickley, NE	Elevator	Moderate	0	1
10	June 3	Galvia Co-op Grain & Supply Co. Galvia, IL	Elevator	Moderate	0	0
11	June 12	ADM Clinton, IA	Corn Processing Plant	Minor	0	1
12	Aug. 7	Pillsbury Co. Brown, IL	Elevator	Moderate	0	1
13	Oct. 15	Buffalo Lake Farmers Co-op Buffalo Lake, MN	Elevator	Minor	0	1

		Robert W. Schoeff
	*Minor - Less than \$50,000	Kansas State University
	Moderate - 50,000 - \$500,000	Manhattan, KS 66506
KSU, County Extension Councils and U.S. Department of Agriculture Cooperating.	Severe - Over 500,000	February 4, 1986 in cooperation with
All educational programs and materials available without discrimination on the basis of race color national		Ralph Regan, FGIS, USDA, Washington D.C.

NUMBER	DATE	FIRM AND LOCATION	FACILITY	DAMAGE*	<u>KILLED</u>	INJURED
14	Oct. 15	Carroll County Farm Bureau Co-op Flora, IN	Elevator	Moderate	0	2
15	Nov. 2	Marion Farmers Co-op Grain Assn. Marion, SD	Elevator	Moderate	3	4
16	Nov. 2	Midstate Terminal Ottawa Lake, MI	Terminal Elevator	Moderate	0	0
17	Nov. 3	Halford Feedlot Colby, KS	Feed Mill	Minor	0	1
18	Nov. 9	Central Soya Baltimore, MD	Port Elevator	Moderate	1	1
19	Nov. 27	Producer's Rice Stuttgart, AR	Rice Mill	Minor	0	1
20	Nov. 29	Cargill Dayton, OH	Corn Processing	N.A.	0	0
21	Dec. 9	DeKalb Co. Farm Bureau Co-op Waterloo, IN	Elevator	Minor	0	0
22	Dec. 31	The Hubinger Co. Keokuk, IA	Elevator	Moderate		0
				TOTAL	4	20

- Less than \$50,000 - 50,000 - \$500,000 - Over \$500,000 - Not available	Robert W. Schoeff Kansas State Unversity Manhattan, KS 66506 February 4, 1986 in cooperation with Ralph Regan, FGIS.
	Ralph Regan, FGIS, USDA, Washington, D.C.