

INSPECTION REPORT

Inspection Entry Date/Time	03/12/2024 11:23 (CT)			Announced: No
Inspection Exit Date/Time	03/12/2024 16:10 (CT)			Access: Granted
Regulatory Program	RCRA			
Type of Inspection	Focused Compliance Inspection (FCI)			
Facility or Site Name	Kiewit Offshore Services LTD			
Facility/Site Identifier	TXR000042648			
Facility/Site Physical Address	2440 Kiewit Road			
City, State, Zip Code	Ingleside, TX 78662			
County/Borough	San Patricio County			
Generator Status	Small Quantity Generator (SQG)			
NAICS	336611			
Type of Operation	Kiewit Offshore Services LTD (Kiewit) is a construction facility specializing in the fabrication of offshore platforms.			
Geographic Coordinates	27.85073, -97.22813			
Additional Persons Participating in Inspection:				
Name	Title	Organization	Email	Phone
Joyce Johnson	Inspector	EPA REGION 6	Johnson.Joyce@epa.gov	(214) 665-8548
Erin Young-Dahl	Inspector	EPA REGION 6	YoungDahl.Erin@epa.gov	(214) 665-3166
Andrew Gates	Contractor	Eastern Research Group (ERG)	Andrew.Gates@erg.com	(657) 206-7829
Lead Inspector:				
Vince Damiano				07/11/2024
	ERG	Vince.Damiano@erg.com	(703) 633-1732	

SECTION I – INTRODUCTION**Site Entry and Purpose of the Inspection**

The Port of Corpus Christi and surrounding facilities were selected for inspection based on an Environmental Justice and Regional initiative to evaluate facilities at ports receiving or transporting Resource Conservation and Recovery Act (RCRA)-regulated hazardous wastes, and/or have an International Convention for the Prevention of Pollution from Ships (MARPOL) Annex V Certificate of Adequacy (COA) issued by the U.S. Coast Guard (USCG) .

This report is based on information supplied by the facility representatives, inspector observations, port related facilities, and records including photographs taken (see Appendix 1), verbal or written statements made during or after the on-site inspection, and/or materials shown, demonstrated, or submitted to the EPA during or after the on-site inspection. In addition, information gathered prior to or after the inspection from a review of EPA, State, and public records may be included in this report.

Attendees

Title/Organization	Name	Phone	Email	Opening Conf.	Closing Conf.
Lead Inspector/ Contractor/ERG	Vince Damiano	(703) 633-1732	Vince.Damiano@erg.com	Yes	Yes
RCRA Inspector/ Contractor/ERG	Andrew Gates	(657) 206-7829	Andrew.Gates@erg.com	Yes	Yes
Inspector/Enforcement Officer/EPA Region 6	Joyce Johnson	(214) 665-8548	Johnson.Joyce@epa.gov	Yes	Yes
Inspector/Enforcement Officer/EPA Region 6	Erin Young-Dahl	(214) 665-3166	YoungDahl.Erin@epa.gov	Yes	Yes

Facility General Description

Tenant/Area	Inspection Date	Process Description	Area of Concern
Kiewit Offshore Services LTD	03/12/24	Kiewit Offshore Services LTD (Kiewit) is a construction facility specializing in the fabrication of offshore modules. The facility does not regularly receive or ship petroleum or chemical products at this location. The facility maintains a MARPOL COA for Annex I and V but does not receive waste from vessels.	Yes

SECTION II – OBSERVATIONS

Tenant: Kiewit Offshore Services LTD			
Section: 2.1	Date: 03/12/24, 11:23 AM	Contains AOC: Yes	Contains CBI: No
Lead Inspector: Vince Damiano	Attendees: Bo Johnson (Ops Manager), Hannah Johnson (Environmental Coordinator), Diana Villenas (Environmental Manager)		
Kiewit is located in Ingleside, Texas to the east of the Port of Corpus Christi and within Corpus Christi Bay. Kiewit operates as a construction facility specializing in the development and fabrication of offshore modules, with a focus on oil drilling rigs. Kiewit is not affiliated with the Port of Corpus Christi and operates one large bulkhead with almost 3,000 feet of shoreline. During refurbishment operations, rigs may arrive with waste onboard in need of disposal. When this happens, the rig owner is responsible for all waste generated and disposal; Kiewit is not responsible for or considered the generator of the wastes. Kiewit maintains a MARPOL COA for Annex I and V and is registered with EPA as a SQG of hazardous waste (EPA ID TXR000042648). Ms. Johnson and Ms. Villenas summarized the waste streams generated at the facility as consisting of bleach, fuels, chemical water with low pH, aerosol cans, paint waste, and used oil. During the inspection the inspection team toured the facility and the bulkhead, including the paint CAA inside the paint building (Appendix 1 – Photos 1 to 7), the can crushing area in the paint building (Appendix 1 – Photos 8 to 17), the satellite accumulation area (SAA) on the west side of the paint building (Appendix 1 – Photos 18 to 20), and the waste CAA (Appendix 1 – Photos 21 to 42). Observations and AOCs are organized by section below along with facility responses where relevant. Paint CAA Inside Paint Building (aka Back Booth Waste Area): During the inspection, the inspection team observed two mostly full 55-gallon drums and two non-empty 5-gallon buckets of paint waste in the paint CAA that did not have the proper label wording (see Appendix 1 – Photos 1 to 7). The labels were not clearly visible due to a plastic liner over the bag, however they did contain an accumulation start date upon further inspection.[AOC #1 – Kiewit did not clearly label containers used to store waste paint with the words “Universal Waste: Paint and Paint Related Waste” – 30 TAC 335.262(c)(2)(F)] Additionally, the two 5-gallon containers did not have lids and had not been completely emptied of paint. [AOC #2 – Kiewit was storing waste paint in open containers – 30 TAC 335.262(c)(2)(A)] Following the inspection, Ms. Johnson sent photos (see Appendix 2) of the two 55-gallon drums labeled “Universal Waste: Paint and Paint Related Waste”. Can Crushing Area Inside Paint Building: In the can crushing area, the inspection team observed two 5-gallon containers that were half full of dried paint and two 1-gallon containers half full of liquid paint (see Appendix 1 – Photos 8, 9, 12, and 13). [AOC #3 – Kiewit was allowing waste paint to dry as a form of treatment – 30 TAC 335.261(b)(21)] The two 5-gallon and two 1-gallon containers were stored without lids (see AOC #2 above) and did not have a visible label (see AOC #1 above). Following the inspection, Ms. Villenas sent photos (see Appendix 3) demonstrating that all containers in the can crushing area were empty and that most of the containers had been processed. Paint SAA West Side of Paint Building: In the paint SAA on the west side of the paint building, the inspection team observed one unlabeled 55-gallon drum containing unpunctured waste aerosol cans (see Appendix 1 – Photos 18 to 20). [AOC #4 – Kiewit was storing non-punctured waste aerosol cans in an unlabeled drum – 40 CFR 273.14(f)] Following the inspection,			

Ms. Villenas sent a photo (see Appendix 3) demonstrating that the 55-gallon drum had been labeled.

Waste CAA and Drum Storage Area (DSA):

The following observations were made in the waste CAA and DSA:

- One full 55-gallon container labeled “Oily Water” and one full 55-gallon container labeled “Hose Oil” (see Appendix 1 – Photos 27 and 28). [**AOC #5** – *Kiewit did not clearly label containers used to store used oil with the words “Used Oil” – 40 CFR 279.22(c)(1)*]
- Several 55-gallon drums with incomplete universal waste labels (see Appendix 1 – Photo 30) (see **AOC #1** above).
- Two unlabeled 55-gallon drums of unknown waste. Following the inspection, they were determined to be non-hazardous waste containing AFFF/water/dirt. (See Appendix 1 – Photos 32 and 33).
- Inadequate aisle space in DSA (see Appendix 1 – Photo 29). [**AOC #6** – *Kiewit did not provide proper aisle space between rows of drums – 40 CFR 262.16(b)(8)(v)*]
- Two full 55-gallon drums of hazardous waste, containing Biocide PC-56 and contaminated gas respectively, with incomplete hazardous waste labels that did not have an indication of the hazards (see Appendix 1 – Photos 23 to 26) [**AOC #7** – *Kiewit did not clearly mark an indication of hazards on a hazardous waste label – 40 CFR 262.16(b)(6)(i)*].
- Several full 55-gallon drums of paint related waste in the DSA and three partially full 55-gallon drums of unidentified waste next to the DSA in poor condition (see Appendix 1 – Photo 31, 39-41). [**AOC #8** – *Kiewit did not immediately transfer hazardous waste from damaged containers to containers that were in good condition – 40 CFR 262.16(b)(2)(i)*]
- Unlabeled spent lead acid batteries stored as universal waste in the CAA. [**AOC #9** – *Kiewit did not label batteries being managed as universal waste properly or store the batteries in a properly labeled container – 40 CFR 273.14(a)*]
- Three partially full, unlabeled 55-gallon drums and seven full, unlabeled 20-liter containers of unknown waste pending analysis. [**AOC #10** – *Kiewit did not clearly label its containers as “Hazardous Waste” as the waste analysis was pending - 40 CFR 262.16(b)(6)(i)*]

Following the inspection, Ms. Villenas sent photos (see Appendix 3 and 4) addressing each of the AOCs identified in the waste CAA and DSA.

After the visual inspection, the inspection team requested the following information from Kiewit:

- A waste determination on three unidentified 55-gallon drums showing signs of container damage in the waste CAA and drum storage area (see Appendix 2).
- A waste determination for the Biocide PC-56 and contaminated gas (see Appendix 1 – Photo 23) (see Appendix 3).
- SDS for the antifoamer and scale inhibitor (see Appendix 1 – Photo 21 and 22) (see Appendix 3).
- MARPOL COA from the U.S. Coast Guard (see Appendix 3).
- Timeline from the NFE Hazardous Waste Event where a contract was held by Kiewit to have a client manage their hazardous waste on Kiewit property during a refabrication contract (see Appendix 4).

The inspection team did not observe other areas of concern at the time of the inspection. A closing conference was conducted at approximately 4:10 PM with Kiewit personnel. The AOCs were communicated

during the closing.

SECTION III – RECORDS REVIEW

No RCRA-regulated records were reviewed during this focused onsite inspection.

SECTION IV – AREAS OF CONCERN

The presentation of Area(s) of Concern does not constitute a formal compliance determination or violation.

Tenant: Kiewit Offshore Services LTD		
AOC #1 – Kiewit did not clearly label containers used to store waste paint with the words “Universal Waste: Paint and Paint Related Waste”.	Citation: 30 TAC 335.262(c)(2)(F)	Section: 2.1
AOC #2 – Kiewit was storing waste paint in open containers.	Citation: 30 TAC 335.262(c)(2)(A)	Section: 2.1
AOC #3 – Kiewit was allowing waste paint to dry prior to disposal.	Citation: 30 TAC 335.261(b)(21)	Section: 2.1
AOC #4 – Kiewit was storing unpunctured waste aerosol cans in an unlabeled drum.	Citation: 40 CFR 273.14(f)	Section: 2.1
AOC #5 – Kiewit did not clearly label containers used to store used oil with the words “Used Oil”.	Citation: 40 CFR 279.22(c)(1)	Section: 2.1
AOC #6 – Kiewit did not provide adequate aisle space between rows of drums.	Citation: 40 CFR 262.16(b)(8)(v)	Section: 2.1
AOC #7 – Kiewit did not clearly mark an indication of the hazards on a hazardous waste label.	Citation: 40 CFR 262.16(b)(6)(i)	Section: 2.1
AOC #8 – Kiewit did not immediately transfer hazardous waste from damaged containers to containers that were in good condition.	Citation: 40 CFR 262.16(b)(2)(i)	Section: 2.1
AOC #9 – Kiewit did not label a container in which universal waste batteries were stored.	Citation: 40 CFR 273.14(a)	Section: 2.1
AOC #10 – Kiewit did not clearly label containers of potentially hazardous waste as “Hazardous Waste” while the waste analysis was pending.	Citation: 40 CFR 262.16(b)(6)(i)	Section: 2.1

SECTION V – FOLLOW UP

Follow-Up

Any facility follow-up items are as discussed in the observations in Section II. Documents or files provided by the facility were transmitted via email and included responses to AOCs or provision of documents requested.

Communication Log

During and after the inspection, additional information was emailed to EPA including:

1. 03/13/24 Kiewit email – Diana Villenas sent several photos and descriptions showing corrective actions implemented at the warehouses and CAA.
2. 03/14/24 Kiewit email – Diana Villenas sent SDS for unleaded gas and Permaclean PC-56.
3. 03/20/24 Kiewit email – Hannah Johnson sent several photos to show corrective actions being implemented on universal waste paint and paint related waste.
4. 03/21/24 Kiewit email – Hannah Johnson sent a written statement outlining the timeline for the hazardous waste that was offloaded from the vessels last year by their client.
5. 03/26/24 Kiewit email – Diana Villenas sent several photos and descriptions showing corrective actions implemented at the warehouses and CAA.

SECTION VI – LIST OF APPENDICES

Appendix 1. Photograph Log

Appendix 2. Kiewit Offshore Services LTD 03/20/24 and 03/26/24 Response

Appendix 3. Kiewit Offshore Services LTD 03/13/24 Response

Appendix 4. Kiewit Offshore Services LTD 03/21/24 Response

APPENDIX 1.
PHOTOGRAPH LOG



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7092

Date of Photo: 03/12/2024

Time of Photo: 13:03 hrs.

Photographer: Vince Damiano

Description: Overview of Back Booth Waste Area.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7093

Date of Photo: 03/12/2024

Time of Photo: 13:03 hrs.

Photographer: Vince Damiano

Description: View of unlabeled, open 5-gallon container of paint waste container with residual liquid paint at the bottom in the Back Booth Waste Area.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7094

Date of Photo: 03/12/2024

Time of Photo: 13:03 hrs.

Photographer: Vince Damiano

Description: View of unlabeled, open 5-gallon container of paint waste container with residual liquid paint at the bottom in the Back Booth Waste Area.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7095

Date of Photo: 03/12/2024

Time of Photo: 13:03 hrs.

Photographer: Vince Damiano

Description: View of unlabeled, open 5-gallon container of paint waste container with residual liquid paint at the bottom in the Back Booth Waste Area.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 5

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7096

Date of Photo: 03/12/2024

Time of Photo: 13:04 hrs.

Photographer: Vince Damiano

Description: View of 55-gallon waste paint drum in the Back Booth Waste Area with label obscured.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 6

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7097

Date of Photo: 03/12/2024

Time of Photo: 13:04 hrs.

Photographer: Vince Damiano

Description: View of 55-gallon waste paint drum in the Back Booth Waste Area with label obscured.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 7

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7098

Date of Photo: 03/12/2024

Time of Photo: 13:04 hrs.

Photographer: Vince Damiano

Description: View of 55-gallon waste paint drum in the Back Booth Waste Area with label partially obscured.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 8

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7099

Date of Photo: 03/12/2024

Time of Photo: 13:11 hrs.

Photographer: Vince Damiano

Description: View of two unlabeled, open 5-gallon containers of paint waste container with residual paint at the bottom in the Can Crushing Area.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 9

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7100

Date of Photo: 03/12/2024

Time of Photo: 13:11 hrs.

Photographer: Vince Damiano

Description: View of two unlabeled, open 5-gallon containers of paint waste container with residual paint at the bottom in the Can Crushing Area.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 10

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7101

Date of Photo: 03/12/2024

Time of Photo: 13:11 hrs.

Photographer: Vince Damiano

Description: View of several 5-gallon containers in the Can Crushing Area.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 11

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7102

Date of Photo: 03/12/2024

Time of Photo: 13:12 hrs.

Photographer: Vince Damiano

Description: View of several unlabeled, open 5-gallon containers of paint waste with residual paint at the bottom in the Can Crushing Area



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 12

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7104

Date of Photo: 03/12/2024

Time of Photo: 13:12 hrs.

Photographer: Vince Damiano

Description: View of unlabeled, open 1-gallon containers of paint waste container with residual paint at the bottom in the Can Crushing Area.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 13

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7105

Date of Photo: 03/12/2024

Time of Photo: 13:13 hrs.

Photographer: Vince Damiano

Description: View of unlabeled, open 1-gallon containers of paint waste container with residual paint at the bottom in the Can Crushing Area.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 14

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7106

Date of Photo: 03/12/2024

Time of Photo: 13:14 hrs.

