

Attachment for Ecology
Inspection 93-005

1. Notification Report 01/01/1993/Environmental Nonroutine Release/Spill Checklist.
2. Information From Caller Report 12/31/92
3. Environmental Spill Checklist (Diesel Fuel)
4. Waste Information Data System Information Acquisition Form
- ~~5. Material Safety Data Sheet 21513~~
- ~~6. Material Safety Data Sheet 13927~~



RL--WHC-WHC1100EM-1993-0001
01/01/1993

Notification Report
Page 2

7. UCNI?:
No
8. PLANT AREA:
1100 Area
9. DATE AND TIME DISCOVERED:
12/31/1992 1145 (PTZ)
10. DATE AND TIME CATEGORIZED:
12/31/1992 1230 (PTZ)
11. DOE NOTIFICATION:
12. OTHER NOTIFICATIONS:
13. SUBJECT OR TITLE OF OCCURRENCE:
Fuel leak from government-owned bus.
-
14. NATURE OF OCCURRENCE:
02) Environmental
B. Hazardous Substances/Regulated Pollutants/Oil Releases
-
15. DESCRIPTION OF OCCURRENCE:
The bus was fueling at the 200 West Area fuel pumps. The fuel pump filler spout failed to shut off when the bus was full. The fuel pump fuel fill spout had leaked (approximately 2 to 5 gal.) of diesel fuel.
-
16. OPERATING CONDITIONS OF FACILITY AT TIME OF OCCURRENCE:
Normal
-
17. ACTIVITY CATEGORY:
Normal Operations
-
18. IMMEDIATE ACTIONS TAKEN AND RESULTS:
Notifications were made to the bus dispatcher. The spill was cleaned up with absorbent.

ENVIRONMENTAL NONROUTINE RELEASE/SPILL CHECKLIST

DATE: 10603	TIME: 4:00 p.m.	RECEIVED BY: Darrell Stocker
NAME OF PERSON REPORTING INCIDENT: Darrell Goeckner 3-3024		
ADDRESS AND PHONE NUMBER OF PERSON REPORTING INCIDENT: 2713E, 3-3024		
LOCATION OF SPILL: 2713W gas station		
DATE AND TIME OF SPILL: 1/25/93 4:00 p.m.		
DURATION OF SPILL: 2 minutes		
WHEN DISCOVERED: 1/25/93		
IDENTITY AND AMOUNT OF MATERIAL SPILLED: 1 gallon diesel #2		
CAUSE OF SPILL (BRIEF DESCRIPTION, I.E., WHO,WHAT, AND WHERE:) Approximately 1 gallon of diesel was spilled to the ground. Vehicle unknown.		
IMMEDIATE ACTION TAKEN: Absorbent was placed on spill. Environmental contacts were made.		
FINAL ACTION TAKEN (CLEAN UP AND DISPOSAL INFORMATION): Dirt, absorbent, and diesel was removed and placed in 30 gallon drums for disposal.		
IMPACT (ENVIRONMENTAL, INJURIES, PROPERTY DAMAGER, ETC.): None		
WHO WAS NOTIFIED IN WHC D.P. AND PHONE NUMBER: Joe Zoric 3-4315		
CATEGORIZED (DATE & TIME AND OFF NORMAL OR NORMAL): n/a		

Date: 12-31 Time: 12:15 PM Received by: R.W. HOOKFIN

Part 1: Information From Caller

1. Identity of spilled material: diesel fuel MSDS No. _____
2. Amount of spilled material: 2-5 gallons
3. Location of spill: 200 - W BUS 1B1840
4. Spilled to: Ground Asphalt Concrete Secondary Containment
 Inside Other _____
5. Date and time of spill: 12-31 11:40 AM
6. When was spill discovered? _____
7. Cause of spill: Equipment Personnel Procedure Design
 Other WEATHER
8. Explain cause of spill: GAS NOZZLE FROZE OPEN DURING INCLEMENT WEATHER, CAUSING GAS TO FLOW TO GROUND
9. Immediate actions (containment, neutralization, etc.): applied absorbant
10. Future actions (waste clean-up, procedure revision, etc.): NONE
11. Impact (environmental, injuries, property damage, etc.): NONE
12. Entry into WIDS required? (WHC-CM-7-7, Sect. 1.10) Yes _____ No
13. Name of person reporting incident: STEVE BICKEL Phone No. 2-0615
14. Associated facility: _____
15. Facility Manager: _____
16. Has this incident been reported to the ONC (6-2900) as an Off-Normal Event? YES
If not, why not? _____

NOTE: MRP 5.14, Appendix F, Group 2 (Environmental) Category B (Release of Hazardous Substances/Regulated Pollutants/Oils, Off-Normal criterion (a) requires off-normal event reports for hazardous material spills.

Part 2: Designation and Pertinent Regulations

Spill/Release Designation: Contact Debi Tureman (6-4646), Cindy Girres (6-4036), Glen Triner (6-4852), Rick Austin (6-4277), or Mandy Pascual (6-4839).

