



CHEMICAL MANUFACTURERS ASSOCIATION

CHEMICAL MANUFACTURERS ASSOCIATION

Memorandum

November 5, 1992

TO: Vinyl Chloride Panel

FROM: Has Shah

RE: CTIRP Incident Report

DISTRIBUTED WITH PERMISSION OF VISTA CHEMICAL COMPANY

CTIRP

VISTA

TO: K. L. Fogg

FROM: M. D. Lunsford
DATE: October 27, 1992

Interoffice
Communication

SUBJECT: CTIRP Incident - Karnack, TX

On Monday, October 5, 1992, at approximately 4:15 a.m., I received a call from Keith Fogg informing me that a derailment had occurred involving seven Vinyl Chloride Monomer tank cars in Karnack, Texas. The following is a summary of information about the event.

At approximately 3:15 a.m. on Monday, October 5, 1992, a 100 car KCS freight train suffered a derailment in the community of Karnack, Texas, near the intersection of Highways 43 and 134. Involved in the derailment were seven vinyl chloride tank cars, all from the Vista VCM Plant and en route to Oklahoma City. There were no other cars involved. A security officer at the nearby Longhorn Munitions Plant contacted KCS and local authorities after witnessing the event. KCS personnel surveyed the scene, and after determining that VCM was involved, made the appropriate notifications. CHEMTREC was notified, and in turn contacted the Vista LCCP Main Gate. Keith Fogg contacted me and informed me of the derailment. At the time, it was known that there were no readily apparent leaks, and response personnel from KCS, Morton Thiokol, the Harrison County Sheriff's office, and local EMS personnel were on the scene. CHEMTREC had sent additional information to the scene on vinyl chloride.

After discussing the event with personnel on the scene, and notifying plant management, a decision was made to respond from Lake Charles to the scene. The initial response team consisted of Charlie McDonald and myself. After obtaining the CTIRP response vehicle from LCCP, and procuring some equipment from the VCM Plant, the team responded at about 6:00 a.m.

Upon arrival at the scene, at 10:18 a.m., the following items were noted:

1. The derailment had occurred near the entrance to the Longhorn Munitions Plant, in the community of Karnack. The office building for the plant was almost 1/4 mile away. The Karnack Post Office and Fire Station were about 100 yards from the site. The Karnack High School was within 1/2 mile of the site. A grocery store was within 1/4 mile of the derailment. Winds were calm, and the weather was sunny.

CMA 111615

CTIRP

2. There were seven VCM cars involved. Two cars were derailed, three on their sides, and two cars were resting upside down on their domes.
3. A loose perimeter had been established along Highway 134 by the Sheriff's Department. Access to the site was controlled. The Post Office and High School were closed.
4. Personnel were on the scene from KCS and Hulcher Services, and equipment was being readied to rerail the cars. Emergency responders included fire department, EMS, and sheriff's department personnel. Morton Thiokol had dispatched its fire truck to the scene from the Munitions plant.
5. The high school had been closed for the day, along with the post office. No residents had been evacuated, but buses from the school district were standing by in case evacuation of the community was necessary. Two invalids living nearby had been visited by the EMS crews. About 50 response personnel were on the scene.
6. There were three television news crews filming at the site, outside the perimeter.

After assessing the incident, I asked for a meeting with representatives from all responding agencies. During that meeting, a discussion was held on the hazards of VCM. KCS outlined their plans for rerailing the cars. Fire and EMS officials discussed their plans for evacuation should the situation change. All parties acknowledged their agreement with the plans as outlined, and the rerailing task began.

During assessment, and before and after rerailing, the cars were checked thoroughly with an explosimeter and TLV analyzer for leaks. No levels of VCM were detected during the entire rerail operation.

At approximately 12:45, Kerry Gregg arrived from Houston. There was little information available to the public up to that point, and some misinformation had been heard. After consultation with Pete Markey, it was determined that a statement should be made to the press. At 1:50 p.m., I issued that statement and fielded a few questions. By 2:30 p.m. the press had left the scene.

The seven cars were rerailed by 6:40 p.m. without incident. Five of the cars sustained insulation damage and one car received coupler damage. The braking systems were damaged on all five cars that had rolled off their trucks. Upon mutual agreement, it was decided to relocate and tranload six of the

CTIRP

seven cars. OHM was chosen as the contractor to do so. Stan Polwort arrived on the scene to provide assistance from S & T, and an inspector from the Bureau of Explosives arrived shortly thereafter.

On Tuesday, October 6, I spent the morning communicating with interested parties on the particulars of the event and obtaining information on the transfer process. KCS moved the six cars and six empty cars to the transfer site, and Charlie McDonald inspected the site. At 3:20 p.m., a meeting was held between Vista, KCS, and OHM concerning the transfer process. A review was conducted on Vinyl Chloride and its hazards. OHM outlined their transfer procedures and agreed to allow Vista personnel to inspect the setups before beginning transfers. Nitrogen purges would be used to clear the hoses before disconnecting. It was agreed that transfer operations would stop as trains passed on the main line, or if lightning was in the area. After agreement was reached on OHM's and Vista's procedures, preparation began for transfer. Barry Enix arrived from LCCP at 7:00 p.m.