Photographer: Vince Damiano

Description: Overview of the Can Crushing Area.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 15

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7107

Date of Photo: 03/12/2024

Time of Photo: 13:14 hrs.

Photographer: Vince Damiano

Description: Overview of the Can Crushing Area.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 16

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7108

Date of Photo: 03/12/2024

Time of Photo: 13:14 hrs.

Photographer: Vince Damiano

Description: Overview of the Can Crushing Area.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 17

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7109

Date of Photo: 03/12/2024

Time of Photo: 13:14 hrs.

Photographer: Vince Damiano

Description: Overview of the Can Crushing Area.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 18

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7110

Date of Photo: 03/12/2024

Time of Photo: 13:31 hrs.

Photographer: Vince Damiano

Description: Unlabeled 55-gallon drum containing unpunctured aerosol cans found in the Paint SAA.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 19

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7111

Date of Photo: 03/12/2024

Time of Photo: 13:31 hrs.

Photographer: Vince Damiano

Description: Unlabeled 55-gallon drum containing unpunctured aerosol cans found in the Paint SAA.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 20

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7112

Date of Photo: 03/12/2024

Time of Photo: 13:31 hrs.

Photographer: Vince Damiano

Description: Overview of SAA found on the west side of the Paint Building.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 21

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7113

Date of Photo: 03/12/2024

Time of Photo: 14:05 hrs.

Photographer: Vince Damiano

Description: View of 55-gallon drum of defoamer found in the DSA



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 22

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7114

Date of Photo: 03/12/2024

Time of Photo: 14:05 hrs.

Photographer: Vince Damiano

Description: View of 55-gallon drum of scale inhibitor found in the DSA.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 23

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7115

Date of Photo: 03/12/2024

Time of Photo: 14:06 hrs.

Photographer: Vince Damiano

Description: View of 55-gallon drum of hazardous waste contaminated gas with no waste codes in the DSA.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 24

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7116

Date of Photo: 03/12/2024

Time of Photo: 14:06 hrs.

Photographer: Vince Damiano

Description: View of hazardous waste 55-gallon drum with no indication of its contents or waste codes in the DSA.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 25

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7117

Date of Photo: 03/12/2024

Time of Photo: 14:06 hrs.

Photographer: Vince Damiano

Description View of hazardous waste 55-gallon drum with no indication of its contents or waste code in the DSA.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 26

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7118

Date of Photo: 03/12/2024

Time of Photo: 14:06 hrs.

Photographer: Vince Damiano

Description: View of hazardous waste 55-gallon drum with no indication of its contents or waste codes in the DSA.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 27

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7119

Date of Photo: 03/12/2024

Time of Photo: 14:08 hrs.

Photographer: Vince Damiano

Description: View of 55-gallon drum of "Hose Oil" found in the DSA.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 28

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7120

Date of Photo: 03/12/2024

Time of Photo: 14:08 hrs.

Photographer: Vince Damiano

Description: View of 55-gallon drum of "Oily Water" found in the DSA.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 29

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7121
Date of Photo: 03/12/2024
Time of Photo: 14:09 hrs.
Photographer: Vince Damiano
Description: Overview of the DSA.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 30

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7122

Date of Photo: 03/12/2024

Time of Photo: 14:09 hrs.

Photographer: Vince Damiano

Description: Example of label found on one of the 55-gallon Universal Paint Waste drums in the DSA.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 31

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7123

Date of Photo: 03/12/2024

Time of Photo: 14:09 hrs.

Photographer: Vince Damiano

Description: View of paint waste drum with a budging top in the DSA



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 32

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7124

Date of Photo: 03/12/2024

Time of Photo: 14:10 hrs.

Photographer: Vince Damiano

Description: View of one of two unlabeled 55-gallon drums found in the DSA.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 33

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7125

Date of Photo: 03/12/2024

Time of Photo: 14:10 hrs.

Photographer: Vince Damiano

Description: View of two of two unlabeled 55-gallon drums found in the DSA.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 34

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7126

Date of Photo: 03/12/2024

Time of Photo: 14:13 hrs.

Photographer: Vince Damiano

Description: Overview of second waste storage area in the DSA.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 35

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7127

Date of Photo: 03/12/2024

Time of Photo: 14:13 hrs.

Photographer: Vince Damiano

Description: View of seven unlabeled 20-liter containers of lube oil waste in the DSA.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 36

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7128

Date of Photo: 03/12/2024

Time of Photo: 14:13 hrs.

Photographer: Vince Damiano

Description: View of four 55-gallon drums of jet fuel waste labeled as hazardous waste in the DSA.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 37

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas

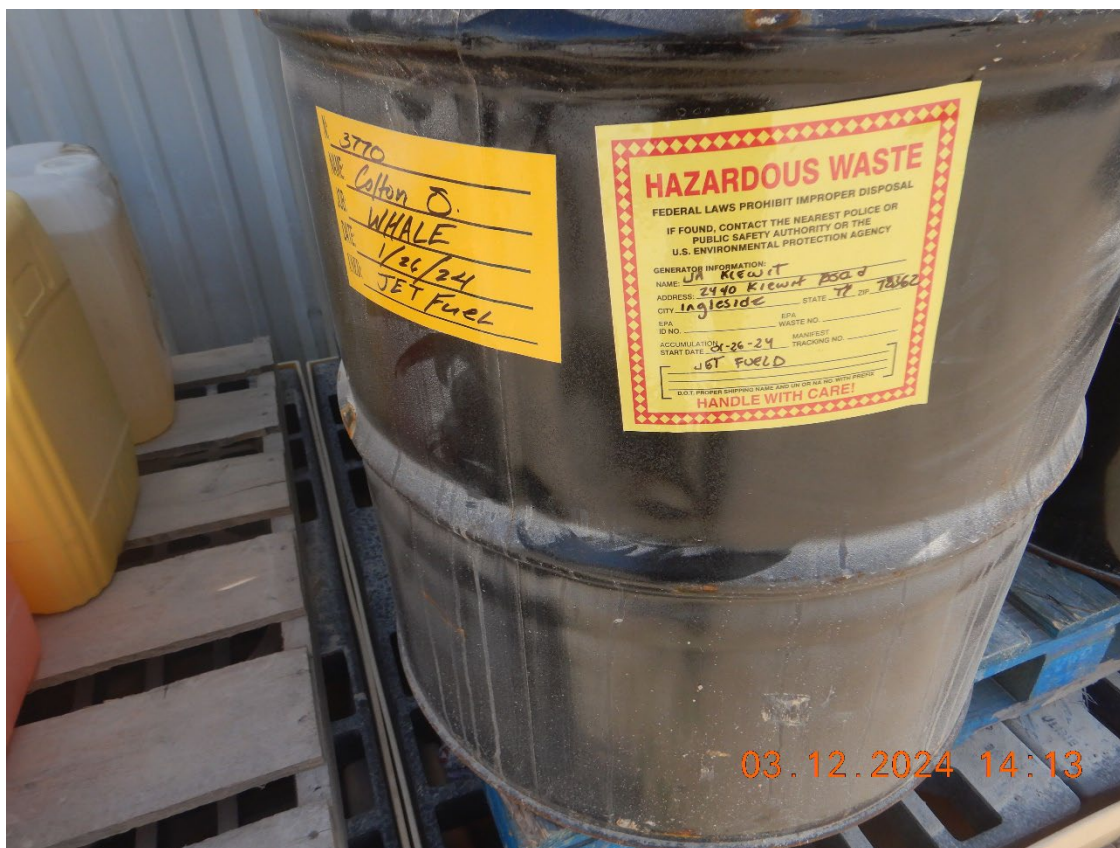


Photo File Name: DSCN7129

Date of Photo: 03/12/2024

Time of Photo: 14:13 hrs.

Photographer: Vince Damiano

Description: View of label on 55-gallon drums of jet fuel waste labeled as hazardous waste in the DSA.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 38

Location: Kiewit Offshore Services LTD

City: Ingleside

County/Parish: San Patricio

State: Texas



Photo File Name: DSCN7130

Date of Photo: 03/12/2024

Time of Photo: 14:13 hrs.

Photographer: Vince Damiano

Description: View of label on 55-gallon drums of jet fuel waste labeled as hazardous waste in the DSA.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 39

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7131

Date of Photo: 03/12/2024

Time of Photo: 14:13 hrs.

Photographer: Vince Damiano

Description: View of one crushed 55-gallon container and five 5-gallon containers that are not labeled in the DSA.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 40

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7132

Date of Photo: 03/12/2024

Time of Photo: 14:14 hrs.

Photographer: Vince Damiano

Description: Damaged and unlabeled 55-gallon waste drums in the DSA. The facility did not know the contents of the drums.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 41

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7133

Date of Photo: 03/12/2024

Time of Photo: 14:17 hrs.

Photographer: Vince Damiano

Description: Close up view of bulging 55-gallon containers of unknown contents in the DSA.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 42

Location: Kiewit Offshore Services LTD		
City: Ingleside	County/Parish: San Patricio	State: Texas



Photo File Name: DSCN7134

Date of Photo: 03/12/2024

Time of Photo: 14:19 hrs.

Photographer: Vince Damiano

Description: View of punctured aerosol cans in 55-gallon trash can in the DSA.

APPENDIX 2.
KIEWIT OFFSHORE SERVICES LTD 03/20/24 AND 03/26/24 RESPONSE

Andrew Gates

From: Diana Villenas <Diana.Villenas@kiewit.com>
Sent: Tuesday, March 26, 2024 6:48 PM
To: Young-Dahl, Erin; Hannah.Johnson
Cc: Andrew Gates; Johnson, Joyce-R6; Vince Damiano; Tim.Storheim; Bo.Johnson
Subject: RE: [External]Follow-up from EPA Inspection 3/12/2024
Attachments: Paint Drums Paint Booth 1 and 2.jpg; Undetermined Waste Warehouse 1.jpg; Undetermined Waste Warehouse 2.jpg; Undetermined Waste Warehouse 3.jpg

CAUTION: Don't open links or attachments unless you recognize the sender and know they are safe.

All,

Please find our corrective actions attached and a brief description of each below –

1. Paint Drums at Paint Booths 1 and 2: Drums are appropriately labeled with lids fixed.
2. Undetermined Waste Warehouse (Central Accumulation Area) 1 and 2: We're still waiting for waste determinations to be finalized by our Vendor. As such, you'll find Hazardous Waste and Pending Analysis stickers on each.
3. Undetermined Waste Warehouse 3: This waste stream was identified as non-hazardous based on SDS and generator knowledge per New Fortress Energy (NFE). Specifically, the waste is a mixture of AFFF/water/dirt.

As always, I'm available via email or at my direct cell below if you have any questions.

Thank you,



Kiewit

Diana Villenas

Diana Villenas
District Environmental Manager

KIEWIT OFFSHORE SERVICES, LTD
2440 Kiewit Road, Ingleside, TX 78362
361-244-1270 Cell
kiewit.com

 Please consider the environment before printing this e-mail

From: Young-Dahl, Erin <YoungDahl.Erin@epa.gov>
Sent: Wednesday, March 20, 2024 9:51 AM
To: Hannah.Johnson <Hannah.Johnson@kiewit.com>
Cc: Andrew Gates <andrew.gates@erg.com>; Johnson, Joyce-R6 <johnson.joyce-r6@epa.gov>; Vince Damiano <Vince.Damiano@erg.com>; Tim.Storheim <Tim.Storheim@kiewit.com>; Bo.Johnson <Bo.Johnson@kiewit.com>;

Diana.Villenas <Diana.Villenas@kiewit.com>

Subject: RE: [External]Follow-up from EPA Inspection 3/12/2024

Some people who received this message don't often get email from youngdahl.erin@epa.gov. [Learn why this is important](#)

Excellent! Thank you!

Erin

From: Hannah.Johnson <Hannah.Johnson@kiewit.com>

Sent: Wednesday, March 20, 2024 9:44 AM

To: Young-Dahl, Erin <YoungDahl.Erin@epa.gov>

Cc: Andrew Gates <andrew.gates@erg.com>; Johnson, Joyce-R6 <johnson.joyce-r6@epa.gov>; Vince Damiano <Vince.Damiano@erg.com>; Tim.Storheim <Tim.Storheim@kiewit.com>; Bo.Johnson <Bo.Johnson@kiewit.com>; Diana.Villenas <Diana.Villenas@kiewit.com>

Subject: RE: [External]Follow-up from EPA Inspection 3/12/2024

Caution: This email originated from outside EPA, please exercise additional caution when deciding whether to open attachments or click on provided links.

Good morning,

I have attached a couple photos to show that we have implemented the labeling correction that you mentioned below for paint waste. Thank you so much for informing us of that discrepancy!



We are still diligently working on the remaining AOC's mentioned during the inspection and will continue to send over proof of corrective actions as they are completed. Please feel free to reach out with questions.

Sincerely,

Hannah Johnson
Environmental Coordinator

 **Kiewit**
Kiewit Offshore Services, LTD.
2440 Kiewit Rd.
Ingleside, TX 78362

Mobile: 361.484.6182

Email: Hannah.Johnson@kiewit.com



From: Young-Dahl, Erin <YoungDahl.Erin@epa.gov>

Sent: Friday, March 15, 2024 9:59 AM

To: Diana.Villenas <diana.villenas@kiewit.com>

Cc: Andrew Gates <andrew.gates@erg.com>; Johnson, Joyce-R6 <johnson.joyce-r6@epa.gov>; Vince Damiano <Vince.Damiano@erg.com>; Tim.Storheim <Tim.Storheim@kiewit.com>; Hannah.Johnson <Hannah.Johnson@kiewit.com>; Bo.Johnson <Bo.Johnson@kiewit.com>

Subject: RE: [External]Follow-up from EPA Inspection 3/12/2024

Hi Diana,

Thanks so much for sending those photos! One quick note: the universal paint waste containers need to say "Universal Waste: Paint and Paint-Related Waste." Since those label stickers already have "Universal Waste" printed on them, the only words that are missing are the "Paint and Paint-Related Waste." It seems cumbersome, I know, but it is literally what is printed in the regulations, and we are beholden to it. The regs for PPRW are found [here](#).

Thank you again for sending those corrections so quickly! Those changes look great. Please don't hesitate to reach out if you have any questions.

Best,

--

Erin Young-Dahl

She/her/hers

Physical Scientist

RCRA Enforcement Section

U.S. Environmental Protection Agency, Region 6

E-mail: youngdahl.erin@epa.gov

Office: (214) 665-3166



3/26/24 Follow-up: Paint Drums Paint Booth 1 and 2



3/26/24 Follow-up: Undetermined Waste Warehouse 1



3/26/24 Follow-up: Undetermined Waste Warehouse 2



3/26/24 Follow-up: Undetermined Waste Warehouse 3

APPENDIX 3.
KIEWIT OFFSHORE SERVICES LTD 03/13/24 RESPONSE

From: [Diana Villenas](#)
To: [Vince Damiano](#); [Bo Johnson](#); [Tim Storheim](#); [Hannah Johnson](#)
Cc: [Andrew Gates](#); [Johnson, Joyce-R6](#); [Young-Dahl, Erin](#)
Subject: RE: [External] Follow-up from EPA Inspection 3/12/2024
Date: Wednesday, March 13, 2024 6:19:34 PM
Attachments: [image020.png](#)
[Certificate of Adequacy exp May2027.pdf](#)
[Antifoam 71D5 PLUS SDS USA \(GHS\) English \(002\).pdf](#)
[RO Antiscalant PC-191T SDS USA \(GHS\) English.pdf](#)
[UnleadedGas.pdf](#)
[Permaclean PC-56 SDS USA \(GHS\) English.pdf](#)

CAUTION: Don't open links or attachments unless you recognize the sender and know they are safe.

Vince,

Thank you for coming out. Attached are records requested during yesterday's visit on Wednesday, March 12, 2024. Following the discussed Areas of Concern, you will additionally find corrective actions implemented below.

I would also like to confirm that a waste determination for Contaminated Gas and the Biocide PC56 were the only waste determinations requested in your email below. Corrective actions for the bulging containers and timeline will be submitted soon. Please let me know if you have any additional questions.