Ecology Dangerous CERCLA RQ (Dangerous Waste) CERCLA RQ (Radionuclides) SARA Title III RQ NPDES

TCA/PCA DOE Order 5486.1 Toxic Substances (PCB) PSD

Applicable Reportable Quantity: _____ None Other: _____

ENVIRONMENTAL SPILL CHECKLIST

Date: Jan 26, Time: 8:00 am Received by: Zain

Part 1: Information From Caller

1. Identity of spilled material: Diesel Fuel MSDS No. _____
2. Amount of spilled material: 1 gallon Diesel Fuel
3. Location of spill: 2713W gas station
4. Spilled to: Ground Asphalt Concrete Secondary Containment
 Inside Other _____
5. Date and time of spill: unknown
6. When was spill discovered? ~ 4:00 pm Jan 25, 93
7. Cause of spill: Equipment Personnel Procedure Design
 Other unknown
8. Explain cause of spill: unknown - spill was discovered at the gas station by noting employees
9. Immediate actions (containment, neutralization, etc.): cleaned up contaminated soil (3 30gal drums) for disposal
10. Future actions (waste clean-up, procedure revision, etc.): designate and dispose of waste according to state and federal regulations
11. Impact (environmental, injuries, property damage, etc.): none
12. Entry into WIDS required? (WHC-CM-7-7, Sect. 1.10) Yes _____ No X
13. Name of person reporting incident: Darrel Stocker Phone No. 6-7284
14. Associated facility: 200 W area
15. Facility Manager: R. A. Evanoff
16. Has this incident been reported to the ONC (6-2900) as an Off-Normal Event? NO
If not, why not? Does Not meet 5114 criteria

NOTE: MRP 5.14, Appendix F, Group 2 (Environmental) Category B (Release of Hazardous Substances/Regulated Pollutants/Oils, Off-Normal criterion (a) requires off-normal event reports for hazardous material spills.

Part 2: Designation and Pertinent Regulations

Spill/Release Designation: Contact Debi Tureman (6-6646), Cindy Girres (6-4036), Glen Triner (6-4852), Rick Austin (6-4277), or Mandy Pascual (6-4839).

- Ecology Dangerous CERCLA RQ (Dangerous Waste) CERCLA RQ (Radionuclides) SARA Title III RQ NPDES
 TCAPCA DOE Order 5484.1 Toxic Substances (PCB) PSD
 Applicable Reportable Quantity: _____ None Other: _____

**Waste Information Data System
INFORMATION ACQUISITION FORM**

Employee Name, Address, and Phone J. W. Schmidt, MSIN T1-30, 274-W 200 West, 373-2116

- Add a Waste Site
 Delete a Waste Site
 Modify Data

Source Document [1] DSI M.J. Brown to JW Schmdit, 1-5-90
 Source Document [2] Suspect Waste Site Information Report
 Source Document [3] Letter HEHF to AD Poor, Letter # C014724, 12-15-89
 Source Document [4]

Remarks

<u>L. P. Diediker</u>	<u><i>[Signature]</i> 9-3-92</u>	<u>J. J. Dorian</u>
*Mgr. Env. Protection/Date	(approve)	*Employee's Immediate Mgr./Date (review)
<u>M. R. Adams</u>	<u><i>[Signature]</i> 1/15/93</u>	<u>N. A. Homan</u>
*Mgr. Env. Engineering/Date	(approve)	*WIDS Engineer/Date (data prep./entry)
<u>R. D. Fox</u>		<u>R. A. Carlson</u>
*WIDS Team Mgr./Date	(accept)	*Operable Unit Mgr./Date (review)
		<u><i>[Signature]</i> 1/14/93</u>

GENERAL INFORMATION

Fill in brackets below with corresponding source document number (see above)

[] *Site Name 220-W-1
 [] Alias(es) 2713-V NORTH PARKING LOT (ARJ-12/14/92)
 [] *Site Type Dust Abatement Area (52)
 [] *Waste Type Hazardous (7)
 [] *Site Status (active/inactive) Inactive (1)
 [] Start Date
 [] End Date
 [] Occurrence Date (spills)
 [] Inactive Category Pre 1980
 [] Waste Physical State (S/L) Liquid
 [] Total Volume Received (m³ or l)
 [] Overburden Soil Volume (m³)
 [] Contaminated Soil Volume (m³)
 [] Overburden Depth (ft)
 [] Top or Bottom Dimensions (T/B)
 [] Length (ft) 300
 [] Width (ft) 500
 [] Depth (ft below grade)
 [] Diameter (ft)
 [] Area (ft²) 150,000
 [] Ground Elev. (MSL)
 [] Water Depth (ft below grade)
 [] *Operable Unit 200-SS-2
 [] *Include in Operable Unit (Y/N) Y
 [] *Operable Unit Category undefined
 [] *TSD No. (N/A if none) N/A
 [] *SUMU (Y/N) NY (ARJ-12/21/92)
 [] Part A Permit Application Written (Y/N)
 [] Part B Permit Application Written (Y/N)
 [] Interim Closure Plan Written (Y/N)
 [] *Hanford Area 200 West