At 9:29 p.m. on October 6, the first transfer was begun. At 7:47 a.m. on October 7, the second OHM crew began transfer operations. During transfer operations, Barry Enix and Stan Polwort covered the night shift, while Charlie McDonald and myself provided daytime coverage. There were frequent delays for trains and one shutdown for lightning before operations were completed at 6:05 a.m. on Thursday, October 8. The railroad switched the cars and prepared for shipment of the full cars to Oklahoma City at 1:00 p.m. on October 8. Barry Enix, Charlie McDonald, and Stan Polwort left the area on October 8, and I stayed an additional day to wrap up the event and recognize the local responders.

The following are some observations from the responding team:

1. The CTIRP Drill that was held shortly before the event helped the team a great deal. Because the drill and the incident contained similar situations, the team was better prepared to respond to the actual event.
2. The CTIRP vehicle provided the team with the appropriate equipment for the response. Knowing that the team had the right equipment for handling emergency scenarios made us feel more comfortable with our response. Having that equipment on the vehicle allowed us to respond quickly and professionally.
3. Having public relations personnel on the site proved to be a real asset. Kerry Gregg assisted in the preparation of the press statement and interacted with other agencies to help ensure a flow of information to the public. His presence allowed the team to concentrate on the incident.

CTIRP

4. The training for CTIRP responders proved quite helpful. During the course of the event, the team members were drawing upon their experiences at Tank Car School and Ammerman Media Training. Without that training, the team could not have responded to this event in as effective a manner.
5. While travelling to the event, and until Kerry Gregg arrived, the team had little communication with the scene or plant management. A cellular telephone for the CTIRP vehicle would have allowed the team to have additional information while in route, and to communicate with personnel on the scene.
6. As an item for future reference, it should be noted that it took longer to transfer from the 31M gallon cars into the 48M gallon (jumbo) cars as opposed to transfers between cars of similar size.

In addition to the previous summary, the following attachments are included to provide more information about this event:

- Attachment A - Map of the site
- Attachment B - List of cars
- Attachment C - Newspaper articles
- Attachment D - Chronology of events

The following persons should be recognized for their contributions to this response: Charlie McDonald, Barry Enix, Stan Polwort, and Kerry Gregg for responding to the scene and providing professional assistance; Pete Markey, Archie Fruge, and others at the VCM Plant provided information and resources to the response team; the Community Relations group for preparing the "if-asked" statement; Keith Fogg for his advice on transfer safety; Mike Kerlegon and his group for arranging for the prompt delivery of empty cars to the site; and the people of KCS, Hulcher, and OHM, as well as the emergency responders from various agencies who helped the incident run smoothly and safely.