Corrective Actions implemented at the Warehouse, Central Accumulation Area –

1. The following photos show the corrected “UNIVERSAL WASTE” labels naming the waste as “PAINT WASTE”.





2. The following photos are of the 2 drums that were identified in the paint waste area without labels.



3. The following photos show the proper “USED OIL” stickers were placed on the drums with free flowing oil inside.





4. The following photo is of the lube oil pending sampling with proper labels.



5. The following photo shows the new aisle spacing of at least 30in.

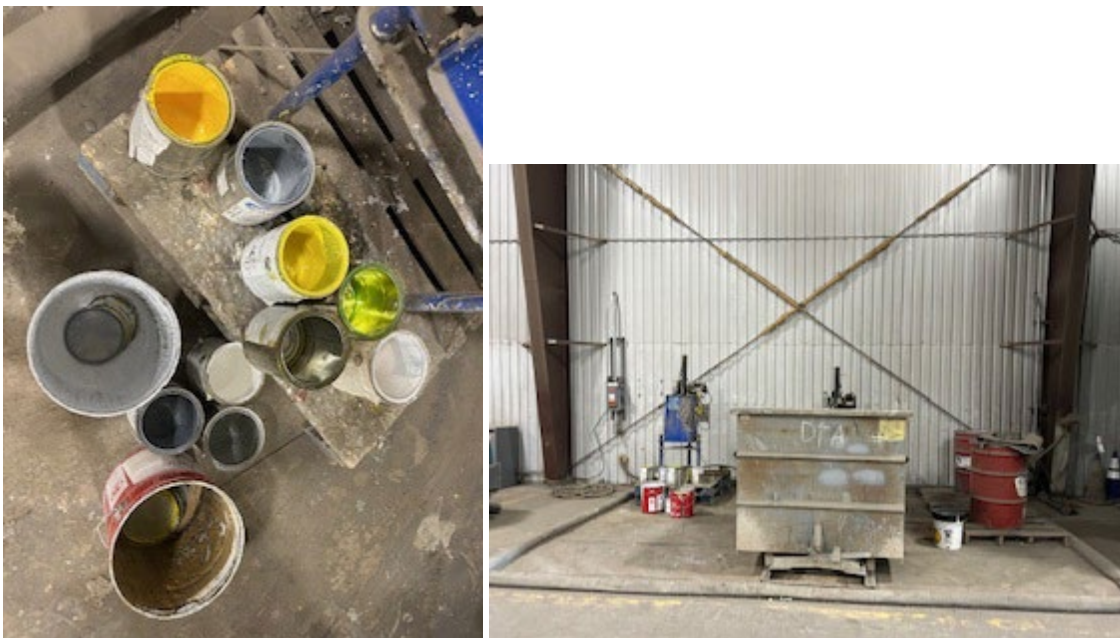


6. The following photo shows the two used battery bins properly labeled with “UNIVERSAL WASTE”.



Corrective Actions implemented at the Painting Building –

7. The following photos show the can crushing area that was cleaned up and only housing the appropriate empty paint cans.



8. The following photo shows the drum of aerosol cans on the west side of the paint building with the correct labeling.



Regards,



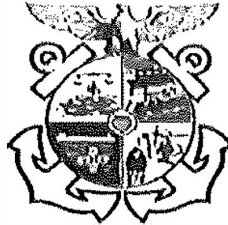
Diana Villenas

Diana Villenas
District Environmental Manager

KIEWIT OFFSHORE SERVICES, LTD
2440 Kiewit Road, Ingleside, TX 78362
361-244-1270 Cell
kiewit.com

 Please consider the environment before printing this e-mail

United States Coast Guard
Certificate Of Adequacy
for
Reception Facility



This certifies that: KIEWIT OFFSHORE SERVICES, LTD. has facilities adequate MARPOL I
to receive _____
_____ MARPOL V

From oceangoing ships, as required by the International Convention for the Prevention of Pollution from Ships, 1973. As modified by the protocol of 1978 (MARPOL 73/78), The Act to Prevent Pollution from Ships, 33 USC 1901-1912 and associated U.S. Regulations in 33 CFR 158.

This certificate is issued pursuant to an application dated 18MAY2022 and an inspection dated 18MAY2022, copies of which are attached, and part of this certificate. Each terminal listed in the application shall maintain a copy of this certificate available for inspection by Coast Guard personnel and the master, operator, agent, or owner of any ship using or intending to use this terminal.

Terminals and ports required to have an operations manual for oil transfer described in 33 CFR 154.300 shall attach a copy of this certificate thereto.

The terminal/port person in charge identified in the attached application shall notify the U.S. Coast Guard Captain of the Port (COTP) in writing after any of the reception facility information or terminal/port information identified in 33 CFR 158.165 changes.

The terminal/port owner, operator, or person in charge is liable for violations of the provisions of 33 CFR 158 and may be subject to the maximum penalty under 33 USC 1908, as adjusted for inflation and found at 33 CFR 27.3.

The terminal/port owner, operator, or person in charge shall ensure that the reception facility holds each state, local, and federal permit and license required by environmental laws and regulations concerning garbage, residues and mixtures containing oil or noxious liquid substances. This certificate certifies compliance with applicable sections of 33 CFR 158, but does not certify compliance with any other law or regulation.

This certificate is valid for a period of 5 years from the date issuance; or until suspended or revoked; or until 30 days after the operator cited on the certificate changes; at which time it shall be promptly returned to the U.S. Coast Guard COTP.

This Certificate Expires:

18MAY2027

5 years from date of issuance

D. Salik
Signature of COTP

18 MAY 2022
Date

D. SALIK CDR, USCG, By direction

Typed Name of COTP

Date

Sector Corpus Christi

COTP Zone

Phone

The following waivers to this certificate are granted. The waivers shall be attached to and are part of this certificate.

Waiver Description (brief description)

Expiry Date (if applicable)

[illegible]

APPLICATION FOR CERTIFICATE OF ADEQUACY (COA) FOR RECEPTION FACILITIES FORM A

1. General. The United States as a party to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78) is required by Annex I and the Act to Prevent Pollution from Ships (33 U.S.C. 1901 et. seq.) to issue certificates to reception facilities verifying their adequacy to receive oily waste from ships. Regulations implementing the United States waste reception facility program are in 33 CFR 158 Code of Federal Regulations.
2. The Certificate of Adequacy remains valid until suspended or revoked.
3. Upon suspension or revocation, a Certificate of Adequacy shall be promptly returned to the Issuing U.S. Coast Guard Captain of the Port (COTP).
4. The Application, as submitted, shall be permanently attached to and become a part of the Certificate of Adequacy upon issuance.
5. A copy of the Certificate of Adequacy with the Application attached shall be available at each port and terminal to which it applies and shall be available for inspection by Coast Guard personnel and the master, person in charge or agent of an oceangoing ship using or intending to use the reception facility.
6. A copy of the Certificate of Adequacy shall be attached to the operations manual for marine oil transfer facilities described in 33 CFR 154.300.
7. The terminal/port person in charge identified in the Application shall notify the U.S. Coast Guard Captain of the Port (COTP) in writing within 10 days after any of the reception facility information supplied under 33 CFR 158.140 changes. The terminal/port person in charge shall notify the U.S. Coast Guard COTP in writing within 30 days after any of the terminal/port information supplied under 33 CFR 158.140 changes.
8. Civil Penalties. A person who after notice and an opportunity for a hearing, is found:
 - a. to have made a false, fictitious or fraudulent statement or representation in any matter in which a statement or representation is required to be made under the Act to Prevent Pollution from Ships, or the regulations thereunder, shall be liable to the United States for a civil penalty, not to exceed \$8,000 for each statement or representation; or
 - b. to have violated the Act to Prevent Pollution from Ships, or the regulations issued thereunder, shall be liable to the United States for a civil penalty not to exceed \$40,000 for each violation.

GENERAL INSTRUCTIONS THE CERTIFICATE OF ADEQUACY (COA) APPLICATION FORM A

The following instructions for individual line items are provided to assist in completing the Application for a Certificate of Adequacy (COA). If you have any questions or need assistance in completing the Application, please contact the U.S. Coast Guard Captain of the Port (COTP) for your area. A list of definitions, which you may find helpful in completing the Application, is provided in 33 Code of Federal Regulations Part 158 (33 CFR 158).

- 1.A. Indicate terminal if you are applying as a single terminal or indicate port if you are applying as a group of terminals. Do not mark "COTP Designated Port" unless you have a letter from the COTP with such a designation. COTP designation of a facility or an area as a port is for unusual situations. If you have a question as to whether COTP designation as a port applies to your situation, contact the COTP for your area.
- 1.C.(1) For a terminal, enter the company or corporation name. For a port, enter the company, corporation, port authority, or organization by which the group of terminals is legally known.
- 1.C.(3) Enter the name of a person authorized to act in behalf of the terminal or port.
- 1.C.(5) For a terminal, enter the company or corporation name. For a port, enter the company, corporation, port authority, or organization of which the person in charge is a member.
- 1.D.(1) Those applying as terminals do not have to complete this section, since the information is the same as in 1.C. Ports are to provide this information for each of the terminals indicated in 1.B.
- 2.A.(1) Enter the company or corporation name of the reception facility.
- 2.A.(5) Check as many of the types of reception facilities as may be used.
- 3.A. Enter the value as calculated on the Coast Guard optional worksheet line "AY" or other calculation sheet.
- 3.B. Enter the value as calculated on the Coast Guard optional worksheet line "AZ" or other calculation sheet. Calculate from vessel traffic at the terminal/port for the last 12 months.
- 3.C. Describe the waste the reception facility can receive. Enter "oil" for all types of oily waste.
- 3.D. Describe the ship types or principal trades, e.g., crude tankers, product tankers, container ships, grain ships, fishing vessels, etc.
- 3.E. Enter a value based upon discharging waste through a single connection. This is necessary since ships are not required to discharge waste through multiple connections. Oily ballast discharge rates may be based on discharging through more than one connection if all of the vessels and reception facilities have this capability.
- 3.F. Enter a value upon discharging waste through a single connection. This is necessary since ships are not required to discharge waste through multiple connections.

**APPLICATION FOR A RECEPTION FACILITY CERTIFICATE OF ADEQUACY FOR OIL
FORM A**

1. PARTICULARS OF TERMINAL OR PORT

A. APPLYING AS: (Check one) ☒ Terminal ☐ Port ☐ COTP Designated Port

B. NUMBER OF TERMINALS TO WHICH THIS APPLICATION APPLIES: 1

C. TERMINAL/PORT INFORMATION

(1) NAME OF TERMINAL/PORT: Kiewit Offshore Services, Ltd.

(2) ADDRESS OF TERMINAL/PORT: 2440 Kiewit Road, Ingleside, Texas 78362

(3) NAME OF TERMINAL/PORT
PERSON-IN-CHARGE: Shea Page

(4) TITLE/POSITION: Facility Security Officer

(5) ORGANIZATION: Kiewit Offshore Services, Ltd.

(6) OFFICE PHONE NUMBER: 361-222-4664

D. **INDIVIDUAL TERMINAL INFORMATION.** If applying as a port, list the information indicated for each terminal in the port. If more space is needed, continue on a separate sheet of paper and attach to the back of the application. The signature of the person in charge of the terminal acknowledges that the terminal agrees and volunteers to being considered as a member of the port, described in section 1, for purposes of these reception facilities. Complete the terminal name, location, etc. below.

(1) NAME OF TERMINAL: _____

(a) ADDRESS OF TERMINAL: _____

(b) NAME/TITLE PERSON-IN-CHARGE: _____

(c) OFFICE PHONE NUMBER: _____

(d) SIGNATURE OF TERMINAL
PERSON-IN-CHARGE: _____

(2) NAME OF TERMINAL: _____

(a) ADDRESS OF TERMINAL: _____

(b) NAME/TITLE PERSON-IN-CHARGE: _____

(c) OFFICE PHONE NUMBER: _____

(d) SIGNATURE OF TERMINAL
PERSON-IN-CHARGE: _____

2. **PARTICULARS OF RECEPTION FACILITY.** Enter information for each reception facility used by the terminal/port. If necessary, continue on a separate sheet and attach to the back of the Application.

A. TYPE OF RECEPTION FACILITY: (Check those that apply)

☐ Fixed ☒ Mobile ☐ Tank Truck ☐ Tank Barge ☐ Other

(Describe Other): _____

(1) NAME OF RECEPTION FACILITY: Nature Environmental & Marine Services, LLC

(a) ADDRESS:

8713 Root St
Corpus Christi, TX 78409

(b) NAME/TITLE PERSON-IN-CHARGE:

Joel Curl

(c) OFFICE PHONE NUMBER:

866-770-7952 option #1

(d) SIGNATURE OF TERMINAL
PERSON-IN-CHARGE:

Joel Curl

3. RECEPTION AND TRANSFER REQUIREMENTS

A. ESTIMATED DAILY CAPACITY OF RECEPTION FACILITY:

80
(metric tons)

B. ESTIMATED DAILY CAPACITY REQUIREMENT OF THE TERMINAL/PORT:

n/a
(metric tons)

C. TYPES OF WASTE THE RECEPTION FACILITY CAN RECEIVE:

Ballast water, engine room sludge, ballast water, other types of oily or waste waters

D. SHIP TYPES OR PRINCIPAL TRADES OF SHIPS VISITING TERMINAL(S):

E. OILY BALLAST WASTE TRANSFER RATE (GPM):

100
(GPM)

F. ALL OTHER OILY RESIDUES AND MIXTURES TRANSFER RATE (GPM):

100
(GPM)

G. RECEPTION FACILITY CAN RECEIVE ALL THE OILY BALLAST FROM SHIPS VISITING THE TERMINAL OR PORT WITHIN 10 HOURS OF WASTE TRANSFER COMMENCEMENT.

Enter either "YES", "NO", OR "N/A".

yes
(Yes, No, N/A)

(If entering other than "YES" explain): with proper notification and ships pumps are capable

H. RECEPTION FACILITY CAN RECEIVE ALL OTHER OILY RESIDUES AND MIXTURES FROM SHIPS VISITING THE TERMINAL OR PORT WITHIN 4 HOURS OF WASTE TRANSFER COMMENCEMENT. Enter either "YES", "NO", OR "N/A".

yes
(Yes, No, N/A)

(If entering other than "YES" explain): if ships pumps are capable

I. RECEPTION FACILITY FOR OIL WASTE WILL BE PROVIDED WITHIN 24 HOURS OF NOTIFICATION. Enter either "YES", "NO", OR "N/A".

yes
(Yes, No, N/A)

(If entering other than "YES" explain): _____

J. OILY WASTE WILL BE TRANSFERRED PRIOR TO SHIP LEAVING SHIP REPAIR YARD. Enter "YES", "NO", OR "N/A".

yes
(Yes, No, N/A)

(If entering other than "YES" explain): _____

CERTIFICATION

I HEREBY CERTIFY THAT THE INFORMATION PROVIDED IN THIS APPLICATION FOR A WASTE RECEPTION FACILITY CERTIFICATE OF ADEQUACY IS COMPLETE, TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF.

PRINTED OR TYPED NAME OF PERSON IN CHARGE:

Shea Page

SIGNATURE OF TERMINAL/PORT
PERSON IN CHARGE:

Shea Page

DATE SIGNED:

5-9-2022

RECEPTION FACILITY INFORMATION SHEET

***** THIS PAGE FOR COMPLETION BY U.S. COAST GUARD *****

COAST GUARD COTP COMPLETE THE FOLLOWING INFORMATION AND FORWARD TO DISTRICT (m) FOR QUARTERLY SUBMISSION TO COMMANDANT (G-FAC-2)

COTP ISSUING CERTIFICATE OF ADEQUACY: _____

NAME OF TERMINAL/PORT: _____

LOCATION OF TERMINAL/PORT (City/State): _____

NAME OF PERSON IN CHARGE: _____

PHONE NUMBER: _____

TYPE OF WASTE THE RECEPTION FACILITY CAN RECEIVE: _____

DAILY CAPACITY OF RECEPTION FACILITY (metric tons): _____

OILY BALLAST WASTE TRANSFER RATE (GPM): _____

ALL OTHER OILY RESIDUES AND MIXTURES TRANSFER RATE (GPM): _____

Privacy Act Statement

Authority: The United States as a party to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78) is required by Annex I and the Act to Prevent Pollution from Ships (33 U.S.C. 1901 et. seq.) to issue certificates to reception facilities verifying their adequacy to receive oily waste from ships. Regulations implementing the United States waste reception facility program are in 33 CFR 158 Code of Federal Regulations.

Purpose: Waterfront Facilities are required to be certified to have adequate reception capabilities when receiving Oily mixtures from oceangoing tankers and any other oceangoing ships of 400 gross tons or more.

