

04-16-385019

State of Wisconsin Substance Release Notification Form

PLEASE PRINT

24-Hour Emergency Hotline Number: 1-800-943-0003

Form 4400-91 Rev. 2-99

Date and Mil. Time of Incident <b>16 Oct 01</b>	Date and Mil. Time Reported <b>3:40:00 pm 16 Oct 01</b>
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Person Reporting/Representing <b>Liz Lundmark</b>	Phone # <b>(715) 398-8434</b>
Responsible Party/Spiller <b>Murphy Oil</b>	Phone # <b>(715) 398-8434</b>
Contact Name <b>Liz Lundmark</b>	Phone # <b>(715) 398-8434</b>
Address <b>2407 Stinson Ave</b>	City, State, Zip Code <b>Superior, WI 54880</b>
Substance Involved <b>LPG</b>	Amount & Units Released <b>632 pounds</b>
Amount Recovered <b>—</b>	

Solid  Semisolid  Liquid  Gas Color \_\_\_\_\_ Odor \_\_\_\_\_

Exact Location (inc. address, facility name, mileage, bldg. #, etc.)  
**Refinery**

City **Superior** County **Douglas** Lat/long \_\_\_\_\_

DNR Region **NOR** \_\_\_\_\_ 1/4 \_\_\_\_\_ 1/4sec \_\_\_\_\_ NR \_\_\_\_\_ (E/W) Weather Cond. \_\_\_\_\_

Cause of Incident  
**crack in the saddle of a high pressure receiver vessel**

Action Taken By Spiller:  
 No Action Taken  
 No Action Needed  
 Monitor  
 Cleanup Method:  
 \_\_\_\_\_  
 Waste Destination:  
 \_\_\_\_\_  
 Containment  
 Contractor Hired  
 Name: \_\_\_\_\_  
 Other: **Area evacuated during repair - no cleanup for air release**

Spilled Substance Impact To: Check (✓) all that apply: <input checked="" type="checkbox"/> Air <input checked="" type="checkbox"/> Potential <input type="checkbox"/> Soil <input type="checkbox"/> Potential <input type="checkbox"/> Groundwater <input type="checkbox"/> Potential <input type="checkbox"/> Surface Water <input type="checkbox"/> Potential Name _____ <input type="checkbox"/> Storm Sewer <input type="checkbox"/> Potential <input type="checkbox"/> Sanitary Sewer <input type="checkbox"/> Potential <input type="checkbox"/> Concrete/Asphalt <input type="checkbox"/> Potential <input type="checkbox"/> Private Well <input type="checkbox"/> Potential <input type="checkbox"/> Contained/Recovered <input type="checkbox"/> Other: _____	Spill Source: <input type="checkbox"/> Transportation Accident, Fuel Tank Spill <input type="checkbox"/> Transportation Accident, Load Spill <input type="checkbox"/> Industrial Facility <input type="checkbox"/> Paper Mill <input type="checkbox"/> Chemical Co. <input type="checkbox"/> Ag Coop/Facility/ Food Factory/Facility <input type="checkbox"/> Gas/Service Station/Garage/Auto Dealer, Repair Shop <input checked="" type="checkbox"/> Pipeline, Terminal, Tank Farm, Oil Jobber/Wholesaler <input type="checkbox"/> Public Property (city, state, church, school, etc.) <input type="checkbox"/> Utility Co, Power Generating/ Transfer Facility <input type="checkbox"/> Private Property (home/farm) <input type="checkbox"/> Construction, Excavation, Wrecking, Quarry, Mine <input type="checkbox"/> Airport Facility <input type="checkbox"/> Railroad Facility <input type="checkbox"/> Other _____
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Injuries?  Yes  No If yes, how many? \_\_\_\_\_ Has an evacuation occurred?  Yes  No Potential?  Yes  No