Waste Information Data System
INFORMATION ACQUISITION FORM

Site Name

- *Location Desc. Parking lot north of 2713-W, East of Beloit Ave and north of 20th St.
- Coordinates (Hanford) N42,000 W72,000 T12N R26E SEC 6 NE 1/4 NW 1/4 SW 1/4
- Exhumed (Y/N) N
- Class V Undrgrnd Injec Well (Y/N) N
- Responsible Program (DOE-RL)
- Hazardous Ranking Migration Score

- Site Description (physical description of site) Parking lot north of 2713-W. Waste oil used for dust abatement was applied in this area. When repairing a water line break, discolored soil was noticed in soil 4" to 6" below grade.
- Associated Structures (related equipment, instrumentation, etc.) 2713-W and waste oil storage tank
- Waste Description (hazardous chemicals, radionuclides, history, etc.)
- Known Releases (spills, unplanned discharges, dates, etc.)
- Release Potential (of wastes from the site)
- Environmental Monitoring (types, frequencies, results, etc.)
- Cleanup Actions
- Comments (information that doesn't fall under the other categories) Soil samples indicate PCB, xylene, lead and other regulated material. Used oils were applied to the parking lot north of 2713-W for dust abatement.

Radionuclides

(in Curies except where noted)

110 Ag	2 H (g)	228 Ra	234 U
110M Ag	3 H	86 Rb	235 U
241 Am (g or Ci)	181 Hf	187 Re	238 U
243 Am (g)	123 I	103 Ru	U- (gross)
195 Au	125 I	106 Ru	49 V
133 Ba	129 I	35 S	87 Y
7 Be	131 I	122 Sb	88 Y
10 Be	40 K	124 Sb	90 Y
14 C	85 Kr	125 Sb	65 Zn
45 Ca	Li (g)	126 Sb	93 Zr
109 Cd	54 Mn	46 Sc	95 Zr
141 Ce	93 Ho	75 Se	
144 Ce	22 Na	79 Se	
252 Cf (g)	91 Nb	147 Sm	Date Decayed to:
36 Cl	93M Nb	151 Sm	
243 Cm	94 Nb	113 Sn	Separately Reported:
244 Cm (g)	95 Nb	123M Sn	Alpha
245 Cm (g)	59 Ni	82 Sr	Beta
57 Co	63 Ni	85 Sr	Gamma
58 Co	237 Np (g)	90 Sr	
60 Co	Other-G (g)	182 Ta	<input type="checkbox"/> Pu (g)
51 Cr	32 P	99 Tc	<input type="checkbox"/> U (g)
134 Cs	231 Pa	121 Te	

**Waste Information Data System
INFORMATION ACQUISITION FORM**

Site Name

137 Cs	212 Pb	125M Te
254 Es	147 Pm	127 Te
152 Eu	210 Po	129M Te
154 Eu	238 Pu (g or Ci)	228 Th (g)
155 Eu	239 Pu (g or Ci)	232 Th (g)
55 Fe	240 Pu	234 Th (g)
59 Fe	241 Pu	204 Tl
153 Gd	242 Pu	170 Tm
68 Ge	226 Ra (g)	233 U (g)

Surveillance Information

Survey Frequency
 Survey Date (month/year)
 In Compliance (Y/N)
 Site Posting
 Cave-In Description
 Vegetation
 Results/Status
 Recommendations

Hazardous Chemicals (in Kg)

AgI	F	Na ₂ Cr ₂ O ₇	Oxalate
AlF(NO ₃) ₂	Fe ₂ Fe(CN) ₆	NaCHO ₂	PbII
Al(NO ₃) ₃	Fe(NO ₃) ₃	NaOH	PO ₄
Be	H ₂ SO ₄	Na ₂ SiO ₃	SO ₄
BP	Hg	NaSulfam	TBP
CaNO ₃	HNO ₃	(NH ₄) ₂ CO ₃	TBP PH
CCl ₄	K	(NH ₄) ₂ NO ₃	TriChlor
CdII	KBO ₂	NH ₂ SO ₃ H	U
CrVI	Mg(NO ₃) ₂	NIII	ZnII
Cu ₂ SO ₄	MIBK	NO ₂	
CuII	Na	NO ₃	
DBBP	NaAlO ₂	NPH	

Single Shell and Double Tank Shell Information
(Volumes in KGals)

Report Date	Ferrocyanide (kg mole)
Supernatant Type	High Heat Load (BTU/hr)
Tank Integrity (Sound/Leaker)	Flammable Gas Accum. (Y/N)
Tank Function	High Organic Salts (Y/N)
Interim Stabilized (Y/N)	High Temp. Reading (F)
Isolation Status (PI/II)	High Temp. Date
Equivalent Waste Inches (inches)	Slurry Volume
Total Waste Volume	Sludge Volume

Waste Information Data System
INFORMATION ACQUISITION FORM

Site Name _____

Available Space (volume)