M. D. Lunsford

M. D. Lunsford

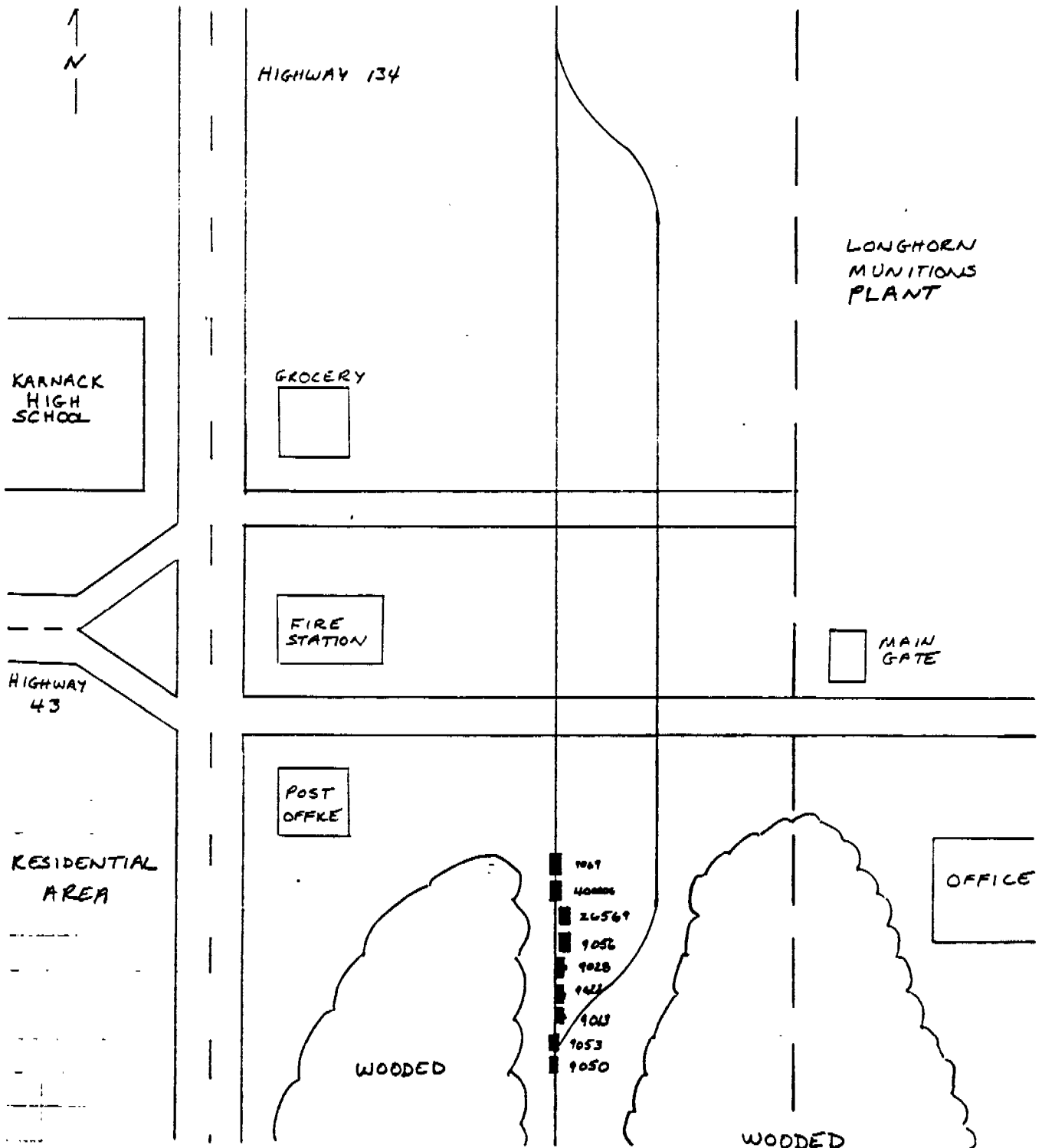
lk

cc: PEM, JEB

CTIR VISTA

ATTACHMENT A

KARNACK, TX
DERAILMENT
SITE



Made By MDL
Date 10-16-92

Job No. NO SCALE
Title _____

ATTACHMENT B
RAILCARS INVOLVED

NUMBER	WEIGHT	CARSEAL #	POSITION	TRANSFERRED TO	CARSEAL #	TRANSFER TIME
TILX 400006	174000	N/A	DERAILED UPRIGHT	N/A	N/A	N/A
GATX 26569	177700	66809	ON DOME	UTLX 96363	66810	4 hrs. 21 mins.
VICX 9056	205600	66819	ON DOME	VICX 4827	66817	6 hrs. 28 mins.
VICX 9028	203700	66812	ON SIDE	VICX 9021	66814	6 hrs. 6 mins.
VICX 9022	207100	66816	ON SIDE	VICX 9025	66820	5 hrs. 15 mins.
VICX 9013	209000	66813	ON SIDE	VICX 9046	66814	6 hrs. 9 mins.
VICX 9053	204600	66882	DERAILED UPRIGHT	VICX 4833	66815	8 hrs. 55 mins

CMA 111620

CRP

CTIRP

MONDAY
October 5, 1992

HUNDREDS MISSING AFTER JET CRASHES INTO HOUSING AREA pag 11

NEWS MESSENGER

Vol. 116 No. 102

MARSHALL, TEXAS

1 Section 12 Pages 35¢

Chemical cars derail in Karnack



POTENTIAL DANGER — A Texas Railroad Commission official inspects several Kansas City Southern rail tank cars which overturned in Karnack early Monday. Each of the seven cars which derailed contains 31,000 gallons of vinyl chloride, a highly flammable industrial chemical. Five of the seven cars overturned, but officials said there were no leaks reported. (Photo/Payne)

No leaks of flammable liquid are reported

JAMES OSBORNE
News Messenger

KISD closes two nearby campuses

MICHAEL J. MIGA
News Messenger

KARNACK — Lawmen and emergency officials sealed off a one-half mile area here today after several tank cars carrying a highly flammable chemical in a Kansas City Southern Railway train derailed near a school, a residential area, and Longhorn Army Ammunition Plant early today.

Authorities said no one was injured in the derailment but Karnack schools were closed and city and school officials are taking precautions to insure no injuries or further accidents occur as a result of the mishap. No residents were asked to leave their homes this morning, but traffic has been restricted along streets highways in the area.

Harrison County Judge Rodney Gilstrap, the county's chief emergency officer, said the Harrison County Sheriff's Department and KCS officials have been monitoring the situation

See DERAILED/2

KARNACK — Students in Karnack public schools got an unexpected day off today when campuses were closed following a train derailment near the secondary campus.

Officials feared the early morning derailment, which took place about 400 yards to 500 yards northeast of the secondary campus, might have caused an extremely flammable substance, vinyl chloride, to leak from several tanker cars.

