



**From:** [Vestal, Janelle](#)  
**To:** [Chavez, Carl J. EMNRD](#)  
**Cc:** [VanHorn, Kristen, NMENV](#); [Bailey, William](#); [Pruner, Dave](#)  
**Subject:** RE: Release Notification Sodium Hydroxide  
**Date:** Thursday, April 27, 2017 5:50:57 PM  
**Attachments:** [170427 C-141initial.pdf](#)  
[SDS CAUSTIC SODA 25\\_30.pdf](#)

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Good Afternoon Carl,

Attached please find our initial C-141 Report for the Sodium Hydroxide leak/spill we had at Western Refining – Gallup on 4/20/2017. Also attached is a picture of the location and extent of the spill, and the SDS for the Sodium Hydroxide we have on site.

Thank you for your attention to this matter,

**Janelle Vestal**  
Environmental Engineer

Western Refining Southwest Inc.  
Gallup Refinery  
505-726-9721  
Cell 505-285-8193  
[janelle.vestal@wnr.com](mailto:janelle.vestal@wnr.com)

**From:** Chavez, Carl J, EMNRD [mailto:[CarlJ.Chavez@state.nm.us](mailto:CarlJ.Chavez@state.nm.us)]  
**Sent:** Friday, April 21, 2017 12:47 PM  
**To:** Vestal, Janelle <[Janelle.Vestal@wnr.com](mailto:Janelle.Vestal@wnr.com)>  
**Cc:** VanHorn, Kristen, NMENV <[Kristen.VanHorn@state.nm.us](mailto:Kristen.VanHorn@state.nm.us)>  
**Subject:** Release Notification Sodium Hydroxide

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Janelle:

My contact info. Thank you.

Mr. Carl J. Chavez, CHMM (#13099)  
New Mexico Oil Conservation Division  
Energy Minerals and Natural Resources Department  
1220 South St Francis Drive  
Santa Fe, New Mexico 87505  
Ph. (505) 476-3490  
E-mail: [CarlJ.Chavez@state.nm.us](mailto:CarlJ.Chavez@state.nm.us)

**“Why not prevent pollution, minimize waste to reduce operating costs, reuse or recycle, and move forward with the rest of the Nation?” (To see how, go to:**

<http://www.emnrd.state.nm.us/OCD> and see "Publications")

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

### Release Notification and Corrective Action

#### OPERATOR

Initial Report     Final Report

Name of Company	Western Refining	Contact	William Bailey
Address	92 Giant Crossing Road, Gallup, NM 87301	Telephone No.	505-726-9743
Facility Name	Western Refining, Gallup Refinery	Facility Type	Petroleum Refinery
Surface Owner	Mineral Owner		API No.

#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	28	15N	15W					McKinley

Latitude 35° 29' 28"      Longitude 108° 25' 45"      NAD83

#### NATURE OF RELEASE

Type of Release	Sodium Hydroxide Leak	Volume of Release	80 bbls	Volume Recovered	30 gal
Source of Release	API Caustic Pump Hose from Flare KOD Tank	Date and Hour of Occurrence	04/20/2017 21:00 hrs	Date and Hour of Discovery	04/20/2017 21:30 hrs
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? NRC/ NM OCD (C. Chavez) / NMED HWB (K. VanHorn - msg)			
By Whom?	Janelle Vestal	Date and Hour    04/21/2014 1150 hrs / 1230 hrs / 1247 hrs			
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.\*

N/A

Describe Cause of Problem and Remedial Action Taken.\*

At 2130 hr on 4/20/2017, during regular rounds, operator noticed the hose to the sandpiper pump had ruptured. Caustic (20-30% sodium hydroxide - SDS attached) was spraying out of the hole. Previous round of the area at approximately 1900 hr on 4/20/2017 had shown no problem with this pump hose. The operator who found the leak donned the proper PPE, turned off the sandpiper, and blocked it in. The shift foreman, refinery manager, and Environmental Department were notified of the incident. Maintenance pumped approximately 20-30 gallons of caustic into a vacuum truck. Initial estimates of the leak were less than 4 bbls. Maintenance also sprayed water on surrounding equipment in an attempt to clean off the caustic. Pumping of the caustic was switched to the east caustic pump. The area was taped off with barricade tape to limit access. After further investigation the following morning, it was apparent that the leak was larger than first thought.