Saltcake Volume

Supernatant Liquid

Drainable Interstitial Volume

Drainable Volume Remaining

Pumpable Volume Remaining

WIDS USE ONLY

Site Code: Site Code _____

Source Document [1] = Bibliography Number _____

Master: HSMUR (Y/N) _____

Source Document [2] = Bibliography Number _____

Source Document [3] = Bibliography Number _____

Source Document [4] = Bibliography Number _____

Change Control Number _____

Source Document [0] = Bibliography Number _____



— Emergency Phone Number(800) 457-2022

MSDS # 2143

Material Safety Data Sheet

CHEVRON Diesel Fuel No. 1

CPS270003

Page 1 of 8

HANFORD ENVIRONMENTAL HEALTH
ATTN: JAIMIE L. CHINSKY
805 GOETHALS DRIVE
RICHLAND, WA 99352

Print Date: August 02, 1990

This Material Safety Data Sheet contains environmental, health and toxicology information for your employees. Please make sure this information is given to them. It also contains information to help you meet community right to know/emergency response reporting requirements under SARA Title III and many other laws. If you resell this product, this MSDS must be given to the buyer or the information incorporated in your MSDS. Discard any previous edition of this MSDS.

Revised to update Sections 1, 5, 6, 8, 9, 11 and 12.

1. PRODUCT IDENTIFICATION

CHEVRON Diesel Fuel No. 1

DANGER!

- HARMFUL OR FATAL IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE
- PROLONGED OR REPEATED SKIN CONTACT CAN BE HARMFUL
- MAY CAUSE SKIN IRRITATION
- COMBUSTIBLE
- KEEP OUT OF REACH OF CHILDREN

PRODUCT NUMBER(S): CPS270003
PRODUCT INFORMATION: (800)582-3835

Revision Number: 9 Revision Date: 03/17/90 MSDS Number: 000533
NDA - No Data Available NA - Not Applicable

Prepared According to the OSHA Hazard Communication Standard (29 CFR 1910.1200) by the Chevron Environmental Health Center, Inc., P.O. Box 4054, Richmond, CA 94804.

2. FIRST AID - EMERGENCY PHONE NUMBER (800) 457-2022

MSDS # 21513**EYE CONTACT:**

No first aid procedures are required. However, as a precaution flush eyes with fresh water for 15 minutes. Remove contact lenses if worn.

SKIN CONTACT:

Remove contaminated clothing. Wash skin thoroughly with soap and water. See a doctor if any signs or symptoms described in this document occur. Discard contaminated non-waterproof shoes and boots. Wash contaminated clothing.

INHALATION:

If any signs or symptoms as described in this document occur, move the person to fresh air. If any of these effects continue, see a doctor.

INGESTION:

If swallowed, give water or milk to drink and telephone for medical advice. DO NOT make person vomit unless directed to do so by medical personnel. If medical advice cannot be obtained, then take the person and product container to the nearest medical emergency treatment center or hospital. Note to Physician: Ingestion of this product or subsequent vomiting can result in aspiration of light hydrocarbon liquid which can cause pneumonitis.

3. IMMEDIATE HEALTH EFFECTS - (ALSO SEE SECTIONS 11 & 12)

EYE CONTACT:

This substance is not expected to cause prolonged or significant eye irritation.

SKIN IRRITATION:

This substance is a moderate skin irritant so contact with the skin could cause prolonged (days) injury to the affected area. The degree of injury will depend on the amount of material that gets on the skin and the speed and thoroughness of the first aid treatment. Signs and symptoms may include pain or a feeling of heat, discoloration, swelling, and blistering. Read the Additional Health Data section (12) of this document for more information.

DERMAL TOXICITY:

If absorbed through the skin, this substance is considered practically non-toxic to internal organs.

RESPIRATORY/INHALATION:

Prolonged breathing of vapors can cause central nervous system effects. This hazard evaluation is based on data from similar materials. Signs and symptoms of central nervous system effects may include one or more of the following: headache, dizziness, loss of appetite, weakness and loss of coordination.

INGESTION:

If swallowed, this substance is considered practically non-toxic to internal organs. Because of the low viscosity of this substance, it can directly enter the lungs if it is swallowed (this is called aspiration). This can occur during the act of swallowing or when vomiting the

Revision Number: 9

Revision Date: 03/17/90

MSDS Number: 000533

NDA - No Data Available

NA - Not Applicable

substance. Once in the lungs, the substance is very difficult to remove and can cause severe injury to the lungs and death.

4. PROTECTIVE EQUIPMENT

MSDS # 21513**EYE PROTECTION:**

No special eye protection is usually necessary.

SKIN PROTECTION:

Avoid contact with skin or clothing. Skin contact should be minimized by wearing protective clothing including gloves.

RESPIRATORY PROTECTION:

This material may be an inhalation hazard and, unless ventilation is adequate, the use of approved respiratory protection is recommended.

VENTILATION:

Use this material only in well ventilated areas.

5. FIRE PROTECTION

FLASH POINT: (TCC) 100F (38C) Min.

AUTOIGNITION: NDA

FLAMMABILITY: NDA

EXTINGUISHING MEDIA:

CO2, Dry Chemical, Foam and Water Fog.

NFPA RATINGS: Health 0; Flammability 2; Reactivity 0; Special NDA;

HMS RATINGS: Health 2; Flammability 2; Reactivity 0; Other NDA;

(Least-0, Slight-1, Moderate-2, High-3, Extreme-4). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association or, if applicable, the National Paint and Coating Association, and do not necessarily reflect the hazard evaluation of the Chevron Environmental Health Center. Read the entire document and label before using this product.

