bp

BP Products North America Inc.
2815 Indianapolis Blvd.
P.O. Box 710
Whiting, IN 46394-0710
USA

August 15, 2013

DELIVERED VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Indiana Department of Environmental Management
OWQ Data Management Section (Mail Code 65-42)
100 North Senate Avenue
Indianapolis, IN 46204-2251

Re: DMR and MMR for Outfalls 002, 003, 004, & 005
NPDES Permit No. 0000108

Please find enclosed the effluent quality data in the Discharge Monitoring Report (DMR) form and the Monthly Monitoring Report (MMR) form from the BP Products North America Inc. - Whiting Business Unit ("Whiting Refinery") for the month of July 2013.

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 additional information, please contact Tim Chen at (219) 473-1286.

Sincerely,

N. O.

Nick Spencer
Business Unit Leader
Whiting Business Unit

Cc: N. Ream, Merrillville, IN

Attachments: DMR Report
MMR Report

Bcc (scanned reports delivered via email)

R.L. Richards, ENVIRON Arlington, VA, rrichards@environcorp.com
J.P. Morrison
R. Solan
Orok Duke
D. Moye
B.L. Cook
M.F. Osadjan, Warrenville, IL

Bcc (e-MMR delivered via email)

Jackie Backus, ENVIRON, jbackus@environcorp.com
Kerry Mierau, ENVIRON, kmierau@environcorp.com

e-MMR file path: I:\Environmental\Plant Docs\4 - Water\4G\4G01\DMR\2013\7-July 2013\WQR0713.xls

PERMITTEE NAME/ADDRESS

NAME BP PRODUCTS NORTH AMERICA INC.
ADDRESS WHITING REFINERY - MAIL CODE 062
2815 INDIANAPOLIS BLVD
WHITING IN 46394

FACILITY BP PRODUCTS NORTH AMERICA INC
LOCATION WHITING IN
ATTN: DANIEL SAJKOWSKI, PLT MANAGER

# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
## DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98

Revised: ☐

| PERMIT NUMBER | PERMITTED FEATURE |
|---|---|
| IN0000108 | 005 A |

MONITORING PERIOD

| | MO | DAY | YEAR | | MO | DAY | YEAR |
|---|---|---|---|---|---|---|---|
| FROM | | | | TO | | | |

*IN0000108005A72012*

For any questions call Gary Starks at 317-232-8694

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

| PARAMETER | | QUANTITY OR LOADING Average | Maximum | Units | QUALITY OR CONCENTRATION Minimum | Average | Maximum | Units | NO. EX | Frequency of Analysis | Sample Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chromium, total (as Cr) | SAMPLE MEASUREMENT | <1.6 | <1.8 | lb/d | ****** | <0.01 | <0.01 | mg/L | 0 | WEEKLY | COMP24 |
| 01034 1 0 0 Effluent Gross | PERMIT REQUIREMENT | 23.9 MO AVG | 68.53 DAILY MX | | | Report MO AVG | Report DAILY MX | | | Weekly | COMP24 |
| Vanadium, total recoverable | SAMPLE MEASUREMENT | 2.3 | 2.3 | lb/d | ****** | 0.016 | 0.016 | mg/L | 0 | MONTHLY | COMP24 |
| 01128 1 0 0 Effluent Gross | PERMIT REQUIREMENT | 50 MO AVG | 100 DAILY MX | | | .28 MO AVG | .56 DAILY MX | | | Monthly | COMP24 |
| Chromium, hexavalent dissolved (as Cr) | SAMPLE MEASUREMENT | <0.8 | <0.9 | lb/d | ****** | <0.005 | <0.005 | mg/L | 0 | WEEKLY | GRAB |
| 01220 1 0 0 Effluent Gross | PERMIT REQUIREMENT | 2.01 MO AVG | 4.48 DAILY MX | | | Report MO AVG | Report DAILY MX | | | Weekly | GRAB |
| Phenolics, total recoverable | SAMPLE MEASUREMENT | <1.67 | <1.80 | lb/d | ****** | <0.01 | <0.01 | mg/L | 0 | WEEKLY | COMP24 |
| 32730 1 0 0 Effluent Gross | PERMIT REQUIREMENT | 20.33 MO AVG | 73.01 DAILY MX | | | Report MO AVG | Report DAILY MX | | | Weekly | COMP24 |
| Flow, in conduit or thru treatment plant | SAMPLE MEASUREMENT | 19.6 | 25.0 | MGD | ****** | ****** | ****** | | 0 | DAILY | TOTALZ |
| 50050 1 0 0 Effluent Gross | PERMIT REQUIREMENT | Report MO AVG | Report DAILY MX | | | | | | | Daily | TOTALZ |
| Chemical Oxygen Demand (COD) | SAMPLE MEASUREMENT | 4796 | 7106 | lb/d | ****** | 28 | 40 | mg/L | 0 | WEEKLY | COMP24 |
| 81017 1 0 0 Effluent Gross | PERMIT REQUIREMENT | 30323 MO AVG | 58427 DAILY MX | | | Report MO AVG | Report DAILY MX | | | Weekly | COMP24 |
| Flow, total | SAMPLE MEASUREMENT | ****** | 608.4 | Mgal/mo | ****** | ****** | ****** | | 0 | MONTHLY | RCTOT |
| 82220 1 0 0 Effluent Gross | PERMIT REQUIREMENT | | Report MO TOTAL | | | | | | | Monthly | RCOTOT |