Not long after the derailment, officials from the Harrison County Sheriff's Office called Acting Superintendent Dr. Anita Walker and suggested schools be closed for the day.

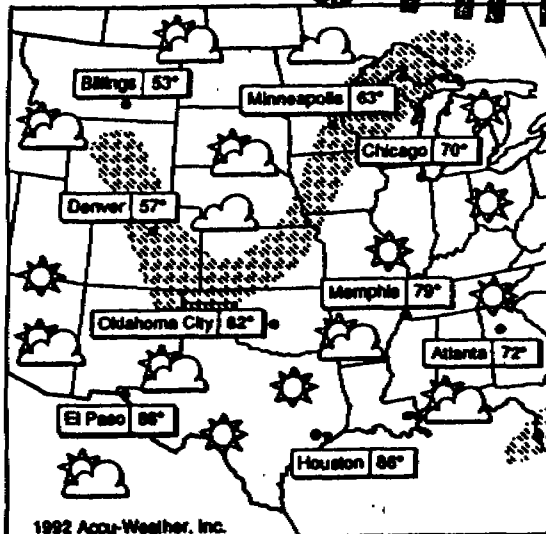
"The sheriff's department rec-

See SCHOOLS/2

COLUMN ONE City meets on 'asbestos train'

ATTACHMENT C

CMA 111621



Local Data

TEMPERATURES		Average low	60.0
	High Low 8 a.m.	Record low	1979, 40
Sunday	80 53 54	Record Rainfall	1949, 3.18
Last Year	86 54 54	SUNRISE-SUNSET	
1992's High	96, Aug. 10	Sunset tonight	6:57
1992's Low	17, Jan. 15	Sunrise tomorrow	7:14

Temperatures show Sunday's high, overnight low and 8 a.m. Monday.

PRECIPITATION		Forecast
8 a.m.-8 a.m.	0.00	Marshall area: Tonight, fair.
Total, month	0.00	Low in the upper 50s. Light
Normal, month	3.03	southeast wind.
Total, year	36.58	Tuesday, mostly sunny. High
Normal to date	37.59	in the mid 80s. Southeast wind
Normal annual	45.57	near 10 mph.
Oct. 5		Extended (Wednesday-
Avg. mean temperature	72.5	Friday): Wednesday increasing
Average high	84.9	clouds with a slight chance of
Record high	1927, 94	showers and thunderstorms.
		Highs in the 80s.

THIS WEATHER CENTER IS BROUGHT TO YOU BY

**Key Air Conditioning
& Heating Inc.**
4610 Kamack Highway
938-9141

Authorized Trane Dealer
TACLB000703C



"It's hard to stop a Trane"

Lawyer outraged

OBITUARY

Edna Jameson

Sullivan Funeral Home
Graveside services for Edna Ann Hanz Jameson, 79, of Marshall, were held at 2 p.m. today at Colonial Gardens Cemetery with the Rev. Rocky Burrow officiating.



Mrs. Jameson died Thursday, Oct. 1, 1992 at Good Shepherd Medical Center after an extended illness. She was born in Bandera on Sept. 19, 1913, to Eamiel F. Hanz and Louisa Velka Hanz. She was married to Thomas Orben Jameson on May 4, 1940, in San Angelo. He preceded her in death on Oct. 6, 1986.

Mrs. Jameson was a homemaker and was formerly employed as a housekeeper for

a physician.

She attended Boerne public schools, was a member of the American Association of Retired Persons, and was a member of the Fireman's Ladies Auxiliary in San Angelo.

She was also a member of the Baptist Church, was a poet, and loved poetry.

She was also preceded in death by three sisters and one brother.

Survivors include a daughter and son-in-law, Jean and Robert Herolt of Marshall; a sister, Mrs. Louise Roach of Midland, and a number of nieces and nephews.

Two grandchildren, Theresa Kirby of Houston and Scott Herolt of Marshall; a sister, Mrs. Louise Roach of Midland, and a number of nieces and nephews.

Active pallbearers were members of the Marshall Fire Department.

and were expected to have the derailment site cleaned by noon today.

"Four tank cars full of vinyl chloride derailed and are on their sides, according to Sheriff's department and railway officials," said Gilstrap. "One or two other cars are off the tracks, but they are upright. There are no leaks or discharge of the chemical from the overturned cars at the site."

Gilstrap said vinyl chloride is a highly flammable substance, according to railway officials.

"City and Kamack school

officials are taking no chances as a result of the derailment," said Gilstrap. "Residents of the area have been evacuated and school officials have cancelled school at least through today."

"Sheriff (Bill) Oldham notified me of the accident approximately between 3 a.m. and 4 a.m. today by car phone."

According to Gilstrap, the incident occurred a very short distance south of the west gate main entrance leading to the Longhorn Army Ammunition Plant where Texas 43 intersects with Texas 134.

"The railway company has

ommended we close schools, so we did," said KISD Board of Trustees President John Alford.