Based on the initial mass balance calculations on the KOD tank where the caustic came from, estimates of the leak volume are approximately 80 bbls.

Describe Area Affected and Cleanup Action Taken.\*

The caustic and cleaning water was somewhat confined to the caustic pump containment. A volume spilled over a retaining wall to a bermed area North of the pump and KOD tank. A volume also sprayed surrounding equipment and out of the containments to surrounding ground. A cleanup action plan will be established.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

#### OIL CONSERVATION DIVISION

Signature:

*William Bailey*

Printed Name: William Bailey

Approved by Environmental Specialist:

Title: Environmental Supervisor

Approval Date:

Expiration Date:

E-mail Address: William.Bailey@wnr.com

Conditions of Approval:

Attached

Date: 04/27/2014

Phone: 505-726-9743

\* Attach Additional Sheets If Necessary



Extent of spill

API Sandpiper Pump

# Material Safety Data Sheet

## Sodium Hydroxide 20-30%

ACC# 88810

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Sodium Hydroxide 20-30%

**Catalog Numbers:** M-090, M090, MCC-030345, NC9168938, NC9453737, NC9648407, NC9848909, NC9872309, XXCMS0204L, XXNAOH20%200LI, XXSODHY6N20L

**Synonyms:** Caustic Soda; Soda Lye; Sodium Hydrate.

**Company Identification:**

Fisher Scientific  
1 Reagent Lane  
Fair Lawn, NJ 07410

**For information, call:** 201-796-7100

**Emergency Number:** 201-796-7100

**For CHEMTREC assistance, call:** 800-424-9300

**For International CHEMTREC assistance, call:** 703-527-3887

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
7732-18-5	Water	70-80	231-791-2
1310-73-2	Sodium hydroxide	20-30	215-185-5

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

**Appearance:** Clear liquid.

**Danger!** Corrosive. Causes eye and skin burns. May cause severe respiratory tract irritation with possible burns. May cause severe digestive tract irritation with possible burns.

**Target Organs:** Eyes, skin, mucous membranes.

#### Potential Health Effects

**Eye:** Causes eye burns. May cause chemical conjunctivitis and corneal damage.

**Skin:** Causes skin burns. May cause deep, penetrating ulcers of the skin. May cause skin rash (in milder cases), and cold and clammy skin with cyanosis or pale color.

**Ingestion:** May cause severe and permanent damage to the digestive tract. Causes gastrointestinal tract burns. May cause perforation of the digestive tract. Causes severe pain, nausea, vomiting, diarrhea, and shock. May cause systemic effects.

**Inhalation:** Irritation may lead to chemical pneumonitis and pulmonary edema. Causes severe irritation of upper respiratory tract with coughing, burns, breathing difficulty, and possible coma. Causes chemical burns to the respiratory tract. Aspiration may lead to pulmonary edema. May cause systemic effects.

**Chronic:** Prolonged or repeated skin contact may cause dermatitis. Effects may be delayed.

### Section 4 - First Aid Measures

**Eyes:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately.

**Skin:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.

**Ingestion:** If swallowed, do NOT induce vomiting. Get medical aid immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:** Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Use water with caution and in flooding amounts. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Contact with metals may evolve flammable hydrogen gas. Containers may explode when heated. Non-combustible, substance itself does not burn but may decompose upon heating to produce irritating, corrosive and/or toxic fumes.

**Extinguishing Media:** Do NOT get water inside containers. For small fires, use dry chemical, carbon dioxide, or water spray. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray. Cool containers with flooding quantities of water until well after fire is out.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 3; Flammability: 0; Instability: 1

## Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Use only in a well-ventilated area. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Do not ingest or inhale. Discard contaminated shoes.

**Storage:** Keep container closed when not in use. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from strong acids. Keep away from metals. Keep away from flammable liquids. Keep away from organic halogens.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Water	none listed	none listed	none listed
Sodium hydroxide	2 mg/m <sup>3</sup> Ceiling	10 mg/m <sup>3</sup> IDLH	2 mg/m <sup>3</sup> TWA

**OSHA Vacated PELs:** Water: No OSHA Vacated PELs are listed for this chemical. Sodium hydroxide: No OSHA

Vacated PELs are listed for this chemical.