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| NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | | TELEPHONE | DATE | | |
|---|---|---|---|---|---|
| Nick Spencer, Business Unit Leader | N.P. | 219 473-3149 | 8 | 23 | 13 |
| TYPED OR PRINTED | SIGNATURE | AREA CODE AND NO. | MO | DAY | YEAR |

COMMENTS AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

INDUSTRIAL MAJOR LAKE COUNTY

**PERMITTEE NAME/ADDRESS**

**NAME** BP PRODUCTS NORTH AMERICA INC.
**ADDRESS** WHITING REFINERY - MAIL CODE 062
2815 INDIANAPOLIS BLVD
WHITING IN 46394

**FACILITY** BP PRODUCTS NORTH AMERICA INC
**LOCATION** WHITING IN
**ATTN:** DANIEL SAJKOWSKI, PLT MANAGER

# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
# DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98

*IN0000108002A72012*

For any questions call Gary Starks at 317-232-8694

Revised: ☐

| PERMIT NUMBER | PERMITTED FEATURE |
|---|---|
| IN0000108 | 002 A |

MONITORING PERIOD

| | MO | DAY | YEAR | | MO | DAY | YEAR |
|---|---|---|---|---|---|---|---|
| FROM | | | | TO | | | |

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

| PARAMETER | | QUANTITY OR LOADING | | | QUALITY OR CONCENTRATION | | | | NO. EX | Frequency of Analysis | Sample Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Average | Maximum | Units | Minimum | Average | Maximum | Units | | | |
| Temperature, water deg. fahrenheit 00011 1 0 0 Effluent Gross | SAMPLE MEASUREMENT | ****** | ****** | | ****** | 98.5 | 102.2 | deg F | 0 | DAILY | CONTIN |
| | PERMIT REQUIREMENT | | | | | Report MO AVG | Report DAILY MX | | | Five Per Week | CONTIN |
| Temperature, water deg. fahrenheit 00011 7 0 0 Intake from Stream | SAMPLE MEASUREMENT | ****** | ****** | | ****** | 70.0 | 75.2 | deg F | 0 | DAILY | CONTIN |
| | PERMIT REQUIREMENT | | | | | Report MO AVG | Report DAILY MX | | | Five Per Week | CONTIN |
| Waste heat rejection rate 00179 2 0 0 Effluent Net | SAMPLE MEASUREMENT | 692 | 762 | MBTU /hr | ****** | ****** | ****** | | 0 | DAILY | CONTIN |
| | PERMIT REQUIREMENT | 1700 MO AVG | 2000 MX DA AV | | | | | | | Five Per Week | CONTIN |
| pH 00400 1 0 0 Effluent Gross | SAMPLE MEASUREMENT | ****** | ****** | | 7.9 | ****** | 8.3 | SU | 0 | 3/WEEK | GRAB |
| | PERMIT REQUIREMENT | | | | 6 DAILY MN | | 9 DAILY MX | | | Three Per Week | GRAB |
| Oil and grease, hexane extr method 00552 1 0 0 Effluent Gross | SAMPLE MEASUREMENT | ****** | ****** | | ****** | <0.3 | <0.3 | mg/L | 0 | MONTHLY | GRAB |
| | PERMIT REQUIREMENT | | | | | Report MO AVG | 5 DAILY MX | | | Monthly | GRAB |
| Flow, in conduit or thru treatment plant 50050 1 0 0 Effluent Gross | SAMPLE MEASUREMENT | 69.9 | 73.5 | MGD | ****** | ****** | ****** | | 0 | DAILY | TOTALZ |
| | PERMIT REQUIREMENT | Report MO AVG | Report DAILY MX | | | | | | | Daily | TOTALZ |
| Chlorine, total residual 50060 1 0 0 Effluent Gross | SAMPLE MEASUREMENT | 0 | 0 | lb/d | ****** | 0 | 0 | mg/L | 0 | WEEL;Y | GRAB |
| | PERMIT REQUIREMENT | 20 MO AVG | 60 DAILY MX | | | .06 MO AVG | .06 DAILY MX | | | Weekly | GRAB |