Walker was on the scene Monday morning to be on hand in the event that an evacuation of residents was ordered from the area. Reports stated that Kamack ISD would provide school buses to transport residents out of the area, if an evacuation was deemed necessary.

Walker received the call from the sheriff's office at 4:15 a.m., about 45 minutes after the derailment. She then called radio and television stations, asking them to include in their

HOSPITAL NEWS

Those admitted into Marshall Memorial Hospital Sunday, Oct. 4, were Henry L. Jackson, Carrie A. Oliver, Margaret O. Quillian, Virgil Roberson, Patricia A. Biggs, James R. Eddings, Jr., Lillie M. James, and Sonja r. Howard.

coverage of the derailment an advisory for KISD students to stay home.

Walker also called secondary campus principal Vernora Marshall and elementary principal Cozetta Warren, requesting they contact teachers to advise them of the situation.

School administrative offices were also shut down for the day, and anyone calling the superintendent's office was greeted with a recording explaining the school closing.

Classes are scheduled to resume Tuesday morning, school officials said.

Derail

Continued from 1

sent in a special crew for train derailments from their Corsicana facility," Gilstrap said. "The game plan is for the railway company to bring in a crane and lift the overturned tank cars onto flat bed trailers, and move them to a deserted site and drain them of their highly flammable chemical."

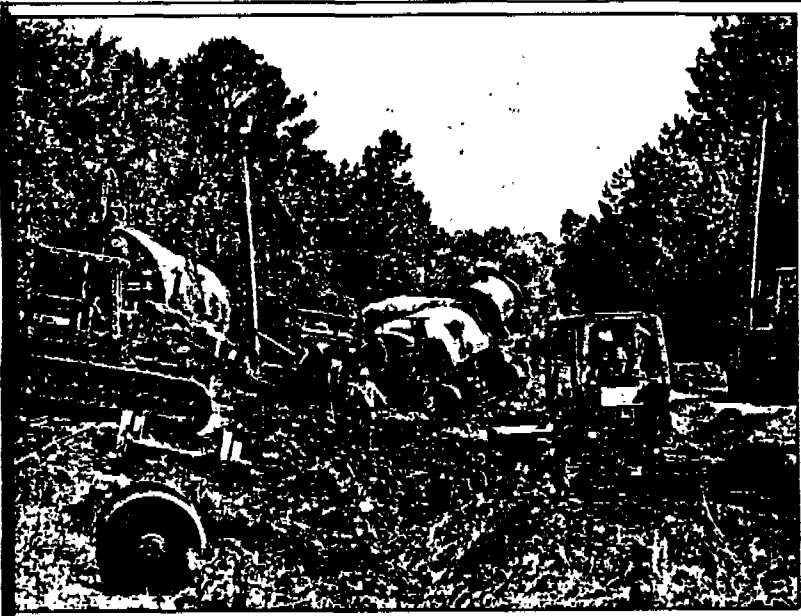
KCS officials are also investigating the site to determine the cause of the derailment.

Gilstrap said railroad officials feared attempting to drain the tank cars on-site because of the nearby school, ammunition plant and residences.

Gilstrap said he would be the county official to contact the governor's office for additional assistance, such as activating the National Guard, if the situation warranted.

"Whenever there is a situation that could escalate into a major disaster that could exceed our local capabilities, I'm always notified," said Gilstrap.

"Sheriff Oldham and his department and railway officials are handling the situation very well. We don't anticipate the situation becoming more serious than that which has already occurred."



By Rich Lyons/Longview News-Journal correspondent

Railroad crews work to right overturned cars Monday following a derailment near Karnack early Monday morning. Derailment of the cars, which contained vinyl chloride monomer, forced the evacuation of a half-mile area around the site.

Karnack train derailment closes school, ammo plant

By Rich Lyons

News-Journal Correspondent

KARNACK — A Kansas City Southern freight train loaded with flammable chemicals derailed here early Monday morning, causing the local elementary school to keep its doors closed and Longhorn Army Ammunition Plant to turn workers away.

No leaks were discovered in the seven tank cars that left the track at the crossing in front of the ammunition plant.

The derailment occurred at 3 a.m., and residents were backed up one-half mile from the gates of the ammunition plant as emergency workers began rerailing the cars containing vinyl chloride monomer.

VCM is a compressed liquid gas that shares the same

flammable properties as compressed propane gas.

Some residents of the town left in a panic when they believed early, incorrect reports that the gas was highly toxic and was escaping from the cars.

"VCM is not particularly toxic," said Kerry L. Gregg, community relations coordinator for Vista Chemical Company, the shipper, headquartered in Houston. "but it is flammable, it is a human carcinogen, and studies show after years of constant exposure there is some increased risk of cancer."

"It was once used as an anesthetic in surgery before more modern medicines were available. Fortunately, in this incident, we had no fire, no leaks and no injuries."

The cars were en route from Westlake, La., to Oklahoma City,

Ok., where the chemical would be used in the production of polyvinyl chloride (PVC), a white plastic used primarily in the manufacture of plumbing pipes.