Are there any resource damages?  Yes  No  Potential What kinds? \_\_\_\_\_

Other Agencies Notified (✓ first column if notified) (✓) both columns if on the scene	Incident Commander, if known: _____ Phone: _____
<input type="checkbox"/> Fire Department <input type="checkbox"/> Local DNR <input type="checkbox"/> EPA <input checked="" type="checkbox"/> Local Law Enforcement <input type="checkbox"/> Div. Emer. Mgt. <input type="checkbox"/> Nat'l Resp. Ctr. 800-442-8802 <input type="checkbox"/> LEPC or Local Emer. Mgt. <input type="checkbox"/> Coast Guard <input type="checkbox"/> Chemtrec 800-424-9300 <input type="checkbox"/> Level A/Level B Team <input type="checkbox"/> DHFS 608-258-0099 <input type="checkbox"/> Other _____	

Prepared By: (Print) **Norman Dunbar** (Phone) **715-365-8963** Date: \_\_\_\_\_ Rpt'd to DATCP?  Yes  No

Person Notified: **Bob Gottblad** (Phone) \_\_\_\_\_ Date: **16 Oct 01** Time: **3:40:00 PM**

Investgtd By: (Print) **Bob Gottblad** (Sign) \_\_\_\_\_ Date: \_\_\_\_\_ Incident Closed?  Yes  No  
Date: **6 Dec 01**

Spill Coordinator Signoff: **Norman Dunbar** Date: **6 Dec 01** Transferred to: ERP  DATCP  Date: \_\_\_\_\_ Case # \_\_\_\_\_ NFA Letter Sent?  Yes  No Spill Packet Sent?  Yes  No To: \_\_\_\_\_

Additional Comments on Reverse

State of Wisconsin Substance Release Report (Con't)

Form 4401-91 Rev. 2-99

Date and Military Time of Incident:	Responsible Party:
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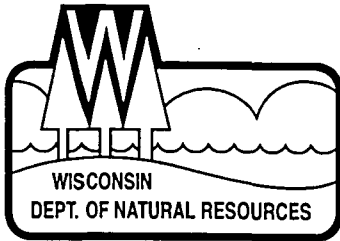
Additional Comments:

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Case Activity Report: <input type="checkbox"/> Yes <input type="checkbox"/> No CAR#:	(Please attach copy of all CAR and other documentation)
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Enforcement Action: <input type="checkbox"/> Yes <input type="checkbox"/> No (explain below)
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State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Scott McCallum, Governor  
Darrell Bazzell, Secretary

101 S. Webster St.  
Box 7921  
Madison, Wisconsin 53707-7921  
Telephone 608-266-2621  
FAX 608-267-3579  
TTY 608-267-6897

December 6, 2001

Liz Lundmark  
Murphy Oil USA, Inc.  
2407 Stinson Ave.  
Superior, WI 54880

Subject: LPG Release on Oct. 16, 2001 at Murphy Oil

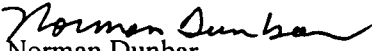
Dear Ms. Lundmark:

I have received your response to the LPG air release on Oct. 16<sup>th</sup> and I have also discussed the matter with Dave Podratz. There has been some concern, comments, and questions if a release of LPG is a reportable spill. NR 706.07(2)(b) Wis. Adm. Code indicates that if a discharged substance presents or threatens to present a fire or explosion hazard or other safety hazard or an evacuation has occurred, the discharge shall be reported.

For any future air releases that require an evacuation, I recommend reporting the release as a spill. I also recommend reporting any liquid spills, which occur on an impervious surface, if they present a fire or explosion hazard or necessitate an evacuation. The DNR spill hotline phone number is 800-943-0003 and is on 24 hours a day. Reporting to this hotline number does not forward the call for any national response reporting requirements. Also, continue to report to the DNR Air Program any air releases they require to have reported.

If you have any questions, I can be reached at 715-365-8963.

