Permits

bp

OFFICE
OF
WATER MANAGEMENT
IDEM

AUG 3 1 36 PM '04

BP Products North America Inc.
Whiting Business Unit
2815 Indianapolis Blvd.
PO Box 710
Whiting, IN 46394-0710

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

July 29, 2004

Mr. Steve Roush
Section Chief
Industrial NPDES Permits Section
Office of Water Quality
Indiana Department of Environmental Management
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015

Whiting In Lake Co.

Re: BP Products North America Inc. NPDES Permit - IN0000108 Follow up to notification for temporary use of water treatment additive

Per this letter BP Products North America Inc. – Whiting Business Unit is submitting a follow up notification per 327 IAC 5-2-11.7 (f) for the temporary use a water treatment additive in our clarifiers at our water treatment facility. A phone notification was made to your office on Friday July 23 noting that we will begin using this additive the afternoon of July 23 as an aid in settling the solids in our clarifiers and to maintain minimal TSS in the effluent to the lake. This additive will be used for approximately 30 days from this date. The MSDS for this additive is attached along with the required information for additive use. The use of Ferriclear is already approved at our incinerator scrubber water clarifier.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions or need any further information, please contact Ms. Rose Herrera, Environmental Engineer at (219) 473-3393.

Sincerely,

Stanley W. Sorrels

Stan Sorrels
HSSE Manager

Attachments

BP Products North America Inc. - Whiting Refinery
Approval to add Water Treatment Additive
Attachment 1

	Existing Point of injection	New point of injection
Additive Name	Ferriclear	Ferriclear
Supplier	Eaglebrook	Eaglebrook
New or Replacement	Existing	Existing
Outfall Affected	Outfall 001	Outfall 001
Point of Injection	Incinerator Scrubber Effluent	Acitvated Sludge Plant Clarifiers
Feed Rate	127,600 grams/day	486,864 grams/day
Water Treatment Concentration	56.2 mg/l	50 mg/l
Duration of Use (hrs/day)	24 hrs/day when incinerator is running	24 hrs/day
Duration of Use (days/year)	approx. 300 days/year	30 days/yr
Final Discharge Concentration	1.9 mg/l (worst case)	1.7 mg/l (worst case)
Determination of Discharge Concentration	This worst case is based upon 100% of additive remaining in final discharge when the additive is used.	This worst case is based upon 100% of additive remaining in final discharge when the additive is used.
Control Description	Addition rate is based on incinerator clarifier effluent water quality, which is measured for turbidity every 4 hours.	Additve use only temporary to help with settling the clarifier bed to normal depths.
Hardness of Discharge Water	216 mg/l	216 mg/l
Chemical Composition	12.2% Ferric Iron (Fe+3) 0.001% Ferrous Iron (Fe+2) <0.1% Sulfuric Acid	12.2% Ferric Iron (Fe+3) 0.001% Ferrous Iron (Fe+2) <0.1% Sulfuric Acid 55%-66% Ferric Sulfate
Treatment System Blowdown Rate	N/A	N/A
Outfall Flow Rate	19.9 mgd	19.9 mgd
Treatment System Temperature	80 - 90 deg F	80 - 90 deg F
Treatment System pH	7.0 - 9.0	7.0 - 9.0
Toxicity Data	No data.	No data.
Fathead Minnow 96h/LC50		
Fathead Minnow 24h/LC50		
Cerodaphnia 48h/LC50		
Daphnia Magna 48h/LC 50		
Daphnia Magna 48/EC50		
Daphnia Magna 24h/LC00		
Daphnia Magna 96h/LC00		
Rainbow Trout 96h/LC50		
Bluegill Sunfish 96h/LC50		
Lepomis macrochrius 48 hr/LC50		
Acartia tonsa 48h/LC50		
Pimephales promelas 48h/LC50		
Pimephales promelas 96h/LC50; 180 mg/l CaCO3		
Pimephales promelas 96h/LC50; 100 mg/l CaCO3		
Threespone stickleback 96h/LC50		
Threespone stickleback 96h/LC50 (aerated)		
Zebra-fish (Brachydanio rerio) 96h/LC50		
Flannelmouth sucker 96h/LC50		
Coho salmon 96 h/LC50		
Chinook salmon 96h/LC50		
Bobwhite quail LD50		
Mosquito Fish 24h/LC50		
Scenedesmus subspicatus 96h/EC50		
Mallard Duck LD50		
Freshwater Invertebrates & Fish Acute EC50/LC50		
Freshwater Algae Static Acute EC50		
Freshwater Biodegradability 28 Day OECD 301D		
Freshwater Biodegradability 5 Day/2.0mg/l		
Freshwater Biodegradability 5 Day/3.8mg/l		
Relationship of toxicity to pH		
Relationship of toxicity to water hardness		
N Octanol-Water Partition Coefficient		