Of the seven cars involved, three were on their side, two were upside down, and two were off the tracks but still standing.

"Looking at the tank cars, it appears there is damage to them, when in reality these cars are designed to withstand the severe impact," said Mike Lunsford, safety director of the Vista Chemical plant in Westlake.

"The steel on the outside of the cars is there to hold four inches of insulation on the cars. We don't think there is any damage

See Derailment, 9-A

Derailment forces school to close

From 1-A

to any of the cars structurally."

Once the cars are righted and placed back on the tracks, they will be moved several miles out of town and the contents will be uploaded to new cars.

That process is scheduled to begin this morning if the cleanup is completed by then.

The cleanup involves emergency crews from KCS and Hulcher Emergency Services, a company specializing in early response to derailments involving hazardous materials.

"We've got four side-boomed tractors and a front end loader from Hulcher," said Michael Hahn, KCS vice president of transportation, who was supervising the emergency crews. "Everything is going well."

Officials will not begin trying to determine the cause of the derailment until later today. Hahn said the track is "pretty well tore up," and will not offer any clues to the cause of the mishap until the cars are removed and the track segments can be inspected in a lab.

He expects the tracks will reopen today for more train traffic.

Fire trucks and ambulances from Marshall, Karnack and Waskom were on alert.

Crews stayed the full half-mile distance from the wreckage in the event that an explosion occurred.

Officials from KCS, Vista and Hulcher said there was little danger of an explosion.

CTIRP

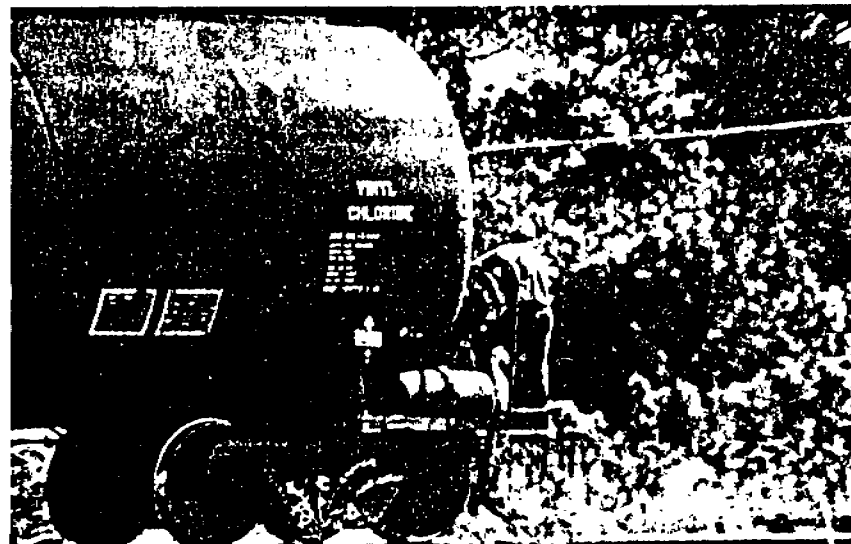
NEWS MESSENGER

Vol. 118 No. 103

MARSHALL, TEXAS

1 Section 12 Pages 35¢

KCS rights derailed cars



ON THE RIGHT TRACK — In the photograph at left, workers from Kansas City Southern Railroad work to get a tank car back on track following the Monday morning derailment in Karnack. At right, Harrison County Fire Marshal Dennis Engdahl, standing, instructs Waskom volunteer firefighter Tim Wilson what to do if one of the derailed tank cars ruptured as crews worked to put the cars back on the tracks. (Photos/Payne)

Classes open, but students ready to go

JAMES OSBORNE
News Messenger

KARNACK — Karnack school officials said classes resumed today following the derailment of several tank cars loaded with a dangerous chemical, but buses would be maintained, with drivers, at Karnack Elementary School.

Harrison County Judge Rodney Gilstrap said school offi-

cials decided that should the evacuation of students at the school become necessary, the buses would remove students from the area.

School officials said the precaution is being taken because of the relative proximity of the school to a remote area near Platt Road where the five tank cars containing the chemical, vinyl chloride, will be drained.

"Vinyl chloride is a highly flammable substance, according to VISTA Co. Inc. and Kansas City Southern Railway officials," said Harrison County Judge Rodney Gilstrap. "School officials are taking every prudent measure necessary for the safety of the school children."

KCS officials say it will be at least five days before all the tank cars involved in the derail-

ment of the KCS train early Monday are drained of the chemical.

The five tanker cars carrying vinyl chloride were part of a 78-car freight train passing through Karnack early Monday morning, en route to Oklahoma City.

The tank cars are owned by VISTA Chemical Co. Inc., home-based in Houston and

were being shipped from Lake Charles, La.

Gilstrap, Sheriff Bill Oldham and other county fire and emergency officials said Monday afternoon every precaution in handling the chemical is being used.