Routine Uses: The information supplied on the form will be used by and disclosed to Coast Guard personnel. Additionally, the Coast Guard may share the information with law enforcement or other government agencies as necessary to respond to any incidents that may occur as a result of any discharge of Oil pollution, or pursuant to its published Privacy Act system of records notice.

Disclosure: Furnishing this information is voluntary; however, failure to furnish the requested information may delay or prevent the issuance of the Certificate of Adequacy (Form CG-5401).

Burden Statement: The Coast Guard estimates that the average burden for this report is 3 hours. You may submit any comments concerning the accuracy of this burden estimate or any suggestions for reducing the burden to: Commandant (CG-FAC-2), U.S. Coast Guard, 2703 Martin Luther King Jr Ave SE Stop 7501, Washington, DC 20593-7501 or Office of Management and Budget, Paperwork Reduction Project (1625-0045), Washington, DC 20593.

Submit the application to: THE LOCAL CAPTAIN OF THE PORT OFFICE

APPLICATION FOR A RECEPTION FACILITY CERTIFICATE OF ADEQUACY FOR GARBAGE FORM C

The Act to Prevent Pollution From Ships (33 U.S.C. 1901 et. seq.) authorizes the Secretary of the Department of Homeland Security to issue certificates to Terminals and Ports verifying their adequacy to receive operational garbage from ships. Regulations implementing this program are in 33 CFR Code of Federal Regulations Part 158. To continue to receive ships at a port or terminal an applicant must hold a Certificate of Adequacy for Garbage if it receives ocean going tankers, or any other ocean going ship of 400 gross tons or more, carrying residues and mixtures containing oil; or if it receives ocean going ships carrying Noxious Liquid substances. To receive a Certificate of Adequacy for Garbage, application is required on FORM C.

Definitions:

"Terminal": an on shore facility or an off shore structure located in the navigable waters of the United States or subject to the jurisdiction of the United States and used, or intended to be used, as a facility for the transfer or other handling of a harmful substance. The definition of "navigable waters" for the purposes of this section may be found in 33 CFR 2.05-25.

"Port": (1) a group of terminals that combines to act as a unit and be considered a port for purposes of this part; (2) a port authority or other organization that chooses to be considered a port for purposes of this part. For the purposes of Annex V of MARPOL73/78, Port also means a commercial fishing facility, recreational boating facility and a mineral and oil industry shore base.

A. Terminal Section

Complete this section if you are applying as a SINGLE TERMINAL

Name of Terminal

Kiewit Offshore Services, Ltd.

Street Address

2440 Kiewit Road

City, State, Zip Code

Ingleside, Texas 78362

Name of Terminal Person-In-Charge

Shea Page

Phone Number (Enter Area Code)

361-222-4664

After completing this section go to Section C.

Check the following boxes if the terminal receives or discharges any of the following cargoes from vessels visiting the terminal:

☒ Oil	☐ Discharge	☒ Receive
☒ Oily wastes	☐ Discharge	☒ Receive
☐ Fuel	☐ Discharge	☐ Receive
☐ Bulk dry cargo	☐ Discharge	☐ Receive
☐ Explosives	☐ Discharge	☐ Receive
☐ Hazardous substances	☐ Discharge	☐ Receive
☐ Fish	☐ Discharge	☐ Receive
☒ Other	☐ Discharge	☒ Receive

Check the following boxes if the terminal handles or services any of the following vessels:

☒ Vessels of foreign registry	☒ Unmanned barges
☒ U.S. Vessels on domestic trade	☐ Chemical ships
☒ U.S. Vessels in foreign trade	☐ Container ships
☐ Passenger vessels	☐ Break bulk ships
☒ Vessels servicing the offshore mineral and oil industry	☐ Fishing ships
	☐ Ferry boat ships

B. Port Section

1. Complete this section if you are applying as a PORT

Name of Terminal

Street Address

City, State, Zip Code

Name of Terminal Person-In-Charge

Phone Number (Enter Area Code)

Number of Terminal which we
will be members of this Port? _____

B. PORT SECTION (continued) Individual terminal data:

Ports are to complete the following entries for each individual terminal which is a member of the port.

Name of Terminal		Check the following boxes if the terminal receives or discharges any of the following cargoes from vessels visiting the terminal:		
Street Address		☐ Oil	☐ Discharge	☐ Receive
City, State, Zip Code		☐ Oily wastes	☐ Discharge	☐ Receive
Name of Terminal Person-in-Charge		☐ Fuel	☐ Discharge	☐ Receive
Phone Number (Enter Area Code)		☐ Bulk dry cargo	☐ Discharge	☐ Receive
Signature of Person-in-Charge of Terminal. (Signature indicates Terminal Acknowledges that terminal agrees and consents to being considered as a member of the port, described in Section B.)		☐ Explosives	☐ Discharge	☐ Receive
		☐ Hazardous substances	☐ Discharge	☐ Receive
		☐ Fish	☐ Discharge	☐ Receive
		☐ Other	☐ Discharge	☐ Receive
		Check the following boxes if the terminal handles or services any of the following vessels:		
3.		☐ Vessels of foreign registry	☐ Unmanned barges	
		☐ U.S. Vessels on domestic trade	☐ Chemical ships	
		☐ U.S. Vessels in foreign trade	☐ Container ships	
		☐ Passenger vessels	☐ Break bulk ships	
		☐ Vessels servicing the offshore mineral and oil industry	☐ Fishing ships	
Name of Terminal		☐ Ferry boat ships		
		Check the following boxes if the terminal receives or discharges any of the following cargoes from vessels visiting the terminal:		
		☐ Oil	☐ Discharge	☐ Receive
		☐ Oily wastes	☐ Discharge	☐ Receive
		☐ Fuel	☐ Discharge	☐ Receive
Street Address		☐ Bulk dry cargo	☐ Discharge	☐ Receive
		☐ Explosives	☐ Discharge	☐ Receive
		☐ Hazardous substances	☐ Discharge	☐ Receive
		☐ Fish	☐ Discharge	☐ Receive
		☐ Other	☐ Discharge	☐ Receive
City, State, Zip Code		Check the following boxes if the terminal handles or services any of the following vessels:		
		☐ Vessels of foreign registry	☐ Unmanned barges	
		☐ U.S. Vessels on domestic trade	☐ Chemical ships	
		☐ U.S. Vessels in foreign trade	☐ Container ships	
		☐ Passenger vessels	☐ Break bulk ships	
Name of Terminal Person-in-Charge		☐ Vessels servicing the offshore mineral and oil industry	☐ Fishing ships	
		☐ Ferry boat ships		
		Check the following boxes if the terminal receives or discharges any of the following cargoes from vessels visiting the terminal:		
		☐ Oil	☐ Discharge	☐ Receive
		☐ Oily wastes	☐ Discharge	☐ Receive
Street Address		☐ Fuel	☐ Discharge	☐ Receive
		☐ Bulk dry cargo	☐ Discharge	☐ Receive
		☐ Explosives	☐ Discharge	☐ Receive
		☐ Hazardous substances	☐ Discharge	☐ Receive
		☐ Fish	☐ Discharge	☐ Receive
City, State, Zip Code		☐ Other	☐ Discharge	☐ Receive
		Check the following boxes if the terminal handles or services any of the following vessels:		
		☐ Vessels of foreign registry	☐ Unmanned barges	
		☐ U.S. Vessels on domestic trade	☐ Chemical ships	
		☐ U.S. Vessels in foreign trade	☐ Container ships	
Name of Terminal Person-in-Charge		☐ Passenger vessels	☐ Break bulk ships	
		☐ Vessels servicing the offshore mineral and oil industry	☐ Fishing ships	
		☐ Ferry boat ships		
		Check the following boxes if the terminal receives or discharges any of the following cargoes from vessels visiting the terminal:		
		☐ Oil	☐ Discharge	☐ Receive
Street Address		☐ Oily wastes	☐ Discharge	☐ Receive
		☐ Fuel	☐ Discharge	☐ Receive
		☐ Bulk dry cargo	☐ Discharge	☐ Receive
		☐ Explosives	☐ Discharge	☐ Receive
		☐ Hazardous substances	☐ Discharge	☐ Receive
City, State, Zip Code		☐ Fish	☐ Discharge	☐ Receive
		☐ Other	☐ Discharge	☐ Receive
		Check the following boxes if the terminal handles or services any of the following vessels:		
		☐ Vessels of foreign registry	☐ Unmanned barges	
		☐ U.S. Vessels on domestic trade	☐ Chemical ships	
Name of Terminal Person-in-Charge		☐ U.S. Vessels in foreign trade	☐ Container ships	
		☐ Passenger vessels	☐ Break bulk ships	
		☐ Vessels servicing the offshore mineral and oil industry	☐ Fishing ships	
		☐ Ferry boat ships		
		Check the following boxes if the terminal receives or discharges any of the following cargoes from vessels visiting the terminal:		
Street Address		☐ Oil	☐ Discharge	☐ Receive
		☐ Oily wastes	☐ Discharge	☐ Receive
		☐ Fuel	☐ Discharge	☐ Receive
		☐ Bulk dry cargo	☐ Discharge	☐ Receive
		☐ Explosives	☐ Discharge	☐ Receive
City, State, Zip Code		☐ Hazardous substances	☐ Discharge	☐ Receive
		☐ Fish	☐ Discharge	☐ Receive
		☐ Other	☐ Discharge	☐ Receive
		Check the following boxes if the terminal handles or services any of the following vessels:		
		☐ Vessels of foreign registry	☐ Unmanned barges	
Name of Terminal Person-in-Charge		☐ U.S. Vessels on domestic trade	☐ Chemical ships	
		☐ U.S. Vessels in foreign trade	☐ Container ships	
		☐ Passenger vessels	☐ Break bulk ships	
		☐ Vessels servicing the offshore mineral and oil industry	☐ Fishing ships	
		☐ Ferry boat ships		

SECTION C (33 CFR 158 Subpart D)

1. Does the terminal or port receive visits from vessels arriving from foreign ports (except Canada), Hawaii or any territories or possessions of the United States?

☒ YES☐ NO (If the answer is "NO" go to question No. 4)

2. Does the terminal or port have facilities approved by the Administrator, Animal and Plant Health Inspection Service, U.S. Department of Agriculture, for the disposal of garbage from foreign ports (except Canada), Hawaii or any Territories or Possessions of the United States in accordance with Title 9 Code of Federal Regulations Part 94.

☒ YES (If the answer is "YES" please fill in the information below.)☐ NO (If the answer is "NO" you may attach a waiver request in accordance with 33 CFR 158 on a separate attached sheet.)

Name of APHIS Approved Facility

Nature Environmental & Marine Services, LLC

Type (Incinerator, Sterilizer, Autoclave, etc.)

Autoclave

City

Corpus Christi

State

TX

Phone Number

866-770-7952 option #1

3. For those terminal(s)/port(s) requiring the services of an Animal and Plant Health Inspection Service approved facility, would the terminal or port be capable of receiving all garbage from these ships visiting the terminal/port within 24 hours after notification of need of such services is given?"

☒ YES☐ NO (If the answer is "NO" you may attach a waiver request in accordance with 33 CFR 158 on a separate attached sheet.)

4. Is the terminal or port able to receive all garbage as defined in 33 CFR 158.120 which the master or person-in-charge of a ship desires to discharge, except: (1) large quantities of spoiled or damaged cargoes not normally expected to be discharged by a ship; or (2) garbage from ships not having commercial transactions with that terminal or port?

☒ YES☐ NO (If the answer is "NO" you may attach a waiver request in accordance with 33 CFR 158 on a separate attached sheet.)

The terminal/port person-in-charge identified in the Application shall notify the U.S. Coast Guard Captain of the Port (COTP) in writing 30 days after any of the terminal/port information supplied under 33 CFR 158.165(b)(3) changes.

Civil Penalties. A person who after notice and an opportunity for a hearing, is found:

a. to have made a false, fictitious or fraudulent statement or representation in any matter in which a statement or representation is required to be made under the Act to Prevent Pollution from Ships, or the regulations thereunder, shall be liable to the United States for a civil penalty, not to exceed \$8,000 for each statement or representation; or

b. to have violated the Act to Prevent Pollution from Ships, or the regulations issued thereunder, shall be liable to the United States for a civil penalty, not to exceed \$40,000 for each violation.

CERTIFICATION

I HEREBY CERTIFY THAT THE INFORMATION PROVIDED IN THIS APPLICATION FOR A WASTE RECEPTION FACILITY CERTIFICATE OF ADEQUACY IS COMPLETE, TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF.

PRINTED OR TYPED NAME OF PERSON IN CHARGE: Shea Page

SIGNATURE OF TERMINAL/PORT
PERSON IN CHARGE: Shea Page

DATE SIGNED: 5-9-2022

Privacy Act Statement

Authority: The Act to Prevent Pollution From Ships (33 U.S.C. 1901 et. seq.) authorizes the Department of Homeland Security to issue certificates to Terminals and Ports verifying their adequacy to receive operational garbage from ships. To continue to receive ships at a port or terminal an applicant must hold a Certificate of Adequacy for Garbage. If it receives ocean going tankers, or any other ocean going ship of 400 gross tons or more. To receive a Certificate of Adequacy for Garbage, application is required on Form C. Regulations implementing the United States waste reception facility program are in 33 CFR 158 Code of Federal Regulations.

Purpose: Waterfront Facilities are required to be certified to have adequate reception capabilities when receiving operational garbage from ocean going tankers, or any other ocean going ship of 400 gross tons or more.

Routine Uses: The information supplied on the form will be used by and disclosed to Coast Guard personnel. Additionally, the Coast Guard may share the information with law enforcement or other government agencies as necessary to respond to any incidents that may occur as a result of any Marine Pollution by Garbage, or pursuant to its published Privacy Act system of records notice.

Disclosure: Furnishing this information is voluntary; however, failure to furnish the requested information may delay or prevent the issuance of the Certificate of Adequacy (Form CG-5401).

Burden Statement: The Coast Guard estimates that the average burden for this report is 45 minutes. You may submit any comments concerning the accuracy of this burden estimate or any suggestions for reducing the burden to: Commandant (CG-FAC-2), U.S. Coast Guard, 2703 Martin Luther King Jr Ave SE Stop 7501, Washington, DC 20593-7501 or Office of Management and Budget, Paperwork Reduction Project (1625-0045), Washington, DC 20593.

Submit the application to: THE LOCAL CAPTAIN OF THE PORT OFFICE

Section: 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : NALCO® 71D5 PLUS

Other means of identification : Not applicable.

Recommended use : ANTIFOAM

Restrictions on use : Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits.

Company : Nalco Company
1601 W. Diehl Road
Naperville, Illinois 60563-1198
USA
TEL: (630)305-1000

Emergency telephone number : (800) 424-9300 (24 Hours) CHEMTREC

Issuing date : 05/04/2015

Section: 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 4
Acute toxicity (Inhalation) : Category 4
Aspiration hazard : Category 1

GHS Label element

Hazard pictograms : 

Signal Word : Danger

Hazard Statements : Combustible liquid
May be fatal if swallowed and enters airways.
Harmful if inhaled.

Precautionary Statements : **Prevention:**
Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Use only outdoors or in a well-ventilated area. Wear protective gloves/ eye protection/ face protection.
Response:
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. Do NOT induce vomiting. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
Storage:

SAFETY DATA SHEET

NALCO® 71D5 PLUS

Store in a well-ventilated place. Keep cool. Store locked up.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Other hazards : None known.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

Chemical Name	CAS-No.	Concentration: (%)
Straight Run Middle Distillate	64741-44-2	30 - 60
Hydrotreated Light Distillate	64742-47-8	10 - 30
Polypropylene Glycol	25322-69-4	5 - 10
1-Octanol	111-87-5	1 - 5
Fatty Alkyl Polyglycol	Proprietary	1 - 5
Aliphatic alcohol	Proprietary	1 - 5
Paraffin Wax	8002-74-2	1 - 5

Section: 4. FIRST AID MEASURES

In case of eye contact : Rinse with plenty of water. Get medical attention if symptoms occur.

In case of skin contact : Wash off with soap and plenty of water. Get medical attention if symptoms occur.

If swallowed : Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Aspiration hazard if swallowed - can enter lungs and cause damage. Get medical attention immediately.

If inhaled : Get medical attention if symptoms occur.