FerriClear®

EMERGENCY NUMBERS

IN CASE OF EMERGENCIES SUCH AS PRODUCT SPILLS, CALL:

CHEMTREC	**(800) 424-9300**	**USA**	**(TOLL FREE)**
CANUTEC	**(613) 996-6666**	**CANADA**	**(CALL COLLECT)**

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

	USA	CANADA
Supplier:	Eaglebrook, Inc. 4801 Southwick Dr. Suite 200 Matteson, IL 60443	Eaglebrook, Inc. of Canada / L'Environment Eaglebrook Québec 3405 Blvd. Marie Victorin Varennes, Québec J3X 1T6
Telephone:	(708) 747-5038 (800) 428-3311	(450) 652-0665 (800) 465-6171

Product Name:	FerriClear®
Chemical Family:	Inorganic salts
Formula:	$Fe_2(SO_4)_3$
Synonym:	Iron (III) Sulfate
Product Use:	Water Treatment (Potable and Wastewater), and Odor Removal

2. HAZARDOUS MATERIAL

Ingestion at high concentration causes serious problems to digestive system. If a spill occurs, there is a surface water contamination hazard.

Component	Concentration	CAS Number
Ferric Sulfate	55% - 66% as $Fe_2(SO_4)_3\ H_2O$	010028-22-5
Sulfuric Acid	<0.1	7664-93-9

3. HAZARDS IDENTIFICATION

Principal Risk: WHMIS – Class E. Irritating to skin, eyes and mucous membranes.

Potential Effects on Health: Acute and Chronic.

Carcinogenicity: Does not contain any carcinogens or potential carcinogens.

4. FIRST AID MEASURES

First Aid: In every case of overexposure ask for medical attention. Move victim to fresh air.

Skin Contact: Wash with soap and water. Remove any contaminated clothing and wash before reuse. If irritation develops, get medical attention.

Eye Contact: Flush eyes thoroughly with water for at least 15 minutes, taking care to keep the eyelids opened to be sure that the rinsing is complete. Get medical attention.

Inhalation: Move to fresh air. Give artificial respiration if breathing has stopped. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: If conscious, drink water or milk of magnesia. DO NOT induce vomiting and do not give bicarbonate to neutralize. Get medical attention.

5. FIRE FIGHTING MEASURES

Flash Point: N/A

Flammable Limits: N/A

Autoignition: N/A

Hazardous Combustion Product: Oxides of Sulfur

Fire Fighting Instructions: Use whatever extinguishing media that is appropriate. Respiratory and eye protection required.

Fire and Explosion Hazards: Sulfuric acid could react with metals to produce hydrogen.

6. PREVENTION MEASURES

Wear appropriate personal protective equipment. Contain and eliminate the release. Neutralize with lime, limestone, or soda ash. This will generate carbon dioxide, so additional ventilation may be necessary. Collect the residues for proper disposal. Notify the appropriate environmental authorities.

Handling and Storage

Keep containers closed. DO NOT store in metal containers due to potential reaction with sulfuric acid which could generate hydrogen. Vent rubber lined steel containers to avoid pressure build up if the lining fails.

Exposure Controls and Personal Protection

Ventilation: There should be enough local ventilation to keep the TLV below the ACGIH limits.

Gloves: Use neoprene or equivalent. Never use leather.

Eyes:	Wear chemical goggles or a face shield.
Respirator:	Use an approved respirator with acid mist cartridges, if necessary.
Clothing:	Protective clothing if necessary, should be neoprene or equivalent.