Sincerely,

  
Norman Dunbar  
NOR Regional Spills Coordinator

c. Ted Matheson, Asst. Fire Chief, 3326 Tower Ave., Superior, WI 54880

## Dunbar, Norman C

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**From:** Hosch, James A  
**Sent:** Monday, December 03, 2001 8:20 AM  
**To:** Dunbar, Norman C  
**Subject:** FW: Spill report

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**From:** Liz\_Lundmark@murphyoilcorp.com[SMTP:Liz\_Lundmark@murphyoilcorp.com]  
**Sent:** Friday, November 30, 2001 10:02 PM  
**To:** Hosch, James A  
**Cc:** Lee\_Vail@murphyoilcorp.com  
**Subject:** Spill report



EL086.doc

Dear Jim,

Here is a written report of the release that took place on October 16th. I reported this to Bob Gothblad on that day. I will hand carry a copy to your office on Monday. The drawing referenced is not attached since I don't have access to a scanner at the moment.

(See attached file: EL086.doc)



November 30<sup>th</sup>, 2001

Mr. James Hosch  
Wisconsin Department of Natural Resources  
1401 Tower Avenue  
Superior, WI 54880

RE: Reported Release of LPG

Dear Mr. Hosch:

This letter is a follow up letter under NR708.05(6)(a) regarding a release of material that was verbally reported to the WDNR on October 16<sup>th</sup>, 2001.

The release was due to a failed bridle on the high-pressure receiver (see attached drawing). The bridle developed a small hole approximately 1/8<sup>th</sup> inch in diameter. This hole allowed a release of flammable material to the air within the process unit. The response to this release was immediate. The refinery alarm was sounded and the emergency response team was activated to man fire hoses to suppress the vapors and control the release. The police department provided roadblocks along the adjacent roads as a precautionary measure. Air monitoring for Lower Explosive Limit was conducted along the adjacent roads with no detectable emissions.

This material was contained within the refinery unit and any material that was knocked down was contained on the concrete of the unit, which drains to the refinery sewer system. An investigation into the source of the corrosion that caused the incident is being conducted and the results of that investigation are to be provided to Bob Gothblad of WDNR as a follow-up to a letter written to him regarding SO<sub>2</sub> emissions associated with this event. A copy will also be provided to you. In addition, and as a part of the incident investigation, we have undertaken to inspect lines in similar service in an effort to prevent similar occurrences.

This type of failure or malfunction is very rare. As a result of the failure we inspected other bridles in the facility that had the potential for similar failure. As a result of that inspection we found one additional bridle on the interstage receiver that had thinned to the point of concern. We curtailed operations on the FCCU and repaired that bridle on Nov 29<sup>th</sup> 2001 thus avoiding another potential release.

Because of the nature of the release (volatile organic) and the location of the release (concrete pad and air) I am requesting a "No Further Response Action" determination as outlined in NR708.09.

EL086

The type of material release was light hydrocarbon similar in nature to LPG. This material was released to the air and was contained and mitigated by the use of water spray as discussed above. The amount of material was approximately 632 pounds. The release rate was approximately 2.1 pounds per minute. The material was not detected outside the facility as determined by LEL measurements and therefore the impact to the surrounding area should be minimal.

The material was released from the hole in the line for approximately 5 hours and the immediate response to the event is discussed above. Neither this response nor the weather conditions would have resulted in accelerated migration of the material.

Due to the volatility of the material, the release mitigation efforts used, and the fact that the material, if condensed, was contained on an impervious surface, there should be no need to conduct a site investigation.