Protection of first-aiders : In event of emergency assess the danger before taking action. Do not put yourself at risk of injury. If in doubt, contact emergency responders. Use personal protective equipment as required.

Notes to physician : Treat symptomatically.

Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

Section: 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : High volume water jet

Specific hazards during firefighting : Fire Hazard
Keep away from heat and sources of ignition.
Flash back possible over considerable distance.

Hazardous combustion products : Carbon oxides

SAFETY DATA SHEET

NALCO® 71D5 PLUS

Special protective equipment for firefighters : Use personal protective equipment.

Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

Section: 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Remove all sources of ignition. Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Do not allow contact with soil, surface or ground water.

Methods and materials for containment and cleaning up : Eliminate all ignition sources if safe to do so. Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Do not flush into surface water or sanitary sewer system.

Section: 7. HANDLING AND STORAGE

Advice on safe handling : Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Keep away from fire, sparks and heated surfaces. Wash hands thoroughly after handling. Use only with adequate ventilation.

Conditions for safe storage : Keep away from heat and sources of ignition. Keep away from oxidizing agents. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

Suitable material : Keep in properly labelled containers.

Unsuitable material : not determined

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
Hydrotreated Light Distillate	64742-47-8	TWA	500 ppm 2,000 mg/m ³	OSHA Z1
		TWA	200 mg/m ³	ACGIH
		TWA (Mist)	5 mg/m ³	OSHA Z1
		TWA (Mist)	5 mg/m ³	NIOSH REL
		STEL (Mist)	10 mg/m ³	NIOSH REL
Polypropylene Glycol	25322-69-4	TWA (Aerosol.)	10 mg/m ³	WEEL
1-Octanol	111-87-5	TWA	50 ppm	WEEL

SAFETY DATA SHEET

NALCO® 71D5 PLUS

Paraffin Wax	8002-74-2	TWA (Fumes)	2 mg/m3	ACGIH
		TWA (Fumes)	2 mg/m3	NIOSH REL

Engineering measures : Effective exhaust ventilation system Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Eye protection : Safety glasses

Hand protection : Wear protective gloves.
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin protection : Wear suitable protective clothing.

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use.
Wash face, hands and any exposed skin thoroughly after handling.

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquid

Colour : clear

Odour : hydrocarbon-like

Flash point : 92 °C
Method: ASTM D 93, Pensky-Martens closed cup

pH : Not applicable.

Odour Threshold : no data available

Melting point/freezing point : PRECIPITATION POINT: 10 °C
POUR POINT: -45 °C, ASTM D-1177

Initial boiling point and boiling range : 132.2 °C Method: ASTM D 86

Evaporation rate : no data available

Flammability (solid, gas) : no data available

Upper explosion limit : no data available

Lower explosion limit : no data available

Vapour pressure : 5.1 mm Hg (37.8 °C)

Relative vapour density : no data available

Relative density : 0.84 (25 °C) ASTM D-1298

Density : 0.84 g/cm3
7.0 lb/gal

Water solubility : insoluble

Solubility in other solvents : no data available

SAFETY DATA SHEET

NALCO® 71D5 PLUS

Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: no data available
Thermal decomposition temperature	: no data available
Viscosity, dynamic	: 10 mPa.s (22.2 °C) Method: ASTM D 2983
Viscosity, kinematic	: 7.52 mm ² /s (22.2 °C) Method: ASTM D 445
VOC	: 57.9 % EPA Method 24

Section: 10. STABILITY AND REACTIVITY

Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: Heat, flames and sparks.
Incompatible materials	: Oxidizing agents Bases
Hazardous decomposition products	: Oxides of carbon

Section: 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

Potential Health Effects

Eyes	: Health injuries are not known or expected under normal use.
Skin	: May be harmful in contact with skin.
Ingestion	: May be fatal if swallowed and enters airways.
Inhalation	: Health injuries are not known or expected under normal use.
Chronic Exposure	: Health injuries are not known or expected under normal use.

Experience with human exposure

Eye contact	: No symptoms known or expected.
Skin contact	: No symptoms known or expected.
Ingestion	: Vomiting
Inhalation	: No symptoms known or expected.

Toxicity

SAFETY DATA SHEET

NALCO® 71D5 PLUS

Product

Acute oral toxicity	: LD50 rat: > 15,380 mg/kg Test substance: Similar Product
Acute inhalation toxicity	: Acute toxicity estimate : 3.38 mg/l Exposure time: 4 h
Acute dermal toxicity	: LD50 rabbit: > 3,038 mg/kg Test substance: Similar Product
Skin corrosion/irritation	: Species: Rabbit Result: 3.1 Method: Draize Test Test substance: Similar Product
Serious eye damage/eye irritation	: Species: rabbit Result: 6.0 Method: Draize Test Test substance: Similar Product
Respiratory or skin sensitization	: no data available
Carcinogenicity	
IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
Reproductive effects	: no data available
Germ cell mutagenicity	: no data available
Teratogenicity	: no data available
STOT - single exposure	: no data available
STOT - repeated exposure	: no data available
Aspiration toxicity	: no data available

Section: 12. ECOLOGICAL INFORMATION

Ecotoxicity

Environmental Effects : Toxic to aquatic life with long lasting effects.

SAFETY DATA SHEET

NALCO® 71D5 PLUS

Product

Toxicity to fish : LC50 *Oncorhynchus mykiss* (rainbow trout): 310 mg/l
Exposure time: 96 hrs
Test substance: Product

LC50 *Pimephales promelas* (fathead minnow): 190 mg/l
Exposure time: 96 hrs
Test substance: Similar Product

NOEC *Oncorhynchus mykiss* (rainbow trout): < 78 mg/l
Exposure time: 96 hrs
Test substance: Product

NOEC *Pimephales promelas* (fathead minnow): 100 mg/l
Exposure time: 96 hrs
Test substance: Similar Product

Toxicity to daphnia and other aquatic invertebrates : LC50 *Daphnia magna* (Water flea): 220 mg/l
Exposure time: 48 hrs
Test substance: Product

LC50 *Ceriodaphnia dubia*: 4.32 mg/l
Exposure time: 48 hrs
Test substance: Similar Product

EC50 *Daphnia magna* (Water flea): 130 mg/l
Exposure time: 48 hrs
Test substance: Product

NOEC *Daphnia magna* (Water flea): 16 mg/l
Exposure time: 48 hrs
Test substance: Product

NOEC *Ceriodaphnia dubia*: 2.50 mg/l
Exposure time: 48 hrs
Test substance: Similar Product

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 1.5 mg/l
Exposure time: 7 d
Species: *Ceriodaphnia dubia*
Test substance: Product

LOEC: 3.0 mg/l
Exposure time: 7 d
Species: *Ceriodaphnia dubia*
Test substance: Product

NOEC: 0.19 mg/l
Exposure time: 7 d
Species: *Ceriodaphnia dubia*
Test substance: Product

LOEC: 0.38 mg/l
Exposure time: 7 d
Species: *Ceriodaphnia dubia*
Test substance: Product

EC25 / IC25: 0.40 mg/l
Exposure time: 7 d

SAFETY DATA SHEET

NALCO® 71D5 PLUS

Species: Ceriodaphnia dubia
Test substance: Product

Components

Toxicity to algae : Hydrotreated Light Distillate
EC50 : > 1,000 mg/l
Exposure time: 48 h

Components

Toxicity to bacteria : Hydrotreated Light Distillate
> 1,000 mg/l

Persistence and degradability

The organic portion of this preparation is expected to be inherently biodegradable.

Total Organic Carbon (TOC) : 195,870 mg/l

Chemical Oxygen Demand (COD): 2,200,000 mg/l

Biochemical Oxygen Demand (BOD):		Test Descriptor Product
Incubation Period	Value	
	102,440 mg/l	
OECD 301 D (Closed Bottle) 28 Day	70-80%	

Mobility

The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models.

If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

Air	: 10 - 30%
Water	: 30 - 50%
Soil	: 30 - 50%

The portion in water is expected to be soluble or dispersible.

Bioaccumulative potential

This preparation or material is not expected to bioaccumulate.

Other information

no data available

Section: 13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it is not a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261, since it does not have the characteristics of Subpart C, nor is it listed under Subpart D.

Disposal methods : The product should not be allowed to enter drains, water courses or the soil. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in

SAFETY DATA SHEET

NALCO® 71D5 PLUS

an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)

For Packages Less Than Or Equal To 119 Gallons:

Proper shipping name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

For Packages Greater Than 119 Gallons:

Proper shipping name : COMBUSTIBLE LIQUID, N.O.S.
Technical name(s) : PETROLEUM HYDROCARBON
UN/ID No. : NA 1993
Hazard Class - Primary : COMBUSTIBLE LIQUID
Packing group : III

Air transport (IATA)

Proper shipping name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

Sea transport (IMDG/IMO)

Proper shipping name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

Section: 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Naphthalene	91-20-3	100	139860

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Fire Hazard
Acute Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SAFETY DATA SHEET

NALCO® 71D5 PLUS

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

INTERNATIONAL CHEMICAL CONTROL LAWS :

TOXIC SUBSTANCES CONTROL ACT (TSCA)

The substances in this preparation are included on or exempted from the TSCA 8(b) Inventory (40 CFR 710)

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA)

The substance(s) in this preparation are included in or exempted from the Domestic Substance List (DSL).

AUSTRALIA

All substances in this product comply with the National Industrial Chemicals Notification & Assessment Scheme (NICNAS).

CHINA

All substances in this product comply with the Provisions on the Environmental Administration of New Chemical Substances and are listed on or exempt from the Inventory of Existing Chemical Substances China (IECSC).

EUROPE

The substances in this preparation have been reviewed for compliance with the EINECS or ELINCS inventories.

JAPAN

All substances in this product comply with the Law Regulating the Manufacture and Importation Of Chemical Substances and are listed on the Existing and New Chemical Substances list (ENCS).

KOREA

All substances in this product comply with the Toxic Chemical Control Law (TCCL) and are listed on the Existing Chemicals List (ECL)

NEW ZEALAND

All substances in this product comply with the Hazardous Substances and New Organisms (HSNO) Act 1996, and are listed on or are exempt from the New Zealand Inventory of Chemicals.

PHILIPPINES

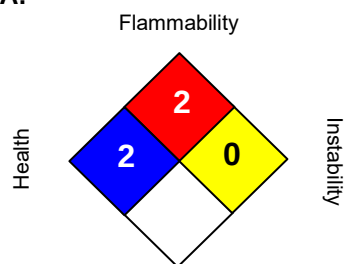
All substances in this product comply with the Republic Act 6969 (RA 6969) and are listed on the Philippines Inventory of Chemicals & Chemical Substances (PICCS).

Section: 16. OTHER INFORMATION

SAFETY DATA SHEET

NALCO® 71D5 PLUS

NFPA:



HMIS III:

HEALTH	2
FLAMMABILITY	2
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Revision Date : 05/04/2015
Version Number : 1.2
Prepared By : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

For additional copies of an MSDS visit www.nalco.com and request access.

Section: 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : PERMACLEAN® PC-56

Other means of identification : Not applicable.

Restrictions on use : Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits.

Company : Nalco Company
1601 W. Diehl Road
Naperville, Illinois 60563-1198
USA
TEL: (630)305-1000

Emergency telephone number : (800) 424-9300 (24 Hours) CHEMTREC

Issuing date : 11/21/2014

Section: 2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity (Inhalation) : Category 4
Skin corrosion : Category 1A
Serious eye damage/eye irritation : Category 1
Skin sensitization : Category 1

GHS Label element

Hazard pictograms : 

Signal Word : Danger

Hazard Statements : Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Harmful if inhaled.

Precautionary Statements : **Prevention:**
Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

SAFETY DATA SHEET

PERMACLEAN® PC-56

Continue rinsing. Immediately call a POISON CENTER or doctor/physician. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Storage:

Store locked up.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Other hazards : None known.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

Chemical Name	CAS-No.	Concentration: (%)
Magnesium Nitrate	10377-60-3	1 - 5
5-Chloro-2-Methyl-4-Isothiazolin-3-one	26172-55-4	1 - 5
2-Methyl-4-Isothiazolin-3-one	2682-20-4	0.1 - 1

Section: 4. FIRST AID MEASURES

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

If swallowed : Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention.

Protection of first-aiders : In event of emergency assess the danger before taking action. Do not put yourself at risk of injury. If in doubt, contact emergency responders. Use personal protective equipment as required.

Notes to physician : Treat symptomatically.

Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

Section: 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : None known.

Specific hazards during firefighting : Not flammable or combustible.

SAFETY DATA SHEET

PERMACLEAN® PC-56

- Hazardous combustion products : Carbon oxides
- Special protective equipment for firefighters : Use personal protective equipment.
- Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

Section: 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Do not allow contact with soil, surface or ground water.
- Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. DEACTIVATION SOLUTION - prepare a fresh solution of 5% sodium bicarbonate and 5% sodium hypochlorite in water (i.e. add 50 grams of sodium bicarbonate per 1 liter of household bleach, seal container then shake well for 1 minute) away from the immediate area of spill. Prepare 10 times the estimated volume of the residual spill. The materials and equipment for preparing solutions should be kept available for use in areas where spills may occur.

Section: 7. HANDLING AND STORAGE

- Advice on safe handling : Do not ingest. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wash hands thoroughly after handling. Use only with adequate ventilation.
- Conditions for safe storage : Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.
- Suitable material : HDPE (high density polyethylene), PTFE, Polyvinylidene difluoride, Polypropylene, Plexiglass, Perfluoroelastomer, CPVC (rigid), Buna-N
Keep in properly labelled containers.
- Unsuitable material : The following compatibility data is suggested based on similar product data and/or industry experience: Shipping and long term storage compatibility with construction materials can vary; we therefore recommend that compatibility is tested prior to use.

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

SAFETY DATA SHEET

PERMACLEAN® PC-56

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : Effective exhaust ventilation system Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Eye protection : Safety goggles
Face-shield

Hand protection : Wear the following personal protective equipment:
Standard glove type.
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin protection : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquid

Colour : colourless

Odour : Mild

Flash point : Not applicable.

pH : 2.0 - 5.0, 100 %
(25 °C)

Odour Threshold : no data available

Melting point/freezing point : FREEZING POINT: -4 °C, ASTM D-1177

Initial boiling point and boiling range : 100 °C Method: ASTM D 86

Evaporation rate : no data available

Flammability (solid, gas) : no data available

Upper explosion limit : no data available

Lower explosion limit : no data available

Vapour pressure : similar to water

Relative vapour density : no data available

Relative density : 1.026 (25 °C)

Density : 8.5 lb/gal

SAFETY DATA SHEET

PERMACLEAN® PC-56

Water solubility	: completely soluble
Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: no data available
Thermal decomposition temperature	: no data available
Viscosity, dynamic	: no data available
Viscosity, kinematic	: 3 mm ² /s (20 °C)
VOC	: 0.80 % 8.39 g/l

Section: 10. STABILITY AND REACTIVITY

Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: None known.
Incompatible materials	: Contact with strong oxidizers (e.g. chlorine, peroxides, chromates, nitric acid, perchlorate, concentrated oxygen, permanganate) may generate heat, fires, explosions and/or toxic vapors.
Hazardous decomposition products	: Oxides of carbon Oxides of nitrogen Oxides of sulfur HCl

Section: 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

Potential Health Effects

Eyes	: Causes serious eye damage.
Skin	: Causes severe skin burns. May cause allergic skin reaction.
Ingestion	: Causes digestive tract burns.
Inhalation	: Harmful if inhaled. May cause nose, throat, and lung irritation.
Chronic Exposure	: Health injuries are not known or expected under normal use.

Experience with human exposure

Eye contact	: Redness, Pain, Corrosion
Skin contact	: Redness, Pain, Irritation, Corrosion, Allergic reactions
Ingestion	: Corrosion, Abdominal pain

SAFETY DATA SHEET

PERMACLEAN® PC-56

Inhalation : Respiratory irritation, Cough

Toxicity

Product

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg

Acute inhalation toxicity : LC50 rat: 13.7 mg/l
Exposure time: 4 hrs
Test substance: Product

Acute dermal toxicity : no data available

Skin corrosion/irritation : no data available

Serious eye damage/eye irritation : no data available

Respiratory or skin sensitization : no data available

Carcinogenicity : no data available

Reproductive effects : no data available

Germ cell mutagenicity : no data available

Teratogenicity : no data available

STOT - single exposure : no data available

STOT - repeated exposure : no data available

Aspiration toxicity : no data available

Components

Acute dermal toxicity : Magnesium Nitrate
LD50 rat: > 5,000 mg/kg

5-Chloro-2-Methyl-4-Isothiazolin-3-one
LD50 rabbit: 200 mg/kg

2-Methyl-4-Isothiazolin-3-one
LD50 rabbit: 200 mg/kg

Section: 12. ECOLOGICAL INFORMATION

Ecotoxicity

Environmental Effects : Very toxic to aquatic life.