FIRE FIGHTING PROCEDURES:

Liquid evaporates and forms vapor (fumes) which can catch fire and burn with explosive violence. Invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment, and electrical motors and switches. Fire hazard is greater as liquid temperature rises above 85 F.

For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of normal products of combustion or oxygen deficiency. Read the entire document.

COMBUSTION PRODUCTS:

Normal combustion forms carbon dioxide and water vapor; incomplete combustion can produce carbon monoxide.

Revision Number: 9

Revision Date: 03/17/90

MSDS Number: 000533

NDA - No Data Available

NA - Not Applicable

6. STORAGE, HANDLING, AND REACTIVITY

HAZARDOUS DECOMPOSITION PRODUCTS:

NDA.

STABILITY:

Stable.

HAZARDOUS POLYMERIZATION:

Polymerization will not occur.

INCOMPATIBILITY:

May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

SPECIAL PRECAUTIONS:

DO NOT USE OR STORE near flame, sparks or hot surfaces. USE ONLY IN WELL VENTILATED AREA. Keep container closed.

DO NOT weld, heat or drill container. Replace cap or bung. Emptied container still contains hazardous or explosive vapor or liquid.

CAUTION! Do not use pressure to empty drum or explosion may result.

WARNING! Not for use as portable heater or appliance fuel. Toxic fumes may accumulate and cause death.

MSDS # 21513

7. PHYSICAL PROPERTIES

SOLUBILITY: Soluble in hydrocarbon solvents; insoluble in water.**APPEARANCE:** Pale yellow liquid.**BOILING POINT:** 204 - 300C (400-572F)**MELTING POINT:** NA**EVAPORATION:** NDA**SPECIFIC GRAVITY:** 0.85 @ 15.6/15.6C (Min.)**VAPOR PRESSURE:** NDA**PERCENT VOLATILE (VOLUME %):** NDA**VAPOR DENSITY (AIR=1):** NDA**VISCOSITY:** 1.9 cSt @ 40C (Min.)

8. ENVIRONMENTAL CONCERNS, SPILL RESPONSE AND DISPOSAL

CHEMTREC EMERGENCY PHONE NUMBER: (800) 424-9300 (24 hour).**SPILL/LEAK PRECAUTIONS:**

This material is considered to be a water pollutant and releases of this product should be prevented from contaminating soil and water and from entering drainage and sewer systems.

Eliminate all open flame in vicinity of spill or released vapor. Stop the source of the leak or release. Clean up releases as soon as possible, observing precautions in Protective Equipment. Contain liquid to prevent

Revision Number: 9

Revision Date: 01/17/90

MSDS Number: 000533

NDA - No Data Available

NA - Not Applicable

further contamination of soil, surface water or groundwater. Clean up small spills using appropriate techniques such as sorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Follow prescribed procedures for reporting and responding to larger releases.

DISPOSAL METHODS:

Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Contact local environmental or health authorities for approved disposal of this material.

MSDS # 21513**9. EXPOSURE STANDARDS, REGULATORY LIMITS AND COMPOSITION****COMPOSITION COMMENT:**

All the components of this material are on the Toxic Substances Control Act Chemical Substances Inventory.

The percent compositions are given to allow for the various ranges of the components present in the whole product and may not equal 100%.

PERCENT/CAS# COMPONENT/REGULATORY LIMITS

100.0 % CHEVRON Diesel Fuel No. 1

CONTAINING

KEROSENE

CAS8008206

HYDRODESULFURIZED KEROSENE

CAS64742810

HYDRODESULFURIZED MIDDLE DISTILLATE

CAS64742809

STRAIGHT RUN MIDDLE DISTILLATES

CAS64741442

< 3.0 %

NAPHTHALENE

CAS91203

A toxic chemical subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

10ppm ACGIH TLV

15ppm ACGIH STEL

10ppm OSHA PEL

15ppm OSHA STEL

CERCLA 302.4 RQ=100 POUNDS

TLV - Threshold Limit Value

PEL - Permissible Exposure Limit

STEL - Short-term Exposure Limit

TPQ - Threshold Planning Quantity

RQ Reportable Quantity

CPS - CUSA Product Code

CC - Chevron Chemical Company

CAS - Chemical Abstract Service Number

Revision Number: 9

Revision Date: 03/17/90

MSDS Number: 000533

NDA - No Data Available

NA - Not Applicable

10. REGULATORY INFORMATION

DOT SHIPPING NAME: FUEL OIL, NO. 1
 DOT HAZARD CLASS: COMBUSTIBLE LIQUID
 DOT IDENTIFICATION NUMBER: NA1993

MSDS # 21513

SARA 311 CATEGORIES:

1.	Immediate (Acute) Health Effects; YES
2.	Delayed (Chronic) Health Effects; YES
3.	Fire Hazard; YES
4.	Sudden Release of Pressure Hazard; NO
5.	Reactivity Hazard; NO

WHEN A COMPONENT OF THIS MATERIAL IS SHOWN IN THIS SECTION, THE REGULATORY LIST ON WHICH IT APPEARS IS INDICATED.