When cleaning, decontaminating or performing maintenance on tanks, containers, piping systems and accessories, and in any other situations where airborne contaminants and/or dust could be generated, use protective equipment to protect against ingestion or inhalation. HEPA or air supplied respirator, full Tyvek coveralls with head cover, gloves and boots or chemical suits, are suggested.

7. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	105° C-110° C (220° F-230° F)
Vapor Pressure (mm Hg):	N/A
Percent Volatile By Vol.:	N/A
Vapor Density (Air=1):	N/A
Form:	Liquid
Appearance:	Reddish brown
Odor:	Acidic
Solubility (water):	Soluble
pH Solution:	<1
Flash Point:	N/A
Flammability:	N/A

Specific Gravity (H_2O):	1.43 – 1.56
Freezing Point:	Consult your Eaglebrook representative for cold weather handling recommendations.

8. STABILITY AND REACTIVITY

Stability:	Stable
Hazardous Polymerization:	Does not occur.
Hazardous Decomposition:	Thermal decomposition above 600° C will evolve toxic and irritant vapors (sulfur oxides).
Conditions to Avoid:	Contact with strong mineral acids, excessive heat, and bases or alkalies.
Incompatible Materials:	Strongly corrosive to mild steel.

9. TOXICOLOGICAL INFORMATION

*No data available.

10. ECOLOGICAL INFORMATION

*No data available.

11. TRANSPORT INFORMATION

Shipping Name:	Corrosive Liquids, Acidic, Inorganic, N.O.S. (Ferric Sulfate/FerriClear®)
Hazardous Class:	8 (9.2)

DOT Number: UN 3264

Packing Group: III

12. DISPOSAL CONSIDERATION

This material exhibits the RCRA characteristic of corrosivity and any disposal must comply with hazardous waste disposal requirements. Any residues and/or rinse waters from cleaning of tanks, containers, piping systems and accessories may be a hazardous characteristic waste and must be properly disposed in accordance with all federal, state, provincial, and local laws.

13. REGULATORY INFORMATION

CERCLA RQ: 1000 pounds of contained ferric sulfate. Sulfuric acid is a reportable chemical under Section 313 of EPCRA (40 CFR 372).

Risk Phrases:
R22 – Harmful if swallowed
R36 – Irritating to eyes.

Safety Phrases:
S25 – Avoid contact with eyes.
S26 – In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39 – Wear suitable protective clothing, gloves and eye protection.

Chronic Hazard: No

Fire Hazard: No

14. OTHER INFORMATION

NFPA RATING

Health:	2
Flammability:	0
Reactivity:	1
Special Hazards:	CORROSIVE

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15. ABBREVIATIONS

ACGIH:	American Conference of Government Industrial Hygienists
AWWA:	American Water Works Association
CAS:	Chemical Abstracts Service
CIRC:	Cancer International Research Center
DOT:	Department of Transport
FRP:	Fiberglass Reinforced Plastic
HEPA:	High Efficiency Particulate Arresting
LEL:	Lower Explosive Limit
LD_{50}:	Lethal Dose
N/A:	Not Applicable
NFPA:	National Fire Protection Agency
NIOSH:	National Institute for Occupational Safety and Health
NSF:	National Sanitation Foundation
RCRA:	Resource Conservation and Recovery Act
RTECS:	Registry of Toxic Effects of Substances
TDG:	Transport of Dangerous Goods
TLV:	Threshold Limit Value
TWA:	Time Weight Average
UEL:	Upper Explosive Limit
WHMIS:	Workplace Hazardous Material Information System

MSDS Prepared on April 6, 2001 by:

Jason Evans
Eaglebrook, Inc.
4801 Southwick Drive
Suite 200
Matteson, IL 60443
(800) 428-3311 telephone
jevans@eaglebrk.com

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.state.in.us/idem

April 25, 2001

VIA CERTIFIED MAIL 7000 0520 002350502263

Mr. Stephen Simko
BP Amoco Oil
Health, Safety, & Environmental Division
2815 Indianapolis Blvd
Whiting, IN 46394-0710