Product

Toxicity to fish : LC50 Cyprinodon variegatus (sheepshead minnow): 32.000

SAFETY DATA SHEET

PERMACLEAN® PC-56

mg/l
Exposure time: 96 hrs
Test substance: Product

LC50 Pimephales promelas (fathead minnow): 8 mg/l
Exposure time: 144 hrs
Test substance: Product (estimated)

LC50 Lepomis macrochirus (Bluegill sunfish): 18.67 mg/l
Exposure time: 96 hrs
Test substance: Product

LC50 Rainbow Trout: 12.67 mg/l
Exposure time: 96 hrs
Test substance: Product

LC50 Inland Silverside: 16.62 mg/l
Exposure time: 96 hrs
Test substance: Product

LC50 Cyprinodon variegatus (sheepshead minnow): 0.3 mg/l
Exposure time: 96 hrs
Test substance: Active Substance

Product

Toxicity to daphnia and other aquatic invertebrates : LC50 Mysid Shrimp (Mysidopsis bahia): 18.000 mg/l
Exposure time: 96 hrs
Test substance: Product

LC50 Ceriodaphnia dubia: 13 mg/l
Exposure time: 48 hrs
Test substance: Product

LC50 Daphnia magna (Water flea): 8.7 - 12 mg/l
Exposure time: 48 hrs
Test substance: Product (estimated)

LC50 Blue Mussel: 865 mg/l
Exposure time: 48 hrs
Test substance: Product (estimated)

LC50 American Oyster: 1,730 mg/l
Exposure time: 48 hrs
Test substance: Product (estimated)

SAFETY DATA SHEET

PERMACLEAN® PC-56

Product

Toxicity to algae : EC50 Marine Algae (*Skeletonema costatum*): 0.003 mg/l
Exposure time: 72 h
Test substance: Active Substance

EC50 Green Algae (*Pseudokirchneriella subcapitata*,
previously *Selenastrum capricornutum*): 0.018 mg/l
Exposure time: 72 h
Test substance: Active Substance

Product

Toxicity to terrestrial organisms : LC50 Pekin Duck: > 100 mg/kg
Exposure time: 8 Days
Test substance: Active Substance

LC50 Bobwhite Quail: 85 mg/kg
Exposure time: 21 Days
Test substance: Active Substance

LC50 Bobwhite Quail: > 60 mg/kg
Exposure time: 8 Days
Test substance: Active Substance

Persistence and degradability

The degradation of the major active substance begins with ring opening and elimination of chloride ion. Degradation leads to the formation of a variety of small organic acids, methylamine, carbon dioxide and elemental sulfur. The half life of each active substance is dependent upon the initial concentration.

Total Organic Carbon (TOC) : 7,850 mg/l

Chemical Oxygen Demand (COD): 20,000 mg/l

Biochemical Oxygen Demand (BOD):	
Incubation Period	Value
	20 mg/l
	Test Descriptor

Mobility

The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models.

If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

Air	: <5%
Water	: 30 - 50%
Soil	: 50 - 70%

The portion in water is expected to be soluble or dispersible.

Bioaccumulative potential

SAFETY DATA SHEET

PERMACLEAN® PC-56

This preparation or material is not expected to bioaccumulate.

Other information

no data available

Section: 13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it could meet the criteria of a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Before disposal, it should be determined if the waste meets the criteria of a hazardous waste.

Disposal methods : The product should not be allowed to enter drains, water courses or the soil. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)

The presence of an RQ component (Reportable Quantity for U.S. EPA and DOT) in this product causes it to be regulated with an additional description of RQ for road, or as a class 9 for road and air, ONLY when the net weight in the package exceeds the calculated RQ for the product.

Proper shipping name : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Technical name(s) : ISOTHIAZOLINONE MICROBIOCIDES
UN/ID No. : UN 3265
Transport hazard class(es) : 8
Packing group : II
Reportable Quantity (per package) : 132,270 lbs
RQ Component : CUPRIC NITRATE

Air transport (IATA)

The presence of an RQ component (Reportable Quantity for U.S. EPA and DOT) in this product causes it to be regulated with an additional description of RQ for road, or as a class 9 for road and air, ONLY when the net weight in the package exceeds the calculated RQ for the product.

Proper shipping name : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Technical name(s) : ISOTHIAZOLINONE MICROBIOCIDES
UN/ID No. : UN 3265
Transport hazard class(es) : 8
Packing group : II
Reportable Quantity (per package) : 132,270 lbs
RQ Component : CUPRIC NITRATE

Sea transport (IMDG/IMO)

SAFETY DATA SHEET

PERMACLEAN® PC-56

Proper shipping name : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Technical name(s) : ISOTHIAZOLINONE MICROBIOCIDIC
UN/ID No. : UN 3265
Transport hazard class(es) : 8
Packing group : II

*Marine pollutant : ISOTHIAZOLINONE MICROBIOCIDIC

*Note: This product is regulated as a Marine Pollutant when shipped by Rail, Highway (in bulk quantities), or Air (if no other hazard class applies), and when shipped by water in all quantities.

Section: 15. REGULATORY INFORMATION

EPA Reg. No. : 1706-183

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Cupric Nitrate	3251-23-8	100	132275

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Acute Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

INTERNATIONAL CHEMICAL CONTROL LAWS :

TOXIC SUBSTANCES CONTROL ACT (TSCA)

This product is exempted under TSCA and regulated under FIFRA. The inerts are on the Inventory List.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA)

Substances regulated under the Pest Control Products Act are exempt from CEPA New Substance Notification requirements.

AUSTRALIA

All substances in this product comply with the National Industrial Chemicals Notification & Assessment Scheme (NICNAS).

CHINA

All substances in this product comply with the Provisions on the Environmental Administration of New Chemical Substances and are listed on or exempt from the Inventory of Existing Chemical Substances China (IECSC).

SAFETY DATA SHEET

PERMACLEAN® PC-56

EUROPE

The substances in this preparation have been reviewed for compliance with the EINECS or ELINCS inventories.

JAPAN

All substances in this product comply with the Law Regulating the Manufacture and Importation Of Chemical Substances and are listed on the Existing and New Chemical Substances list (ENCS).

KOREA

All substances in this product comply with the Toxic Chemical Control Law (TCCL) and are listed on the Existing Chemicals List (ECL)

NEW ZEALAND

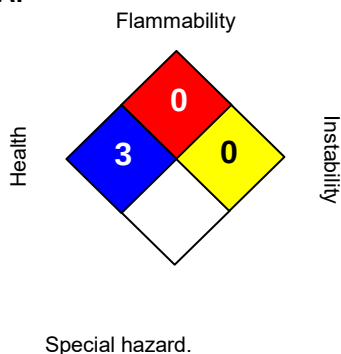
All substances in this product comply with the Hazardous Substances and New Organisms (HSNO) Act 1996, and are listed on or are exempt from the New Zealand Inventory of Chemicals.

PHILIPPINES

All substances in this product comply with the Republic Act 6969 (RA 6969) and are listed on the Philippines Inventory of Chemicals & Chemical Substances (PICCS).

Section: 16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Revision Date : 11/21/2014
Version Number : 1.1
Prepared By : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

For additional copies of an MSDS visit www.nalco.com and request access.

Section: 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : PERMATREAT™ PC-191T

Other means of identification : Not applicable.

Recommended use : REVERSE OSMOSIS ANTISCALANT

Restrictions on use : Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits.

Company : Nalco Company
1601 W. Diehl Road
Naperville, Illinois 60563-1198
USA
TEL: (630)305-1000

Emergency telephone number : (800) 424-9300 (24 Hours) CHEMTREC

Issuing date : 11/03/2015

Section: 2. HAZARDS IDENTIFICATION

GHS Classification

Not a hazardous substance or mixture.

GHS Label element

Precautionary Statements : **Prevention:**
Wash hands thoroughly after handling.
Response:
Specific measures: consult SDS Section 4.
Storage:
Store in accordance with local regulations.

Other hazards : None known.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

No hazardous ingredients

Section: 4. FIRST AID MEASURES

In case of eye contact : Rinse with plenty of water. Get medical attention if symptoms occur.

In case of skin contact : Wash off with soap and plenty of water. Get medical attention if symptoms occur.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Get medical attention if symptoms occur.

Protection of first-aiders : In event of emergency assess the danger before taking action. Do not put

SAFETY DATA SHEET

PERMATREAT™ PC-191T

yourself at risk of injury. If in doubt, contact emergency responders. Use personal protective equipment as required.

Notes to physician : Treat symptomatically.

Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

Section: 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : None known.

Specific hazards during firefighting : Not flammable or combustible.

Hazardous combustion products : Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus

Special protective equipment for firefighters : Use personal protective equipment.

Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Section: 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.

Environmental precautions : No special environmental precautions required.

Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Flush away traces with water.

Section: 7. HANDLING AND STORAGE

Advice on safe handling : For personal protection see section 8. Wash hands after handling.

Conditions for safe storage : Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

SAFETY DATA SHEET

PERMATREAT™ PC-191T

- Suitable material : The following compatibility data is suggested based on similar product data and/or industry experience: HDPE (high density polyethylene), Stainless Steel 304, Polyethylene (rigid), Polypropylene (rigid), CPVC (rigid), 100% phenolic resin liner, Epoxy phenolic resin, coated steel
- Unsuitable material : The following compatibility data is suggested based on similar product data and/or industry experience: Brass, Buna-N, EPDM, Neoprene, Polyurethane, Fluoroelastomer, Chlorosulfonated polyethylene rubber, Shipping and long term storage compatibility with construction materials can vary; we therefore recommend that compatibility is tested prior to use.

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

- Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal protective equipment

- Eye protection : Safety glasses
- Hand protection : Wear protective gloves.
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
- Skin protection : Wear suitable protective clothing.
- Respiratory protection : No personal respiratory protective equipment normally required.
- Hygiene measures : Wash hands before breaks and immediately after handling the product.

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : Liquid
- Colour : Clear, yellow to amber greenish
- Odour : Ammoniacal
- Flash point : > 93.3 °C
- pH : 10.0 - 11.5, 1 %
(25 °C)
- Odour Threshold : no data available
- Melting point/freezing point : no data available
- Initial boiling point and boiling range : no data available
- Evaporation rate : no data available

SAFETY DATA SHEET

PERMATREAT™ PC-191T

Flammability (solid, gas)	: no data available
Upper explosion limit	: no data available
Lower explosion limit	: no data available
Vapour pressure	: no data available
Relative vapour density	: no data available
Relative density	: 1.335 - 1.362 (15.6 °C)
Density	: 1.127 g/cm ³ 11.3 lb/gal
Water solubility	: completely soluble
Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: Pow: 3.5 log Pow: 0.544
Auto-ignition temperature	: no data available
Thermal decomposition temperature	: no data available
Viscosity, dynamic	: no data available
Viscosity, kinematic	: no data available
Molecular weight	: no data available
VOC	: 0 % Calculation method

Section: 10. STABILITY AND REACTIVITY

Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: Freezing temperatures.
Incompatible materials	: Strong oxidizing agents Strong acids
Hazardous decomposition products	: Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NO _x) Sulphur oxides Oxides of phosphorus

Section: 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

Potential Health Effects

Eyes : Health injuries are not known or expected under normal use.

SAFETY DATA SHEET

PERMATREAT™ PC-191T

Skin : Health injuries are not known or expected under normal use.

Ingestion : Health injuries are not known or expected under normal use.

Inhalation : Health injuries are not known or expected under normal use.

Chronic Exposure : Health injuries are not known or expected under normal use.

Experience with human exposure

Eye contact : No symptoms known or expected.

Skin contact : No symptoms known or expected.

Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

Toxicity

Product

Acute oral toxicity : LD50 rat: > 17,800 mg/kg
Test substance: Similar Product

Acute inhalation toxicity : no data available

Acute dermal toxicity : LD50 rabbit: > 15,800 mg/kg
Test substance: Similar Product

Skin corrosion/irritation : Species: Rabbit
Exposure time: 24 hrs
Result: 0.3
Method: Draize Test
Test substance: Similar Product

Serious eye damage/eye irritation : Species: rabbit
Exposure time: 24 hrs
Result: 3.7
Method: Draize Test
Test substance: Similar Product

Respiratory or skin sensitization : no data available

Carcinogenicity : no data available

Reproductive effects : no data available

Germ cell mutagenicity : no data available

Teratogenicity : no data available

SAFETY DATA SHEET

PERMATREAT™ PC-191T

STOT - single exposure : no data available

STOT - repeated exposure : no data available

Aspiration toxicity : no data available

Section: 12. ECOLOGICAL INFORMATION

Ecotoxicity

Environmental Effects : This product has no known ecotoxicological effects.

Product

Toxicity to fish : LC50 *Oncorhynchus mykiss* (rainbow trout): > 330 mg/l
Exposure time: 96 hrs
Test substance: Similar Product

LC50 *Cyprinodon variegatus* (sheepshead minnow): 8,132 mg/l
Exposure time: 96 hrs
Test substance: Similar Product

LC50 *Lepomis macrochirus* (Bluegill sunfish): > 330 mg/l
Exposure time: 96 hrs
Test substance: Similar Product

LC50 *Ictalurus punctatus* (channel catfish): 1,212 mg/l
Exposure time: 96 hrs
Test substance: Similar Product

LC50 *Oncorhynchus mykiss* (rainbow trout): 4,530 mg/l
Exposure time: 96 hrs
Test substance: Product
Test Type: Static

NOEC *Oncorhynchus mykiss* (rainbow trout): 3,600 mg/l
Exposure time: 96 hrs
Test substance: Product
Test Type: Static

LC50 Inland Silverside: > 10,000 mg/l
Exposure time: 96 h
Test substance: Product

NOEC Inland Silverside: 10,000 mg/l
Exposure time: 96 h
Test substance: Product

Toxicity to daphnia and other aquatic invertebrates : LC50 Grass Shrimp: 4,575 mg/l
Exposure time: 96 hrs
Test substance: Similar Product

LC50 *Daphnia magna* (Water flea): 1,673 mg/l

SAFETY DATA SHEET

PERMATREAT™ PC-191T

Exposure time: 48 hrs
Test substance: Product
Test Type: Static

EC50 Daphnia magna (Water flea): 297 mg/l
Exposure time: 48 hrs
Test substance: Similar Product

NOEC Daphnia magna (Water flea): 1,296 mg/l
Exposure time: 48 hrs
Test substance: Product
Test Type: Static

LC50 Mysid Shrimp (Mysidopsis bahia): 8,263 mg/l
Exposure time: 96 h
Test substance: Product

NOEC Mysid Shrimp (Mysidopsis bahia): 6,000 mg/l
Exposure time: 96 h
Test substance: Product

Toxicity to algae : LC50 Green Algae (*Pseudokirchneriella subcapitata*,
previously *Selenastrum capricornutum*): 20 mg/l
Exposure time: 96 hrs
Test substance: Similar Product

Toxicity to fish (Chronic toxicity) : LOEC: 47.6 mg/l
Exposure time: 60 Days
Species: *Oncorhynchus mykiss* (rainbow trout)
Test substance: Similar Product

NOEC: 23 mg/l
Exposure time: 60 Days
Species: *Oncorhynchus mykiss* (rainbow trout)
Test substance: Similar Product

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : LOEC: 50 mg/l
Exposure time: 28 Days
Species: *Daphnia magna*
Test substance: Similar Product
Test Type: 3 Brood

NOEC: 25 mg/l
Exposure time: 28 Days
Species: *Daphnia magna*
Test substance: Similar Product
Test Type: 3 Brood

Toxicity to terrestrial organisms : LC50 Bobwhite Quail: > 2,510 mg/kg
Exposure time: 14 Days
Test substance: Similar Product

LC50 Mallard Duck: > 2,510 mg/kg
Exposure time: 14 Days
Test substance: Similar Product

SAFETY DATA SHEET

PERMATREAT™ PC-191T

Persistence and degradability

Total Organic Carbon (TOC) : 65,000 mg/l

Mobility

The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models.