KEROSENE	C2,10,11,
NAPHTHALENE	01,02,10,11,14,15,17,18,26,28,

REGULATORY LISTS:

01-SARA 313	02-MASS RTK	03-NTP Carcinogen
04-CA Prop. 65	05-MI 406	06-IARC Group 1
07-IARC Group 2A	08-IARC Group 2B	09-SARA 302/304
10-PA RTK	11-NJ RTK	12-CERCLA 302.4
13-MN RTK	14-ACGIH TLV	15-ACGIH STEL
16-ACGIH Calculated TLV	17-OSHA PEL	18-OSHA STEL
19-Chevron TLV	20-EPA Carcinogen	21-TSCA SECT 4
22-TSCA SECT 5 SNUR	23-TSCA SECT 6 RULE	24-TSCA SECT 12 EXPORT
25-TSCA SECT 8A CAIR	26-TSCA SECT 8D REPORT	27-TSCA SECT 8E
28-Canadian WHMIS		

11. PRODUCT TOXICOLOGY DATA**EYE IRRITATION:**

NDA. The hazard evaluation was based on data from similar materials.

SKIN IRRITATION:

NDA. The hazard evaluation was based on data from similar materials.

DERMAL TOXICITY:

The dermal LD50 in rabbits is > 5 ml/kg.

RESPIRATORY/INHALATION:

NDA. The hazard evaluation was based on data from similar materials.

INGESTION:

The oral LD50 in rats is > 5 ml/kg.

ADDITIONAL TOXICOLOGY DATA:

The data above is obtained from studies sponsored by the American Petroleum Institute (API).

Revision Number: 9 Revision Date: 03/17/90 MSDS Number: 000533
 NDA - No Data Available NA - Not Applicable

12. ADDITIONAL HEALTH DATA

MSDS # 21513

ADDITIONAL HEALTH DATA COMMENT:

This product contains a mixture of petroleum hydrocarbons called middle distillates (which means they boil between approximately 350 and 700 F). Because of this broad description, many products are considered middle distillates yet they are produced by a variety of different petroleum refining processes. Toxicology data developed on some middle distillates found that they caused positive responses in some mutagenicity tests and caused skin cancer when repeatedly applied to mice over their lifetime. This product may contain some middle distillates found to cause those adverse effects.

This product contains naphthalene. Overexposure to naphthalene by inhalation of vapor, ingestion or skin contact may produce signs and symptoms of headache, fever, profuse sweating, nausea, abdominal pain, diarrhea, lethargy, tremors, convulsions, evidence of blood changes, including hematuria and hemoglobinuria, and optic neuritis. Laboratory animals given repeated oral doses of naphthalene have developed cataracts. MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE TO NAPHTHALENE: Individuals with congenital erythrocyte glucose-6-phosphate dehydrogenase deficiency may be particularly susceptible to the hemolytic effects of the naphthalene.

Whole diesel engine exhaust was reviewed by the International Agency for Research on Cancer (IARC) in their Monograph 46 (1989). Evidence for causing cancer was considered sufficient in animals and limited in humans. IARC placed this material in category 2A, considering it probably carcinogenic to humans.

The National Institute of Occupational Safety and Health (NIOSH) has recommended that whole diesel exhaust be regarded as potentially causing cancer. This recommendation was based on test results showing increased lung cancer in laboratory animals exposed to whole diesel exhaust. The excess risk of cancer for people exposed to diesel exhaust has not been determined as studies on exposed workers have been inconclusive. It is recommended that exposure to diesel exhaust be minimized to reduce the potential cancer risk.

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modification of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular

Revision Number: 9 Revision Date: 03/17/90 MSDS Number: 000533
NDA - No Data Available NA - Not Applicable

purpose.

MSDS # 21513

Revision Number: 9 Revision Date: 03/17/90 MSDS Number: 000533
NDA - No Data Available NA - Not Applicable

CURRENT MSDS

Emergency Phone Number (800) 457-2022



Material Safety Data Sheet

CHEVRON Diesel Fuel No. 2

CPS272102

Page 1 of 8

HANFORD ENVIRONMENTAL HEALTH
ATTN: JAIMIE L. CHINSKY
805 GOETHALS DRIVE
RICHLAND, WA 99352

MSDS# 13927

Print Date: August 02, 1990

This Material Safety Data Sheet contains environmental, health and toxicology information for your employees. Please make sure this information is given to them. It also contains information to help you meet community right-to-know/emergency response reporting requirements under SARA Title III and many other laws. If you resell this product, this MSDS must be given to the buyer or the information incorporated in your MSDS. Discard any previous edition of this MSDS.

Revised to update Sections 1, 5, 6, 8, 9, 11 and 12.

1. PRODUCT IDENTIFICATION

CHEVRON Diesel Fuel No. 2

- DANGER:
- HARMFUL OR FATAL IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE
 - PROLONGED OR REPEATED SKIN CONTACT CAN BE HARMFUL
 - MAY CAUSE SKIN IRRITATION
 - COMBUSTIBLE
 - KEEP OUT OF REACH OF CHILDREN

PRODUCT NUMBER(S): CPS272102

PRODUCT INFORMATION: (800)562-3635

Revision Number: 10

Revision Date: 03/17/90

MSDS Number: 000525

NDA - No Data Available

NA - Not Applicable

Prepared According to the OSHA Hazard Communication Standard (29 CFR 1910.1200) by the Chevron Environmental Health Center, Inc., P.O. Box 4054, Richmond, CA 94804.