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|---|---|---|---|---|---|
| Nick Spencer, Business Unit Leader | N.D.S. | 219 473-3149 | 8 | 23 | 13 |
| TYPED OR PRINTED | SIGNATURE | AREA CODE AND NO. | MO | DAY | YEAR |

COMMENTS AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

INDUSTRIAL MAJOR WHITING, LAKE COUNTY

PERMITTEE NAME/ADDRESS

NAME BP PRODUCTS NORTH AMERICA INC.

ADDRESS WHITING REFINERY - MAIL CODE 062
2815 INDIANAPOLIS BLVD
WHITING IN 46394

FACILITY BP PRODUCTS NORTH AMERICA INC

LOCATION WHITING IN

ATTN: DANIEL SAJKOWSKI, PLT MANAGER

# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
# DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98

Revised: ☐

| PERMIT NUMBER | PERMITTED FEATURE |
|---|---|
| IN0000108 | 002 A |

MONITORING PERIOD

| | MO | DAY | YEAR | | MO | DAY | YEAR |
|---|---|---|---|---|---|---|---|
| FROM | | | | TO | | | |

*IN0000108002A72012*

For any questions call Gary Starks at 317-232-8694

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

| PARAMETER | | QUANTITY OR LOADING | | | QUALITY OR CONCENTRATION | | | | NO. EX | Frequency of Analysis | Sample Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Average | Maximum | Units | Minimum | Average | Maximum | Units | | | |
| Flow, total | SAMPLE MEASUREMENT | ****** | 2166.6 | Mgal/mo | ****** | ****** | ****** | | | MPNTHLY | RCTOT |
| 82220 1 0 0 Effluent Gross | PERMIT REQUIREMENT | | Report MO TOTAL | | | | | | | Monthly | RCOTOT |

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|---|---|---|---|---|---|
| Nick Spencer, Business Unit Leader | N.D.S | 219 473-3149 | 8 | 23 | 13 |
| TYPED OR PRINTED | SIGNATURE | AREA CODE AND NO. | MO | DAY | YEAR |

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2815 INDIANAPOLIS BLVD
WHITING IN 46394

**FACILITY** BP PRODUCTS NORTH AMERICA INC
**LOCATION** WHITING IN
**ATTN:** DANIEL SAJKOWSKI, PLT MANAGER

# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
## DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98

* I N 0 0 0 0 1 0 8 0 0 3 A 7 2 0 1 2 *

For any questions call Gary Starks at 317-232-8694

**Revised:** ☐

| PERMIT NUMBER | PERMITTED FEATURE |
|---|---|
| IN0000108 | 003 A |

**MONITORING PERIOD**

| | MO | DAY | YEAR | | MO | DAY | YEAR |
|---|---|---|---|---|---|---|---|
| FROM | | | | TO | | | |

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

| PARAMETER | | QUANTITY OR LOADING | | | QUALITY OR CONCENTRATION | | | | NO. EX | Frequency of Analysis | Sample Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Average | Maximum | Units | Minimum | Average | Maximum | Units | | | |
| pH | SAMPLE MEASUREMENT | ****** | ****** | | 7.4 | ****** | 7.7 | SU | 0 | WEEKLY | GRAB |
| 00400 1 0 0 Effluent Gross | PERMIT REQUIREMENT | | | | 6 DAILY MN | | 9 DAILY MX | | | Weekly | GRAB |
| Oil and grease, hexane extr method | SAMPLE MEASUREMENT | ****** | ****** | | ****** | 1.2 | 2.5 | mg/L | 0 | WEEKLY | GRAB |
| 00552 1 0 0 Effluent Gross | PERMIT REQUIREMENT | | | | | Report MO AVG | 15 DAILY MX | | | Weekly | GRAB |
| Carbon, tot organic (TOC) | SAMPLE MEASUREMENT | ****** | ****** | | ****** | 37 | 80 | mg/L | 0 | WEEKLY | GRAB |
| 00680 1 0 0 Effluent Gross | PERMIT REQUIREMENT | | | | | Report MO AVG | 110 DAILY MX | | | Weekly | GRAB |
| Flow, in conduit or thru treatment plant | SAMPLE MEASUREMENT | 0.09 | 0.37 | MGD | ****** | ****** | ****** | | 0 | DAILY | TOTALZ |
| 50050 1 0 0 Effluent Gross | PERMIT REQUIREMENT | Report MO AVG | Report DAILY MX | | | | | | | Daily | TOTALZ |