If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

Air	: <5%
Water	: 30 - 50%
Soil	: 50 - 70%

The portion in water is expected to be soluble or dispersible.

Bioaccumulative potential

This preparation or material is not expected to bioaccumulate.

Other information

no data available

Section: 13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it is not a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261, since it does not have the characteristics of Subpart C, nor is it listed under Subpart D.

Disposal methods : Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)

Proper shipping name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

Air transport (IATA)

SAFETY DATA SHEET

PERMATREAT™ PC-191T

Proper shipping name : PRODUCT IS NOT REGULATED DURING
TRANSPORTATION

Sea transport (IMDG/IMO)

Proper shipping name : PRODUCT IS NOT REGULATED DURING
TRANSPORTATION

Section: 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

INTERNATIONAL CHEMICAL CONTROL LAWS :

TOXIC SUBSTANCES CONTROL ACT (TSCA)

The substances in this preparation are included on or exempted from the TSCA 8(b) Inventory (40 CFR 710)

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA)

The substance(s) in this preparation are included in or exempted from the Domestic Substance List (DSL).

AUSTRALIA

All substances in this product comply with the National Industrial Chemicals Notification & Assessment Scheme (NICNAS).

CHINA

All substances in this product comply with the Provisions on the Environmental Administration of New Chemical Substances and are listed on or exempt from the Inventory of Existing Chemical Substances China (IECSC).

JAPAN

All substances in this product comply with the Law Regulating the Manufacture and Importation Of Chemical Substances and are listed on the Existing and New Chemical Substances list (ENCS).

SAFETY DATA SHEET

PERMATREAT™ PC-191T

KOREA

All substances in this product comply with the Toxic Chemical Control Law (TCCL) and are listed on the Existing Chemicals List (ECL)

NEW ZEALAND

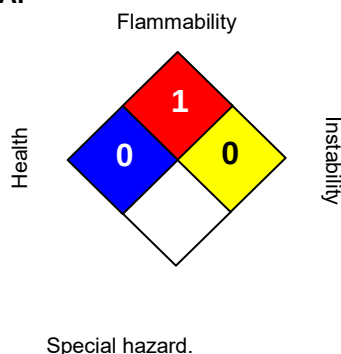
All substances in this product comply with the Hazardous Substances and New Organisms (HSNO) Act 1996, and are listed on or are exempt from the New Zealand Inventory of Chemicals.

PHILIPPINES

All substances in this product comply with the Republic Act 6969 (RA 6969) and are listed on the Philippines Inventory of Chemicals & Chemical Substances (PICCS).

Section: 16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	0
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Revision Date : 11/03/2015
Version Number : 1.1
Prepared By : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. For additional copies of an SDS visit www.nalco.com and request access.

Safety Data Sheet

According to OSHA HCS 2012 (29 CFR 1910.1200)



SECTION 1: Identification

Product Identifier	Unbranded Conventional Gasoline
Other means of identification	Gasoline, Unleaded, Conventional (All Grades) Gasoline, Low Sulfur Unleaded (All Grades) Gasoline Treated as Blendstock (GTAB)
SDS Number	724020
MARPOL Annex I Category	Gasoline and Spirits
Relevant identified uses	Fuel
Uses advised against	All others
24 Hour Emergency Phone Number	CHEMTREC 1-800-424-9300 CANUTEC 613-996-6666 CHEMTREC Mexico 01-800-681-9531

Manufacturer/Supplier	SDS Information
Phillips 66 Company	Phone: 800-762-0942
P.O. Box 4428	Email: SDS@P66.com
Houston, Texas 77210	URL: www.Phillips66.com

SECTION 2: Hazard identification

Classified Hazards	Hazards Not Otherwise Classified (HNOC)
H224 -- Flammable liquids -- Category 1 H304 -- Aspiration Hazard -- Category 1 H315 -- Skin corrosion/irritation -- Category 2 H336 -- Specific target organ toxicity (single exposure) -- Category 3 H350 -- Carcinogenicity -- Category 1B H411 -- Hazardous to the aquatic environment, chronic toxicity -- Category 2	PHNOC: Electrostatic charge may be generated during pumping and other operations HHNOC: None known

Label Elements



DANGER

Extremely flammable liquid and vapor
May be fatal if swallowed and enters airways
Causes skin irritation
May cause drowsiness or dizziness
May cause cancer
Toxic to aquatic life with long lasting effects



Obtain special instructions before use; Do not handle until all safety precautions have been read and understood; Keep away from heat/sparks/open flames/hot surfaces. - No smoking; Keep container tightly closed; Ground/bond container and receiving equipment; Use only non-sparking tools; Take precautionary measures against static discharge; Avoid breathing dust/fume/gas/mist/vapours/spray; Wash skin thoroughly after handling; Use only outdoors or in a well-ventilated area; Avoid release to the environment; Wear protective gloves/protective clothing and eye/face protection; IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician; Do NOT induce vomiting; IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower; IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing; Call a POISON CENTER or doctor/physician if you feel unwell; Take off contaminated clothing and wash before reuse; In case of fire: Use CO₂, dry chemical, or foam for extinction; Collect spillage; Dispose of contents/container to an approved waste disposal plant

SECTION 3: Composition/information on ingredients

Chemical Name	CASRN	Concentration ¹
Gasoline	NONE	100
Toluene	108-88-3	0-35
Xylenes (o-, m-, p- isomers)	1330-20-7	0-15
Benzene	71-43-2	0-5
n-Hexane	110-54-3	0-5
Ethylbenzene	100-41-4	0-5

¹ All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

SECTION 4: First aid measures

Eye Contact: If irritation or redness develops from exposure, flush eyes with clean water. If symptoms persist, seek medical attention.

Skin Contact: Remove contaminated shoes and clothing, and flush affected area(s) with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. If skin surface is not damaged, cleanse affected area(s) thoroughly by washing with mild soap and water or a waterless hand cleaner. If irritation or redness develops, seek medical attention. Wash contaminated clothing before reuse. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician. (see Note to Physician)

Inhalation: If respiratory symptoms develop, move victim away from source of exposure and into fresh air in a position comfortable for breathing. If breathing is difficult, oxygen or artificial respiration should be administered by qualified personnel. If symptoms persist, seek medical attention.

Ingestion: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. If victim is drowsy or unconscious and vomiting, place on the left side with the head down. If possible, do not leave victim unattended and observe closely for adequacy of breathing. Seek medical attention.

Most important symptoms and effects, both acute and delayed: Effects of overexposure can include slight irritation of the respiratory tract, nausea, vomiting, and signs of nervous system depression (e.g., headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue). Continued exposure to high concentrations can result in vomiting, cardiac irregularities and sudden loss of consciousness. Prolonged or repeated contact may dry skin and cause irritation

Notes to Physician: Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to high concentrations of hydrocarbon solvents (e.g., in enclosed spaces or with deliberate abuse). The use of other drugs with less arrhythmogenic potential should be considered. If sympathomimetic drugs are administered, observe for the development of cardiac arrhythmias.

When using high-pressure equipment, injection of product under the skin can occur. In this case, the casualty should be sent immediately to the hospital. Do not wait for symptoms to develop. High-pressure hydrocarbon injection injuries may produce substantial necrosis of underlying tissue despite an innocuous appearing external wound. These injuries often require extensive emergency surgical debridement and all injuries should be evaluated by a specialist in order to assess the extent of injury. Early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

Federal regulations (29 CFR 1910.1028) specify medical surveillance programs for certain exposures to benzene above the action level or PEL (specified in Section (i)(1)(i) of the Standard). In addition, employees exposed in an emergency situation shall, as described in Section (i)(4)(i), provide a urine sample at the end of the shift for measurement of urine phenol.

SECTION 5: Firefighting measures

NFPA 704 Hazard Class

Health: 1 Flammability: 3 Instability: 0



0 (Minimal)
1 (Slight)
2 (Moderate)
3 (Serious)
4 (Severe)

Extinguishing Media: Dry chemical, carbon dioxide, or foam is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Water may be ineffective for extinguishment, unless used under favorable conditions by experienced fire fighters.

Specific hazards arising from the chemical

Unusual Fire & Explosion Hazards: Extremely flammable This material can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe) Vapors may travel considerable distances to a source of ignition where they can ignite, flash back, or explode. May create vapor/air explosion hazard indoors, in confined spaces, outdoors, or in sewers. This product will float and can be reignited on surface water. Vapors are heavier than air and can accumulate in low areas. If container is not properly cooled, it can rupture in the heat of a fire.

Hazardous Combustion Products: Combustion may yield smoke, carbon monoxide, and other products of incomplete combustion. Oxides of nitrogen and sulfur may also be formed.

Special protective actions for firefighters: For fires beyond the initial stage, emergency responders in the immediate hazard area should wear protective clothing. When the potential chemical hazard is unknown, in enclosed or confined spaces, a self contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

Isolate the hazard area and deny entry to unnecessary and unprotected personnel Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done safely. Avoid spreading burning liquid with water used for cooling purposes.

See Section 9 for Flammable Properties including Flash Point and Flammable (Explosive) Limits

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures: Extremely flammable Spillages of liquid product will create a fire hazard and may form an explosive atmosphere. Keep all sources of ignition and hot metal surfaces away from spill/release if safe to do so. The use of explosion-proof electrical equipment is recommended. Stay upwind and away from spill/release. Avoid direct contact with material. For large spillages, notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Wear appropriate protective equipment, including respiratory protection, as conditions warrant (see Section 8). See Sections 2 and 7 for additional information on hazards and precautionary measures.

Environmental Precautions: Stop and contain spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Use foam on spills to minimize vapors Use water sparingly to minimize environmental contamination and reduce disposal requirements. If spill occurs on water notify appropriate authorities and advise shipping of any hazard. Spills into or upon navigable waters, the contiguous zone, or adjoining shorelines that cause a sheen or discoloration on the surface of the water, may require notification of the National Response Center (phone number 800-424-8802).

Methods and material for containment and cleaning up: Notify relevant authorities in accordance with all applicable regulations. Immediate cleanup of any spill is recommended. Dike far ahead of spill for later recovery or disposal. Absorb spill with inert material such as sand or vermiculite, and place in suitable container for disposal. If spilled on water remove with appropriate methods (e.g. skimming, booms or absorbents). In case of soil contamination, remove contaminated soil for remediation or disposal, in accordance with local regulations.

Recommended measures are based on the most likely spillage scenarios for this material; however local conditions and regulations may influence or limit the choice of appropriate actions to be taken.

SECTION 7: Handling and storage

Precautions for safe handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Use good personal hygiene practices and wear appropriate personal protective equipment (see section 8). Extremely Flammable. May vaporize easily at ambient temperatures. The vapor is heavier than air and may create an explosive mixture of vapor and air. Beware of accumulation in confined spaces and low lying areas. Open container slowly to relieve any pressure. The use of explosion-proof electrical equipment is recommended and may be required (see appropriate fire codes). Refer to NFPA-70 and/or API RP 2003 for specific bonding/grounding requirements. Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.146. Do not wear contaminated clothing or shoes. Keep contaminated clothing away from sources of ignition such as sparks or open flames.

High pressure injection of hydrocarbon fuels, hydraulic oils or greases under the skin may have serious consequences even though no symptoms or injury may be apparent. This can happen accidentally when using high pressure equipment such as high pressure grease guns, fuel injection apparatus or from pinhole leaks in tubing of high pressure hydraulic oil equipment.

For use as a motor fuel only. Do not use as a solvent due to its flammable and potentially toxic properties. Siphoning by mouth can result in lung aspiration which can be harmful or fatal.

The use of hydrocarbon fuel in an area without adequate ventilation may result in hazardous levels of incomplete combustion products (e.g. carbon monoxide, oxides of sulfur and nitrogen, benzene and other hydrocarbons) and/or dangerously low oxygen levels.

Gasoline engine exhaust contains hazardous combustion products and has been identified as a possible cancer hazard. Exposure should be minimized to reduce potential risk.

Static Accumulation Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding of tanks, transfer piping, and storage tank level floats are necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. Special care should be given to ensure that special slow load procedures for "switch loading" are followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil or diesel) is loaded into tanks previously containing low flash point products (such as gasoline or naphtha). For more information, refer to OSHA Standard 29 CFR 1910.106, 'Flammable and Combustible Liquids', National Fire Protection Association (NFPA 77, 'Recommended Practice on Static Electricity', and/or the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents'.

Conditions for safe storage: Keep container(s) tightly closed and properly labeled. Use and store this material in cool, dry, well-ventilated areas away from heat, direct sunlight, hot metal surfaces, and all sources of ignition. Store only in approved containers. Post area "No Smoking or Open Flame." Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage. Outdoor or detached storage is preferred. Indoor storage should meet OSHA standards and appropriate fire codes.

Portable Containers: Static electricity may ignite gasoline vapors when filling portable containers. To avoid static buildup do not use a nozzle lock open device. Use only approved containers for the storage of gasoline. Place the container on the ground before filling. Keep the nozzle in contact with the container during filling. Do not fill any portable container in or on a vehicle or marine craft.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. Before working on or in tanks which contain or have contained this material, refer to OSHA regulations, ANSI Z49.1, and other references pertaining to cleaning, repairing, welding, or other contemplated operations.

SECTION 8: Exposure controls/personal protection

Chemical Name	ACGIH	OSHA	Other
---------------	-------	------	-------

Gasoline	TWA: 300 ppm TWA: 890 mg/m ³ STEL: 500 ppm STEL: 1480 mg/m ³	---	0.5 ppm TWA8hr (as benzene) 0.25 ppm TWA12hr (as benzene) 2.5 ppm STEL (as benzene) (Phillips 66 Guidelines)
Toluene	TWA: 20 ppm	Ceiling: 300 ppm TWA: 200 ppm	---
Xylenes (o-, m-, p- isomers)	STEL: 150 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 435 mg/m ³	---
Benzene	STEL: 2.5 ppm TWA: 0.5 ppm Skin	Ceiling: 25 ppm STEL: 5 ppm TWA: 10 ppm TWA: 1 ppm	---
n-Hexane	TWA: 50 ppm Skin	TWA: 500 ppm TWA: 1800 mg/m ³	---
Ethylbenzene	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m ³	20 ppm TWA8hr 10 ppm TWA12hr 87 mg/m ³ TWA8hr 43.5 mg/m ³ TWA12hr (Phillips 66 Guidelines)

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.

Engineering controls: If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits, additional engineering controls may be required.

Eye/Face Protection: The use of eye protection that meets or exceeds ANSI Z.87.1 is recommended to protect against potential eye contact, irritation, or injury. Depending on conditions of use, a face shield may be necessary.

Skin/Hand Protection: The use of gloves impervious to the specific material handled is advised to prevent skin contact. Users should check with manufacturers to confirm the breakthrough performance of their products. Depending on exposure and use conditions, additional protection may be necessary to prevent skin contact including use of items such as chemical resistant boots, aprons, arm covers, hoods, coveralls, or encapsulated suits. Suggested protective materials: Nitrile

Respiratory Protection: Where there is potential for airborne exposure above the exposure limit a NIOSH certified air purifying respirator equipped with organic vapor cartridges/canisters may be used.

A respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed whenever workplace conditions warrant a respirator's use. Air purifying respirators provide limited protection and cannot be used in atmospheres that exceed the maximum use concentration (as directed by regulation or the manufacturer's instructions), in oxygen deficient (less than 19.5 percent oxygen) situations, or under conditions that are immediately dangerous to life and health (IDLH).

If benzene concentrations equal or exceed applicable exposure limits, OSHA requirements for personal protective equipment, exposure monitoring, and training may apply (29CFR1910.1028 - Benzene).

Other Protective Equipment: Eye wash and quick-drench shower facilities should be available in the work area. Thoroughly clean shoes and wash contaminated clothing before reuse.

Suggestions provided in this section for exposure control and specific types of protective equipment are based on readily available information. Users should consult with the specific manufacturer to confirm the performance of their protective equipment. Specific situations may require consultation with industrial hygiene, safety, or engineering professionals.

SECTION 9: Physical and chemical properties

Note: Unless otherwise stated, values are determined at 20°C (68°F) and 760 mm Hg (1 atm). Data represent typical values and are not intended to be specifications.