### Personal Protective Equipment

**Eyes:** Wear chemical splash goggles and face shield.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** Clear

**Odor:** none reported

**pH:** Alkaline

**Vapor Pressure:** 14 mm Hg

**Vapor Density:** >1.0

**Evaporation Rate:** Not available.

**Viscosity:** >1 (ether=1)

**Boiling Point:** 212 deg F

**Freezing/Melting Point:** 32 deg F

**Decomposition Temperature:** Not available.

**Solubility:** Completely soluble in water.

**Specific Gravity/Density:** 1.0

**Molecular Formula:** NaOH

**Molecular Weight:** Not available.

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable at room temperature in closed containers under normal storage and handling conditions.

**Conditions to Avoid:** Extreme temperatures.

**Incompatibilities with Other Materials:** Metals, acids, flammable liquids, halogenated organics (e.g. dibromoethane, hexachlorobenzene, methyl chloride, trichloroethylene), aluminum, tin, zinc, nitromethane, nitro compounds.

**Hazardous Decomposition Products:** Toxic fumes of sodium oxide.

**Hazardous Polymerization:** Has not been reported.

## Section 11 - Toxicological Information

### RTECS#:

**CAS# 7732-18-5:** ZC0110000

**CAS# 1310-73-2:** WB4900000

### LD50/LC50:

**CAS# 7732-18-5:**

Oral, rat: LD50 = >90 mL/kg;

**CAS# 1310-73-2:**

Draize test, rabbit, eye: 400 ug Mild;

Draize test, rabbit, eye: 1% Severe;

Draize test, rabbit, eye: 50 ug/24H Severe;

Draize test, rabbit, eye: 1 mg/24H Severe;

Draize test, rabbit, skin: 500 mg/24H Severe;

**Carcinogenicity:**

CAS# 7732-18-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.  
CAS# 1310-73-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information found

**Teratogenicity:** No information found

**Reproductive Effects:** No information found

**Mutagenicity:** No information found

**Neurotoxicity:** No information found

**Other Studies:**

**Section 12 - Ecological Information**

No information available.

**Section 13 - Disposal Considerations**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

**Section 14 - Transport Information**

	US DOT	Canada TDG
<b>Shipping Name:</b>	SODIUM HYDROXIDE SOLUTION	No information available.
<b>Hazard Class:</b>	8	
<b>UN Number:</b>	UN1824	
<b>Packing Group:</b>	II	

**Section 15 - Regulatory Information**

**US FEDERAL**

**TSCA**

CAS# 7732-18-5 is listed on the TSCA inventory.

CAS# 1310-73-2 is listed on the TSCA inventory.

**Health & Safety Reporting List**

None of the chemicals are on the Health & Safety Reporting List.

**Chemical Test Rules**

None of the chemicals in this product are under a Chemical Test Rule.

**Section 12b**

None of the chemicals are listed under TSCA Section 12b.

**TSCA Significant New Use Rule**

None of the chemicals in this material have a SNUR under TSCA.

**CERCLA Hazardous Substances and corresponding RQs**

CAS# 1310-73-2: 1000 lb final RQ; 454 kg final RQ

**SARA Section 302 Extremely Hazardous Substances**

None of the chemicals in this product have a TPQ.

**SARA Codes**

CAS # 1310-73-2: immediate, reactive.

**Section 313** No chemicals are reportable under Section 313.

**Clean Air Act:**

This material does not contain any hazardous air pollutants.



This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

**Clean Water Act:**

CAS# 1310-73-2 is listed as a Hazardous Substance under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:**

None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE**

CAS# 7732-18-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 1310-73-2 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

**California Prop 65**

California No Significant Risk Level: None of the chemicals in this product are listed.

**European/International Regulations**

**European Labeling in Accordance with EC Directives**

**Hazard Symbols:**

C

**Risk Phrases:**

R 35 Causes severe burns.

**Safety Phrases:**

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 37/39 Wear suitable gloves and eye/face protection.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**WGK (Water Danger/Protection)**

CAS# 7732-18-5: No information available.

CAS# 1310-73-2: 1

**Canada - DSL/NDSL**

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 1310-73-2 is listed on Canada's DSL List.

**Canada - WHMIS**

This product has a WHMIS classification of E.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**

CAS# 1310-73-2 is listed on the Canadian Ingredient Disclosure List.

**Section 16 - Additional Information**

**MSDS Creation Date:** 12/12/1997

**Revision #6 Date:** 10/05/2004

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.*