Dear Mr. Simko:

Re: NPDES Permit No. IN0000108
BP Amoco Oil
Whiting, Indiana

The Indiana Department of Environmental Management needs the following information to update the NPDES permit renewal application for BP Amoco Oil and complete the mixing zone application submitted by BP Amoco Oil:

1. Please complete the enclosed EPA Form 2C. Note that analytical Method 1631 is to be used for mercury analysis. In addition, include analytical analysis for the concentration of chloride, total dissolved solids, vanadium, and free cyanide in the effluent discharge. BP Amoco Oil may want to include more that one data point for parameters that exhibit reasonable potential to exceed water quality standards in accordance with 327 IAC 5-2-11.5.

2. Please provide an estimated time line for the construction of the effluent diffuser.

3. Due to the age of the acute and chronic whole effluent toxicity test results, IDEM is requesting that BP Amoco submit updated acute and chronic whole effluent toxicity test results. Please provide three (3) consecutive months of test results for acute and chronic whole effluent toxicity tests using fathead minnow, ceriodaphnia, and algae.

9. Please provide test results from sediment analysis studies. Perform sediment analysis studies collected from BP Amoco discharge shore line area and Lake Michigan pristine shore line area. Analyze sediments for suspected inorganic and organic pollutants.

Also, it should be noted that in accordance with 327 IAC 5-2-11.4(a)(9)(B) the highest monthly average flow from the previous two (2) years of monitoring shall be used to develop a wasteload allocation for BP Amoco. Pursuant to 327 IAC 5-2-11.6(g)(2), the effluent flow used to establish concentration-based water quality based effluent limitations will also be used to calculate mass loading rates.

If you have any questions regarding this letter please contact Christina Lowry at (317) 232-8707.

Sincerely,

Steven K. Roush

Steven K. Roush
Section Chief
Industrial NPDES Permits Section
Office of Water Quality

CTL/ctl
cc: Ms. Natalie Grimmer, BP Amoco
Mr. Fred Andes, Barnes and Thornburg
Ms. Robin Garibay, The Advent Group Inc.

bp

OWQ

Whiting Business Unit
2815 Indianapolis Blvd.
PO Box 710
Whiting, IN 46394-0710

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

September 28, 2001

Dept. of Environmental Mgmt.
Commissioner's Office

OCT 02 2001

Ms. Lori Kaplan
Commissioner
Indiana Department of Environmental Management
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015

Re: Amoco Oil Company
Whiting Business Unit
2815 Indianapolis Boulevard
Whiting, Indiana 46394

This letter is to notify you that effective October 1, 2001, Amoco Oil Company, a Maryland corporation, changed its name to BP Products North America Inc., a Maryland Corporation. The federal identification number of 36-2440313 remains the same. All future correspondence to IDEM will use the new name. This is simply a name change and not a transfer in ownership. The above-referenced facility is subject to the following NPDES permit:

NPDES Permit No. IN 0000108
Effective Date: April 1, 1990

Please contact Natalie Grimmer at (219) 473-5417 if you have any questions regarding this name change.

Sincerely,

Karleen James/NRG

Karleen James
Environmental Superintendent
Health, Safety, and Environment

1-file
Comp

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Commissioner

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Telephone 317-232-8603
Environmental Helpline 1-800-451-6027

March 31, 1995

Mr. J.E. Naccache
Superintendent, Water Quality
Amoco Oil Company
2815 Indianapolis Boulevard
Post Office Box 710
Whiting, Indiana 46394-0710

Dear Mr. Naccache:

Re: Approval for Use of New Additive
NPDES Permit No. IN 0000108
Amoco Oil Company
Whiting, Indiana

This letter is written in response to your request dated October 18, 1994, for approval of the new water treatment additive.

This agency has reviewed the material safety data sheets for the new treatment program. We have no objection for the use of Nalco 8357 Scale Inhibitor to treat non-contact cooling tower system.

Should you have any questions regarding this matter, please feel free to contact Ms. Heidi Nassiri at 317/232-8738.

Sincerely,

Steven K. Roush

Steven K. Roush, Supervisor
Industrial Permit Group
Permits Section
Office of Water Management