Appearance: Clear to amber

Physical Form: Liquid

Odor: Gasoline

Odor Threshold: No data

pH: Not applicable

Vapor Density (air=1): >1

Upper Explosive Limits (vol % in air): 7.6

Lower Explosive Limits (vol % in air): 1.4

Flash Point: < -49 °F / < -45 °C

Test Method: (estimate)

Initial Boiling Point/Range: 80 - 440 °F / 27 - 227 °C

Vapor Pressure: 330-775 mm Hg / 6.4-15 psia (Reid VP) @ 100°F / 37.8°C

Partition Coefficient (n-octanol/water) (Kow): No data

Melting/Freezing Point: No data

Auto-ignition Temperature: 833 °F / 445 °C

Decomposition Temperature: No data

Evaporation Rate (nBuAc=1): >1
Particle Size: Not applicable
Percent Volatile: 100%
Flammability (solid, gas): Not applicable

Specific Gravity (water=1): 0.72-0.75 @ 60°F (15.6°C)
Bulk Density: 6.17 lbs/gal
Viscosity: No data
Solubility in Water: Negligible

SECTION 10: Stability and reactivity

Reactivity: Not chemically reactive.

Chemical stability: Stable under normal ambient and anticipated conditions of use.

Possibility of hazardous reactions: Hazardous reactions not anticipated.

Conditions to avoid: Avoid high temperatures and all sources of ignition. Prevent vapor accumulation.

Incompatible materials: Avoid contact with strong oxidizing agents and strong reducing agents.

Hazardous decomposition products: Not anticipated under normal conditions of use.

SECTION 11: Toxicological information

Information on Toxicological Effects

Substance / Mixture

Acute Toxicity	Hazard	Additional Information	LC50/LD50 Data
Inhalation	Expected to have a low degree of toxicity by inhalation		>5.2 mg/L (vapor)
Dermal	Unlikely to be harmful		3.75 g/kg
Oral	Unlikely to be harmful		14 g/kg

Aspiration Hazard: May be fatal if swallowed and enters airways

Skin Corrosion/Irritation: Causes skin irritation. Repeated exposure may cause skin dryness or cracking.

Serious Eye Damage/Irritation: Causes mild eye irritation.

Skin Sensitization: Not expected to be a skin sensitizer.

Respiratory Sensitization: No information available.

Specific Target Organ Toxicity (Single Exposure): May cause drowsiness and dizziness.

Specific Target Organ Toxicity (Repeated Exposure): Not expected to cause organ effects from repeated exposure. Two year inhalation studies of wholly vaporized unleaded gasoline, and 90 days studies of various petroleum naphthas, did not produce significant target organ toxicity in laboratory animals. Nephropathy in male rats, characterized by the accumulation of alpha-2-u- globulin in epithelial cells of the proximal tubules was observed, however follow-up studies suggest that these changes are unique to the male rat.

Carcinogenicity: May cause cancer. Based on component information. Two year inhalation studies of vaporized unleaded gasoline produced an increased incidence of kidney tumors in male rats and liver tumors in female mice. Repeated skin application of various petroleum naphthas in mice for two years resulted in an increased incidence of skin tumors but only in the presence of severe skin irritation. Follow-up mechanistic studies suggest that the occurrence of these tumors may be the consequence of promotional processes and not relevant to human risk assessment. Epidemiology data collected from a study of more than 18,000 petroleum marketing and distribution workers showed no increased risk of leukemia, multiple myeloma, or kidney cancer from gasoline exposure. Unleaded gasoline has been identified as a possible carcinogen by the International Agency for Research on Cancer.

Germ Cell Mutagenicity: Not expected to cause heritable genetic effects. Gasoline was negative in microbial mutagenicity and unscheduled DNA tests in rat hepatocytes. Gasoline did not induce chromosome aberrations in vivo in rat bone marrow cells and was negative in a mouse dominant lethal assay.

Reproductive Toxicity: Not expected to cause reproductive toxicity. Based on component information. No evidence of developmental toxicity was found in pregnant laboratory animals (rats and mice) exposed to high vapor concentrations of unleaded gasoline and petroleum naphthas via inhalation. A two-generation reproductive toxicity study of vapor recovery gasoline did not adversely affect reproductive function or offspring survival and development.

Other Comments: Gasoline engine exhaust has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to human.

Information on Toxicological Effects of Components

Xylenes (o-, m-, p- isomers)

Reproductive Toxicity: Both mixed xylenes and the individual isomers produced limited evidence of developmental toxicity in laboratory animals. Inhalation and oral administration of xylene resulted in decreased fetal weight, increased incidences of delayed ossification, skeletal variations and resorptions, but no evidence of teratogenicity.

Target Organ(s): Rats exposed to xylenes at 800, 1000 or 1200 ppm 14 hours daily for 6 weeks demonstrated high frequency hearing loss. Another study in rats exposed to 1800 ppm 8 hours daily for 5 days demonstrated middle frequency hearing loss.

Toluene

Carcinogenicity: Exposure of rats and mice to toluene at concentrations ranging from 120-1200 ppm for two years did not demonstrate evidence of carcinogenicity. Toluene has not been listed as a carcinogen by IARC.

Reproductive Toxicity: Exposure to toluene during pregnancy has demonstrated limited evidence of developmental toxicity in laboratory animals. Decreased fetal body weight and increased skeletal variations in both inhalation and oral studies, but only at doses that were maternally toxic. No fetal toxicity was seen at doses that were not maternally toxic. Decreased sperm counts have been observed in male rats in the absence of a reduction in fertility. Toluene has been reported to cause mental or growth retardation in the children of solvent abusers who directly inhale toluene during pregnancy.

Target Organ(s): Epidemiology studies suggest that chronic occupational overexposure to toluene may damage color vision. Subchronic and chronic inhalation studies with toluene produced kidney and liver damage, hearing loss and central nervous system (brain) damage in laboratory animals. Intentional misuse by deliberate inhalation of high concentrations of toluene has been shown to cause liver, kidney, and central nervous system damage, including hearing loss and visual disturbances.

Benzene

Carcinogenicity: Benzene is an animal carcinogen and is known to produce acute myelogenous leukemia (a form of cancer) in humans. Benzene has been identified as a human carcinogen by IARC, the US National Toxicology Program and the US-Occupational Safety and Health Administration.

Reproductive Toxicity: Some studies in occupationally exposed women have suggested benzene exposure increased risk of miscarriage and stillbirth and decreased birth weight and gestational age. The size of the effects detected in these studies was small, and ascertainment of exposure and outcome in some cases relied on self-reports, which may limit the reliability of these results.

Target Organ(s): Prolonged or repeated exposures to benzene vapors can cause damage to the blood and blood forming organs, including disorders like leukopenia, thrombocytopenia, and aplastic anemia.

Germ Cell Mutagenicity: Benzene exposure has resulted in chromosomal aberrations in human lymphocytes and animal bone marrow cells. Exposure has also been associated with chromosomal aberrations in sperm cells in human and animal studies.

Ethylbenzene

Carcinogenicity: Rats and mice exposed to 0, 75, 250, or 750 ppm ethyl benzene in a two year inhalation study demonstrated limited evidence of kidney, liver, and lung cancer. Ethyl benzene has been listed as a possible human carcinogen by IARC.

Target Organ(s): In rats and mice exposed to 0, 75, 250, or 750 ppm ethyl benzene in a two year inhalation study there was mild damage to the kidney (tubular hyperplasia), liver (eosinophilic foci, hypertrophy, necrosis), lung (alveolar epithelium metaplasia), thyroid (hyperplasia), thyroid (hyperplasia) and pituitary (hyperplasia). In animal models (particularly rats), ethyl benzene affects the auditory function mainly in the cochlear mid-frequency range and ototoxicity was observed after combined exposure to noise and ethyl benzene. There is no evidence of either ethyl benzene-induced hearing losses or ototoxicity with combined exposure to ethyl benzene and noise in workers.

n-Hexane

Reproductive Toxicity: Prolonged exposure to high concentrations of n-hexane (>1,000 ppm) resulted in decreased sperm count and degenerative changes in the testes of rats but not those of mice.

Target Organ(s): Excessive exposure to n-hexane can result in peripheral neuropathies. The initial symptoms are symmetrical sensory numbness and paresthesias of distal portions of the extremities. Motor weakness is typically observed in muscles of the toes and fingers but may also involve muscles of the arms, thighs and forearms. The onset of these symptoms may be delayed for several months to a year after the beginning of exposure. The neurotoxic properties of n-hexane are potentiated by exposure to methyl ethyl ketone and methyl isobutyl ketone.

SECTION 12: Ecological information



GHS Classification:
H411 -- Hazardous to the aquatic environment, chronic toxicity -- Category 2
Toxic to aquatic life with long lasting effects.

Toxicity: Acute aquatic toxicity studies on samples of gasoline and naphtha streams show acute toxicity values greater than 1 mg/L and mostly in the range 1-100 mg/L. These tests were carried out on water accommodated fractions, in closed systems to prevent evaporative loss. Results are consistent with the predicted aquatic toxicity of these substances based on their hydrocarbon composition. These substances should be regarded as toxic to aquatic organisms, with the potential to cause long term adverse effects in the aquatic environment.

Persistence and Degradability: The hydrocarbons in this material are not readily biodegradable but are regarded as inherently biodegradable since their hydrocarbon components can be degraded by microorganisms.

Persistence per IOPC Fund definition: Non-Persistent

Bioaccumulative Potential: Log Kow values measured for the hydrocarbon components of this material range from 3 to greater than 6 and therefore are regarded as having the potential to bioaccumulate. In practice, metabolic processes or physical properties may prevent this effect or limit bioavailability.

Mobility in Soil: On release to water, hydrocarbons will float on the surface and since they are sparingly soluble, the only significant loss is volatilization to air. In air, these hydrocarbons are photodegraded by reaction with hydroxyl radicals with half lives varying from 6.5 days for benzene to 0.5 days for n-dodecane.

Other adverse effects: None anticipated.

SECTION 13: Disposal considerations

The generator of a waste is always responsible for making proper hazardous waste determinations and needs to consider state and local requirements in addition to federal regulations. This material, if discarded as produced, would not be a federally regulated RCRA "listed" hazardous waste. However, it would likely be identified as a federally regulated RCRA hazardous waste for the following characteristic(s) shown below. See Sections 7 and 8 for information on handling, storage and personal protection and Section 9 for physical/chemical properties. It is possible that the material as produced contains constituents which are not required to be listed in the SDS but could affect the hazardous waste determination. Additionally, use which results in chemical or physical change of this material could subject it to regulation as a hazardous waste. Container contents should be completely used and containers should be emptied prior to discard. Container residues and rinseates could be considered to be hazardous wastes.

EPA Waste Number(s)

- D001 - Ignitability characteristic
- D018 - Benzene

SECTION 14: Transport information

U.S. Department of Transportation (DOT)

UN Number: UN1203

UN proper shipping name: Gasoline

Transport hazard class(es): 3

Packing Group: II

Environmental Hazards: Marine pollutant - Environmentally Hazardous

Special precautions for user: *If transported in bulk by marine vessel in international waters, product is being carried under the scope of MARPOL Annex I.*

Container(s) greater than 5 liters (liquids) or 5 kilograms (solids), shipped by water mode and ALL bulk shipments may require the shipping description to contain the "Marine Pollutant" notation [49 CFR 172.203(l)] and the container(s) to display the [Marine Pollutant Mark] [49 CFR 172.322].

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

SECTION 15: Regulatory information

CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs (in pounds):

This material does not contain any chemicals subject to the reporting requirements of SARA 302 and 40 CFR 372.

CERCLA/SARA - Section 311/312 (Title III Hazard Categories)

Acute Health Hazard: Yes
Chronic Health Hazard: Yes
Fire Hazard: Yes
Pressure Hazard: No
Reactive Hazard: No

CERCLA/SARA - Section 313 and 40 CFR 372:

This material contains the following chemicals subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR 372:

Chemical Name	Concentration ¹	de minimis
Toluene	0-35	1.0%
Xylenes (o-, m-, p- isomers)	0-15	1.0%
Benzene	0-5	0.1%
Benzene, 1,2,4-trimethyl-	0-5	1.0%
n-Hexane	0-5	1.0%
Ethylbenzene	0-5	0.1%
Cyclohexane	0-2	1.0%

¹ All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

EPA (CERCLA) Reportable Quantity (in pounds):

EPA's Petroleum Exclusion applies to this material - (CERCLA 101(14)).

California Proposition 65:

Warning: This material may contain detectable quantities of the following chemicals, known to the State of California to cause cancer, birth defects or other reproductive harm, and which may be subject to the warning requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):

Chemical Name	Type of Toxicity
Toluene	Developmental Toxicant
Benzene	Cancer Developmental Toxicant Male Reproductive Toxicant
Ethylbenzene	Cancer
Unleaded Gasoline (Wholly Vaporized)	Cancer

Gasoline engine exhaust is on the Proposition 65 list of chemicals known to the State of California to cause cancer.

Canada:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the Regulations.

International Inventories

All components are either listed on the US TSCA Inventory, or are not regulated under TSCA.
All components are either on the DSL, or are exempt from DSL listing requirements.

U.S. Export Control Classification Number: EAR99

SECTION 16: Other information

Issue Date:	Previous Issue Date:	SDS Number	Status:
07-Dec-2015	09-Apr-2015	724020	FINAL

Revised Sections or Basis for Revision:

Composition (Section 3); Exposure limits (Section 8)

Guide to Abbreviations:

ACGIH = American Conference of Governmental Industrial Hygienists; CASRN = Chemical Abstracts Service Registry Number; CEILING = Ceiling Limit (15 minutes); CERCLA = The Comprehensive Environmental Response, Compensation, and Liability Act; EPA = Environmental Protection Agency; GHS = Globally Harmonized System; IARC = International Agency for Research on Cancer; INSHT = National Institute for Health and Safety at Work; IOPC = International Oil Pollution Compensation; LEL = Lower Explosive Limit; NE = Not Established; NFPA = National Fire Protection Association; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; PEL = Permissible Exposure Limit (OSHA); SARA = Superfund Amendments and Reauthorization Act; STEL = Short Term Exposure Limit (15 minutes); TLV = Threshold Limit Value (ACGIH); TWA = Time Weighted Average (8 hours); UEL = Upper Explosive Limit; WHMIS = Worker Hazardous Materials Information System (Canada)

Disclaimer of Expressed and Implied Warranties:

The information presented in this Safety Data Sheet is based on data believed to be accurate as of the date this Safety Data Sheet was prepared. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use. In addition, no authorization is given nor implied to practice any patented invention without a license.

APPENDIX 4.
KIEWIT OFFSHORE SERVICES LTD 03/21/24 RESPONSE

From: [Hannah.Johnson](#)
To: [Vince Damiano](#)
Cc: [Andrew Gates](#); [Johnson, Joyce-R6](#); [Young-Dahl, Erin](#); [Bo.Johnson](#); [Tim.Storheim](#); [Diana.Villenas](#)
Subject: RE: [External]Follow-up from EPA Inspection 3/12/2024
Date: Thursday, March 21, 2024 4:25:43 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[Kiewit Offshore Services Hazardous Waste Timeline.pdf](#)

CAUTION: Don't open links or attachments unless you recognize the sender and know they are safe.

Good afternoon,

I have attached a written statement outlining the timeline for the hazardous waste that was offloaded from the vessels last year by our client. Please let me know if you have any further questions regarding this topic.

Sincerely,

Hannah Johnson
Environmental Coordinator



Kiewit Offshore Services, LTD.

2440 Kiewit Rd.

Ingleside, TX 78362

Mobile: 361.484.6182

Email: Hannah.Johnson@kiewit.com





NFE Hazardous Waste Timeline

The company New Fortress Energy, the owner of the vessels that came to KOS under a refabrication contract, were the sole handlers of all hazardous waste that resulted from the vessels preexisting inventory before reaching our facility. This agreement had been made between Kiewit and NFE via contract before the job was awarded due to the allowable quantity of hazardous waste that KOS may dispose of versus the amount of waste that was needing to be disposed of. Waste began being offloaded from the vessels late January 2023 and NFE contracted out GHD Consulting to assess and help properly manage the waste for disposal. Safety-Kleen was then hired by NFE to begin removing the materials in April 2023, and the first load of waste was removed April 24th, 2023. Over the next month, several pickups were made to remove all the hazardous material which concluded with the final shipment on July 28th, 2023. KOS assisted NFE with containment for the waste, advised on proper labeling, and helped manage spacing and overall housekeeping of the area where their waste was stored. This was the extent to which KOS had in the waste management and handling of New Fortress Energy's hazardous waste.