2. FIRST AID - EMERGENCY PHONE NUMBER (800) 457-2022

EYE CONTACT:

No first aid procedures are required. However, as a precaution flush eyes with fresh water for 15 minutes. Remove contact lenses if worn.

SKIN CONTACT:

Remove contaminated clothing. Wash skin thoroughly with soap and water. See a doctor if any signs or symptoms described in this document occur. Discard contaminated non-waterproof shoes and boots. Wash contaminated clothing.

INHALATION:

If any signs or symptoms as described in this document occur, move the person to fresh air. If any of these effects continue, see a doctor.

INGESTION:

If swallowed, give water or milk to drink and telephone for medical advice. DO NOT make person vomit unless directed to do so by medical personnel. If medical advice cannot be obtained, then take the person and product container to the nearest medical emergency treatment center or hospital. Note to Physician: Ingestion of this product or subsequent vomiting can result in aspiration of light hydrocarbon liquid which can cause pneumonitis.

3. IMMEDIATE HEALTH EFFECTS - (ALSO SEE SECTIONS 11 & 12)

EYE CONTACT:

This substance is not expected to cause prolonged or significant eye irritation.

SKIN IRRITATION:

This substance is a moderate skin irritant so contact with the skin could cause prolonged (days) injury to the affected area. The degree of injury will depend on the amount of material that gets on the skin and the speed and thoroughness of the first aid treatment. Signs and symptoms may include pain or a feeling of heat, discoloration, swelling, and blistering. Read the Additional Health Data section (12) of this document for more information.

DERMAL TOXICITY:

If absorbed through the skin, this substance is considered practically non-toxic to internal organs.

RESPIRATORY/INHALATION:

Prolonged breathing of vapors can cause central nervous system effects. This hazard evaluation is based on data from similar materials. Signs and symptoms of central nervous system effects may include one or more of the following: headache, dizziness, loss of appetite, weakness and loss of coordination.

INGESTION:

If swallowed, this substance is considered practically non-toxic to internal organs. Because of the low viscosity of this substance, it can directly enter the lungs if it is swallowed (this is called aspiration). This can occur during the act of swallowing or when vomiting the

Revision Number: 10**Revision Date: 03/17/90****MSDS Number: 000525****NDA - No Data Available****NA - Not Applicable**

substance. Once in the lungs, the substance is very difficult to remove and can cause severe injury to the lungs and death.

4. PROTECTIVE EQUIPMENT

MSDS# 13927

EYE PROTECTION:

No special eye protection is usually necessary.

SKIN PROTECTION:

Avoid contact with skin or clothing. Skin contact should be minimized by wearing protective clothing including gloves.

RESPIRATORY PROTECTION:

This material may be an inhalation hazard and, unless ventilation is adequate, the use of approved respiratory protection is recommended.

VENTILATION:

Use this material only in well ventilated areas.

5. FIRE PROTECTION

FLASH POINT: (P-M) 125F (52C) Min.

AUTOIGNITION: NDA

FLAMMABILITY: NDA

EXTINGUISHING MEDIA:

CO₂, Dry Chemical, Foam and Water Fog.

NFPA RATINGS: Health 0; Flammability 2; Reactivity 0; Special NDA;

HMIS RATINGS: Health 2; Flammability 2; Reactivity 0; Other NDA;

(Least-0, Slight-1, Moderate-2, High-3, Extreme-4). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association or, if applicable, the National Paint and Coating Association, and do not necessarily reflect the hazard evaluation of the Chevron Environmental Health Center. Read the entire document and label before using this product.

FIRE FIGHTING PROCEDURES:

Liquid evaporates and forms vapor (fumes) which can catch fire and burn with explosive violence. Invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment, and electrical motors and switches. Fire hazard is greater as liquid temperature rises above 85 F.

For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of normal products of combustion or oxygen deficiency. Read the entire document.

COMBUSTION PRODUCTS:

Normal combustion forms carbon dioxide and water vapor; incomplete combustion can produce carbon monoxide.

Revision Number: 10

Revision Date: 03/17/90

MSDS Number: 000525

NDA - No Data Available

NA - Not Applicable

6. STORAGE, HANDLING, AND REACTIVITY

HAZARDOUS DECOMPOSITION PRODUCTS:

NDA.

STABILITY:

Stable.

MSDS# 13927**HAZARDOUS POLYMERIZATION:**

Polymerization will not occur.

INCOMPATIBILITY:

May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

SPECIAL PRECAUTIONS:

DO NOT USE OR STORE near flame, sparks or hot surfaces. USE ONLY IN WELL VENTILATED AREA. Keep container closed.

DO NOT weld, heat or drill container. Replace cap or bung. Emptied container still contains hazardous or explosive vapor or liquid.

CAUTION! Do not use pressure to empty drum or explosion may result.