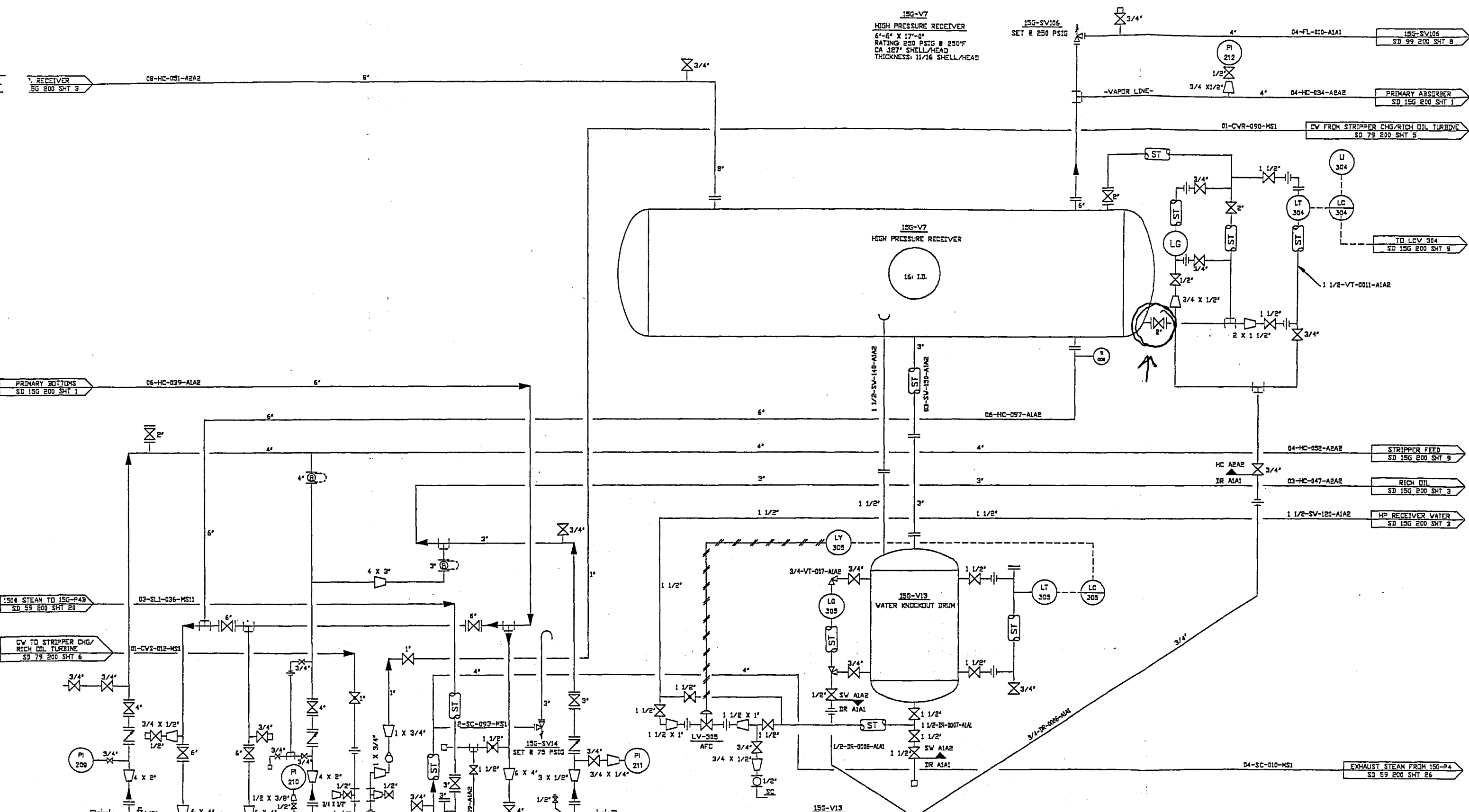
Please respond with your concurrence or denial of a no further response actions required. If you have any further questions, please do not hesitate to contact me at 398-8434.