"We were told by VISTA Chemical and KCS representatives because of the highly
See DERAILMENT/5

CTRP

Derailment

Continued from 1

volatile nature of the vinyl chloride chemical involved, each tank car would be righted and off-loaded one at a time, in a remote area near Platt Road," said Gilstrap.

Lawmen and emergency officials sealed off a one-half mile area early Monday after several of the tank cars carrying the highly flammable chemical derailed near a school, a residential area, and Longhorn Army Ammunition Plant.

Authorities said no one was injured in the derailment but Karnack schools were closed and city and school officials were taking precautions to ensure no injuries or further

accidents occurred as a result of the mishap. No residents were asked to leave their homes Monday, but traffic was restricted along streets and highways in the area.

Gilstrap, the county's chief emergency officer, said the sheriff's department, VISTA, and KCS officials have been monitoring the situation and KCS derailment crews had removed the overturned tank cars from the scene by 7 p.m. Monday.

Gilstrap said no leaks or discharge of the chemical from the overturned cars was detected at the site.

The incident occurred a very

short distance south of the west gate main entrance leading to the Longhorn Army Ammunition Plant where Texas 43 intersects with Texas 134.

Gilstrap said KCS sent a special crew for train derailments from its Corsicana facility with a crane to lift the overturned tank cars onto flat bed trailers, and move them to the remote site to be drained.

KCS officials also investigating the site believe the cause of the derailment was due to a broken rail in the track, although an investigation is continuing by railway officials.

h
c
n
c
c

CLIP

CTIRP

ATTACHMENT D
KARNACK, TX DERAILMENT CHRONOLOGY
PAGE 1

<u>DATE</u>	<u>TIME</u>	<u>ITEM</u>
Oct. 5, 1992	0415	MDL received call from K. L. Fogg relating details of seven car derailment in Karnack, TX. There were no leaks apparent, 5 cars were overturned and two were upright.
	0420	MDL called Pat Mayze with Harrison County Sheriff's Office. She confirmed that the derailment had occurred and that responders were on the scene. Chemtrec had sent information for the responders.
	0430	MDL called Chemtrec to notify them that Vista was responding.
	0435	MDL contacted PEM and gave details.
	0440	MDL contacted CJM and advised to respond to plant.
	0450	MDL was contacted by M. Hahn with KCS who was on the scene.
	0530	MDL and CJM arrive at LCVCM Plant.
	0600	MDL and CJM leave LCVCM Plant in route to Karnack.
	0725	Team gets behind slow moving army convoy.
	0740	Team passes convoy.
	0800	Team stopped in Jasper, TX. to call PEM. Advised that K. Gregg and Hulcher should arrive about 10:00 a.m.
	1018	Arrived on scene - met Sheriff and was directed to KCS personnel - Hulcher had just arrived.
	1020	Met KCS personnel: Jim Jarrett - Claim Agent, Johnny Martin - Chemist, and Steve Brewster - Special Agent.
	1025	Toured scene.

CMA 111626

CTIRP

<u>DATE</u>	<u>TIME</u>	<u>ITEM</u>
Oct. 5, 1992	1030	Met with Michael Hahn - VP Operations for KCS MDL called PEM and advised of situation. CJM began checking domes and ends of cars with TLV sniffer - no levels detected.
	1053	Emergency responders convene for safety/strategy meeting. Discussed plan of action and hazards of VCM as well as detection capabilities. All persons in agreement.
	1106	Safety/Strategy meeting complete. Hulcher begins work.
	1115	Rail south of TILX 400006 cut.
	1144	TILX 400006 rerailed and coupled to VICX 9069 and switched out. TILX 400006 "A" coupler appears damaged.
	1240	GATX 26569 trucks rebuilt and on track.
	1312	GATX 26569 upright.
	1320	TLV check of GATX 26569 - No levels detected.
	1335	GATX 25669 rerailed and damaged metal was cut away.
	1340	Began work on VICX 9056.
	1400	MDL gave statement to press - 3 television crews at site.
	1406	VICX 9056 upright.
	1415	VICX 9056 trucks rerailed - B end.
	1423	VICX 9056 trucks rerailed - A end.
	1426	TLV check of VICX 9056 - No levels detected.
	1456	Began cutting coupler off of VICX 9013 because it was fastened to VICX 9053 and could not uncouple.
	1516	Completed cutting coupler - VICX 9013 swung slightly upon release.
	1538	VICX 9013 rerailed.