WARNING! Not for use as portable heater or appliance fuel. Toxic fumes may accumulate and cause death.

7. PHYSICAL PROPERTIES

SOLUBILITY: Soluble in hydrocarbon solvents; insoluble in water.

APPEARANCE: Pale yellow liquid.

BOILING POINT: 176 - 370C (348-698F)

MELTING POINT: NA

EVAPORATION: NDA

SPECIFIC GRAVITY: 0.84 @ 15.5/15.5C (Typical)

VAPOR PRESSURE: 0.04PSIA @ 40C

PERCENT VOLATILE (VOLUME %): NDA

VAPOR DENSITY (AIR=1): NDA

VISCOSITY: 1.9 cSt @ 40C (Min.)

8. ENVIRONMENTAL CONCERNS, SPILL RESPONSE AND DISPOSAL

CHEMTREC EMERGENCY PHONE NUMBER: (800) 424-9300 (24 hour).

SPILL/LEAK PRECAUTIONS:

This material is considered to be a water pollutant and releases of this product should be prevented from contaminating soil and water and from entering drainage and sewer systems.

Eliminate all open flame in vicinity of spill or released vapor. Stop the source of the leak or release. Clean up releases as soon as possible, observing precautions in Protective Equipment. Contain liquid to prevent

Revision Number: 10 Revision Date: 03/17/90 MSDS Number: 000525
NDA - No Data Available NA - Not Applicable

further contamination of soil, surface water or groundwater. Clean up small spills using appropriate techniques such as sorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Follow prescribed procedures for reporting and responding to larger releases.

DISPOSAL METHODS:

MSDS# 13927

Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Contact local environmental or health authorities for approved disposal of this material.

9. EXPOSURE STANDARDS, REGULATORY LIMITS AND COMPOSITION

COMPOSITION COMMENT:

All the components of this material are on the Toxic Substances Control Act Chemical Substances Inventory.

The percent compositions are given to allow for the various ranges of the components present in the whole product and may not equal 100%.

PERCENT/CAS# COMPONENT/REGULATORY LIMITS

100.0 % CHEVRON Diesel Fuel No. 2

CONTAINING

100.0 % FUELS, DIESEL, NO. 2
CAS68476346

CAS64742809 HYDRODESULFURIZED MIDDLE DISTILLATE

CAS64741442 STRAIGHT RUN MIDDLE DISTILLATES

CAS8008206 KEROSENE

CAS64742810 HYDRODESULFURIZED KEROSENE

CAS64741599 DISTILLATES, LIGHT CATALYTIC CRACKED

< 3.0 % NAPHTHALENE
CAS91203

A toxic chemical subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

10ppm ACGIH TLV

15ppm ACGIH STEL

10ppm OSHA PEL

15ppm OSHA STEL

Revision Number: 10 Revision Date: 03/17/90 MSDS Number: 000525
NDA - No Data Available NA - Not Applicable

ADDITIONAL TOXICOLOGY DATA:

The data above is obtained from studies sponsored by the American Petroleum Institute (API).

12. ADDITIONAL HEALTH DATAMSDS# 13927**ADDITIONAL HEALTH DATA COMMENT:**

This product contains a mixture of petroleum hydrocarbons called middle distillates (which means they boil between approximately 350 and 700 F). Because of this broad description, many products are considered middle distillates yet they are produced by a variety of different petroleum refining processes. Toxicology data developed on some middle distillates found that they caused positive responses in some mutagenicity tests and caused skin cancer when repeatedly applied to mice over their lifetime. This product may contain some middle distillates found to cause those adverse effects.

This product contains naphthalene. Overexposure to naphthalene by inhalation of vapor, ingestion or skin contact may produce signs and symptoms of headache, fever, profuse sweating, nausea, abdominal pain, diarrhea, lethargy, tremors, convulsions, evidence of blood changes, including hematuria and hemoglobinuria, and optic neuritis. Laboratory animals given repeated oral doses of naphthalene have developed cataracts. **MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE TO NAPHTHALENE:** Individuals with congenital erythrocyte glucose-6-phosphate dehydrogenase deficiency may be particularly susceptible to the hemolytic effects of the naphthalene.

Whole diesel engine exhaust was reviewed by the International Agency for Research on Cancer (IARC) in their Monograph 46 (1989). Evidence for causing cancer was considered sufficient in animals and limited in humans. IARC placed this material in category 2A, considering it probably carcinogenic to humans.

The National Institute of Occupational Safety and Health (NIOSH) has recommended that whole diesel exhaust be regarded as potentially causing cancer. This recommendation was based on test results showing increased lung cancer in laboratory animals exposed to whole diesel exhaust. The excess risk of cancer for people exposed to diesel exhaust has not been determined as studies on exposed workers have been inconclusive. It is recommended that exposure to diesel exhaust be minimized to reduce the potential cancer risk.

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modification of the information, we do not

Revision Number: 10 Revision Date: 03/17/90 MSDS Number: 000525
 NDA - No Data Available NA - Not Applicable

assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

MSDS# 13927

Revision Number: 10 Revision Date: 03/17/90 MSDS Number: 000525
NDA - No Data Available NA - Not Applicable