Sincerely,



Liz Lundmark  
Manager—Environmental and PSM

cc: Fred Green  
Kevin Melnyk  
Jim Britt  
Dave Podratz  
Lee Vail



15G-V7  
HIGH PRESSURE RECEIVER  
6'-6" X 17'-0"  
RATING 250 PSIG @ 250°F  
CA 1/2" SHELL/HEAD  
THICKNESS: 11/16 SHELL/HEAD

15G-V13  
WATER KNOCKOUT DRUM  
38' X 113'  
RATING: 215 PSIG @ 100°F

15G-P4A  
STRIPPER CHARGE PUMP  
DESIGN: 270 GPM @ PT  
20 HP. ELECTRIC, 3550 RPM

15G-P43  
STRIPPER CHARGE PUMP  
DESIGN: 270 GPM @ PT  
TURBINE: 3550 RPM

15G-P5  
RICH OIL PUMP  
DESIGN: 145 GPM @ PT  
10 HP. ELECTRIC, 3550 RPM

REV.	DATE	INITIALS	DESCRIPTION	EQUIPMENT
A	07/12/94	R.N.	INSTRUMENTATION	15G-V7 HIGH PRESSURE RECEIVER
B	07/21/94	PNZ	HP. LEVEL CONVERTED TO CAD	15G-V13 WATER K.O. DRUM
C	01/17/95	RON	LV 305 VALVE SIZE INSTRUMENT SYM'S SCALED UP	15G-P5 RICH OIL PUMP
D	02/12/96	D.R.	LINE NO. REVISIONS	15G-P4A STRIPPER CHARGE PUMP
E	08/19/96	RON	FLAG TIE IN	15G-P43 STRIPPER CHARGE PUMP
F	04/23/97	RON	FLAG TIE IN	
G	01/13/98	RON	CC-39 TIE IN	
H	03/22/01	PNZ	VLV. TAG LAYER	
I	06/12/01	PNZ	LINE NUMBER	
J	10/19/01	PNZ	NOC #1238	

**MURPHY OIL CORPORATION**  
SUPERIOR REFINERY  
SUPERIOR, WISCONSIN

FCC GAS CONCENTRATION AND MEROX UNIT  
FCC GAS CONCENTRATION SECTION  
PIPING AND INSTRUMENT DIAGRAM

DRAWN BY ED SMITH 12/29/93 SCALE NONE  
CHECKED BY ED SMITH 03/18/93 DATE 12/29/93  
APPROVED BY LYLE LAKE 06/04/93 DRAWING NO.  
INITIALS SD 15G 200 SHEET 04

12 Oct 11  
16th release pipeline leak

Dave Podratz

Murphy 715-398-3535

Env. Managin  
traffic stopped

Fire dept & DNR not called  
quickly in

NR 706- (NON)?

~~to~~

— talk to Mick first before  
send anything



Bob Gottiblad - reported  
to

Air releases - reportable  
Murphy thought only to  
Air Program

copy to

11/2

- Ted ~~Matheson~~ -

Matheson  
Asst Fire Chief

3326 Town Ave

Superior, 54880

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708.05.6?

Letter to Murphy  
re spill reporting  
air  
soil

## **Dunbar, Norman C**

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**From:** Hosch, James A  
**Sent:** Friday, November 02, 2001 9:47 AM  
**To:** Dunbar, Norman C; Robinson, John H.  
**Subject:** Murphy Oil Unreported Spill

I spoke with Tad Matheson (sp.?) Asst. Fire Chief with the City of Superior. He would like a call in regards to the spill at 715-394-0227. They were quite upset that they were not contacted for this incident. He stated that they evacuated the contractors, blocked the road, and they were using deluge lines to knock down the vapors. Sounds to me like the situation was fairly serious and reportable. Let me know what you intend to do. The Assistant Chief's comment was business as usual, and that Murphy tries to keep these things as quiet as possible.

## Dunbar, Norman C

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**From:** Hosch, James A  
**Sent:** Tuesday, October 23, 2001 9:39 AM  
**To:** Dunbar, Norman C  
**Cc:** Robinson, John H.; Gothblad, Robert C; Baudhuin, Neal E; Holmbeck, Phyllis J; LaValley, Steven A  
**Subject:** FW: Murphy Oil

Norm,

Since your the Spill Guy, I will let you follow up on it. My two cents is that calls to the local office don't work after hours and emails don't work all the time either if there isn't someone to receive it. Murphy handles some very hazardous material and we cannot afford to be out of the loop. In the future, Murphy should follow NR 706.05(b) Wis. Adm. Code. I understand that the Fire Department was not happy with Murphy's lack of notification.