CTIRP

<u>DATE</u>	<u>TIME</u>	<u>ITEM</u>
Oct. 5, 1992	1545	Stan Polwort from Houston S & T arrived on the scene.
	1610	VICX 9013 pulled away from site.
	1705	Discussed firewater availability for transfer operations with BOE representative.
	1717	VICX 9022 uprighted - jacket damage on side - some liquid coming out - Tested with TLV sniffer - Liquid determined to be condensation, not VCM.
	1738	VICX 9022 "A" End rerailed.
	1751	VICX 9022 "B" End rerailed.
	1803	Began work on VICX 9028.
	1808	VICX 9028 in place.
	1815	VICX 9028 upright.
	1826	VICX 9028 "A" End rerailed.
	1835	VICX 9028 "B" End rerailed but would not couple with VICX 9056 due to coupler damage on VICX 9028.
	1900	MDL and CJM left scene.
Oct. 6, 1992	1000	CJM attended meeting with KCS to discuss transfer strategies while MDL communicated with management and support personnel to prepare for transfer. S. Polwort inspected the VCM cars not involved in the derailment. Damaged cars and empties moved to the plant road crossing.
	1522	MDL and CJM met with Larry Peyton (OHM) and Jim Jarrett (KCS) to discuss the transfer operations and procedures and reviewed the OHM site safety and health plan.
	1605	OHM crew arrived.
	1900	B. Enix arrived from LCCP.
	2118	VICX 9028 to VICX 9021 - transfer pressure checked hoses.
	2123	MDL/CJM checked the transfer set up - all OK.

CMA 111628

CTIRP

<u>DATE</u>	<u>TIME</u>	<u>ITEM</u>
Oct. 6, 1992	2124	Began transfer - VICX 9028 to VICX 9021.
	2129	Started pump.
	2319	CJM/MDL left site - S. Polwort and B. Enix represented Vista.
Oct. 7, 1992	0040	Transfer stopped for train.
	0050	Transfer restarted.
	0155	Transfer stopped for train.
	0210	Transfer restarted.
	0300	Transfer stopped for train.
	0307	Transfer restarted.
	0330	Transfer complete - began hose purging.
	0345	Disconnected hoses - VICX 9028 to VICX 9021
	0430	Completed breakdown of VICX 9028 to VICX 9021 transfer.
	0655	Second OHM crew arrived.
	0700	MDL/CJM on site - BKE/SP left site.
	0715	MDL/CJM met with second OHM crew - discussed VCM/safety procedures and transfer procedures - second crew supervised by Audie Richard.
	0732	GATX 26569 to GATX 96363 transfer - pressure checked hoses.
	0735	MDL and CJM checked the transfer setup - all OK.
	0736	GATX 26569 to GATX 96363 vapor lines opened.
	0747	GATX 26569 to GATX 96363 liquid lines opened.
	0749	GATX 26569 to GATX 96363 compressor started.
	0840	VICX 9022 to VICX 9025 transfer pressure checked.
	0844	MDL and CJM checked transfer setup - all OK.
	0845	VICX 9022 to VICX 9025 vapor lines opened.

CTIRP

<u>DATE</u>	<u>TIME</u>	<u>ITEM</u>
Oct. 7, 1992	0850	VICX 9022 to VICX 9025 compressor started.
	1157	GATX 26569 went empty.
	1215	GATX 26569 to UTLX 96363 hoses purged.
	1222	GATX 26569 to UTLX 96363 hoses disconnected.
	1240	Began VICX 9056 to VICX 4827 hookup.
	1306	VICX 9056 to VICX 4827 transfer pressure checked.
	1314	CJM checked transfer setup - all OK. VICX 9056 to VICX 4827 vapor lines opened.
	1316	VICX 9056 to VICX 4827 compressor started.
	1400	VICX 9022 went empty.
	1411	VICX 9022 to VICX 9025 hoses purged.
	1425	VICX 9022 to VICX 9025 hoses disconnected.
	1430	VICX 9013 to VICX 9046 transfer hoses connected.
	1437	Shutdown transfer for train.
	1438	VICX 9013 to VICX 9046 pressure checked hoses.
	1445	VICX 9056 to VICX 4827 transfer resumed - train passed.
	1446	VICX 9013 to VICX 9046 vapor lines opened.
	1455	VICX 9013 to VICX 9046 compressor started.
	1705	Transfer shut down for two trains to pass
	1708	First train passed.
	1720	Second train passed - transfers restarted.
	1810	Transfers shut down for train to pass.
	1813	Train passed - transfers restarted.
	1900	BKE/SP on site - MDL/CJM left site.
	1942	VICX 9056 went empty.

CTIRP

<u>DATE</u>	<u>TIME</u>	<u>ITEM</u>
Oct. 7, 1992	1955	VICX 9056 to VICX 4827 hoses purges.
	2015	VICX 9056 to VICX 4827 hoses disconnected.
	2045	VICX 9053 to VICX 4833 hook up begun.
	2055	VICX 9013 went empty.
	2056	VICX 9013 to VICX 9046 hoses purged.
	2110	VICX 9053 to VICX 4833 transfer began.
	2115	VICX 9013 to VICX 9046 hoses disconnected.
	2140	Shutdown transfer for lightening.
	2225	Restarted transfer.
Oct. 8, 1992	0505	VICX 9053 empty - hose purge began.
	0520	VICX 9053 to VICX 4833 hoses disconnected.
	0630	BKE/SP left site.

CMA 111631