Just some background information you might find useful whatever you decide on follow-up. I referred Lakehead Pipeline for non-reporting a while back. They had an ongoing leak of LNG for about 4 days. I only mention this because they are located across the street from Murphy.

I also understand that Steve LaValley has referred Murphy to DOJ recently for some spill reporting violations. According to Steve, Murphy has had a long history of not reporting going back to the 1980s.

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**From:** Gothblad, Robert C  
**Sent:** Tuesday, October 23, 2001 9:21 AM  
**To:** Hosch, James A  
**Subject:** FW: Murphy Oil

Jim...maybe this helps you figure out what may have been going on out Murphy way 10/16-17/01.

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**From:** Baudhuin, Neal E  
**Sent:** Tuesday, October 23, 2001 8:44 AM  
**To:** Holmbeck, Phyllis J; Gothblad, Robert C  
**Subject:** RE: Murphy Oil

How did the news media report this as a propane leak? I would have *assumed* they checked with Murphy. Maybe Liz can figure out how this got messed up.

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**From:** Gothblad, Robert C  
**Sent:** Monday, October 22, 2001 4:02 PM  
**To:** Holmbeck, Phyllis J; Baudhuin, Neal E  
**Cc:** Gothblad, Robert C  
**Subject:** RE: Murphy Oil

Liz Lundmark called me 10/16/01 (late afternoon 3:00-4:00 I believe) to report an expected SO2 episode. They discovered a crack in the saddle of a high pressure receiver vessel. They were having to vent the vessel to flare in order to vacate the vessel so they could repair it. They were expecting a very minor (~20 # SO2) episode as a result of flaring. The problem was first noticed in the early morning and thought at first to be a steam leak but upon closer inspection they noted that they had a hydrocarbon leak. Thus they took some evacuation precautions. [Maybe this is the event folks are referring to regarding if DNR was notified]. Liz figured the tank would be depressured by 8:00 pm and the repair work would be done that evening.

I was just heading out the door and left things with the understanding that Murphy had things under control and would follow up with a detailed report as usual. I did suggest to Liz that in addition to calling me on each episode that she consider also sending a quick e-mail to at least document that they were attempting to notify DNR as soon as possible of an event, because in this particular episode we played phone tag a time or two before we were able to connect with one another.

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**From:** Baudhuin, Neal E  
**Sent:** Thursday, October 18, 2001 8:30 AM

**To:** Holmbeck, Phyllis J  
**Cc:** Gothblad, Robert C  
**Subject:** RE: Murphy Oil

Thanks, Phyliss.

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**From:** Holmbeck, Phyllis J  
**Sent:** Wednesday, October 17, 2001 4:41 PM  
**To:** Baudhuin, Neal E  
**Cc:** Holmbeck, Phyllis J  
**Subject:** FW: Murphy Oil

Neal

As best we can tell Murphy did not call us about the release. Jim checked with the Fire Department. They were notified after the fact when someone called them to find out why the road was blocked. Jim will do some more checking tomorrow. He will be routing the info to me and I will forward it to you. Later  
Phyliss

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**From:** Holmbeck, Phyllis J  
**Sent:** Wednesday, October 17, 2001 2:14 PM  
**To:** Baudhuin, Neal E  
**Cc:** Holmbeck, Phyllis J  
**Subject:** Murphy Oil

Neal

the news of TV this morning said Murphy Oil had a propane leak. The leak came from a broken pipe. The news said the plant had to be evacuated and also some of the surrounding area. The news story said when Murphy checked the outside area around the plant Murphy said there wasn't any health danger.

Jim Hosch has a call into Madison to see if Murphy reported it.

Phyliss