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|---|---|---|---|---|---|
| Nick Spencer, Business Unit Leader | N.D. | 219 473-3149 | 8 | 23 | 13 |
| TYPED OR PRINTED | SIGNATURE | AREA CODE AND NO. | MO | DAY | YEAR |

COMMENTS AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

INDUSTRIAL MAJOR WHITING, LAKE COUNTY

**PERMITTEE NAME/ADDRESS**

**NAME** BP PRODUCTS NORTH AMERICA INC.
**ADDRESS** WHITING REFINERY - MAIL CODE 062
2815 INDIANAPOLIS BLVD
WHITING IN 46394

**FACILITY** BP PRODUCTS NORTH AMERICA INC
**LOCATION** WHITING IN
**ATTN:** DANIEL SAJKOWSKI, PLT MANAGER

# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
# DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98

*IN0000108004A72012*

For any questions call Gary Starks at 317-232-8694

**Revised:** ☐

| PERMIT NUMBER | PERMITTED FEATURE |
|---|---|
| IN0000108 | 004 A |

**MONITORING PERIOD**

| | MO | DAY | YEAR | | MO | DAY | YEAR |
|---|---|---|---|---|---|---|---|
| FROM | | | | TO | | | |

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

| PARAMETER | | QUANTITY OR LOADING | | | QUALITY OR CONCENTRATION | | | | NO. EX | Frequency of Analysis | Sample Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Average | Maximum | Units | Minimum | Average | Maximum | Units | | | |
| pH | SAMPLE MEASUREMENT | ****** | ****** | | 7.3 | ****** | 8.4 | SU | 0 | WEEKLY | GRAB |
| 00400 1 0 0 Effluent Gross | PERMIT REQUIREMENT | | | | 6 DAILY MN | | 9 DAILY MX | | | Weekly | GRAB |
| Oil and grease, hexane extr method | SAMPLE MEASUREMENT | ****** | ****** | | ****** | <0.8 | 2.9 | mg/L | 0 | WEEKLY | GRAB |
| 00552 1 0 0 Effluent Gross | PERMIT REQUIREMENT | | | | | Report MO AVG | 15 DAILY MX | | | Weekly | GRAB |
| Carbon, tot organic (TOC) | SAMPLE MEASUREMENT | ****** | ****** | | ****** | 17 | 20 | mg/L | 0 | WEEKLY | GRAB |
| 00680 1 0 0 Effluent Gross | PERMIT REQUIREMENT | | | | | Report MO AVG | 110 DAILY MX | | | Weekly | GRAB |
| Flow, in conduit or thru treatment plant | SAMPLE MEASUREMENT | 0.04 | 0.12 | MGD | ****** | ****** | ****** | | 0 | DAILY | TOTALZ |
| 50050 1 0 0 Effluent Gross | PERMIT REQUIREMENT | Report MO AVG | Report DAILY MX | | | | | | | Daily | TOTALZ |

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|---|---|---|---|---|---|
| Nick Spencer, Business Unit Leader | N.D.S | 219 473-3149 | 8 | 23 | 13 |
| TYPED OR PRINTED | SIGNATURE | AREA CODE AND NO. | MO | DAY | YEAR |

COMMENTS AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

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**ADDRESS** WHITING REFINERY - MAIL CODE 062
2815 INDIANAPOLIS BLVD
WHITING IN 46394

**FACILITY** BP PRODUCTS NORTH AMERICA INC
**LOCATION** WHITING IN
**ATTN:** DANIEL SAJKOWSKI, PLT MANAGER

# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
# DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98

Revised: ☐

| PERMIT NUMBER | PERMITTED FEATURE |
|---|---|
| IN0000108 | 005 A |

MONITORING PERIOD

| | MO | DAY | YEAR | | MO | DAY | YEAR |
|---|---|---|---|---|---|---|---|
| FROM | | | | TO | | | |

*IN0000108005A72012*

For any questions call Gary Starks at 317-232-8694

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

| PARAMETER | | QUANTITY OR LOADING | | | QUALITY OR CONCENTRATION | | | | NO. EX | Frequency of Analysis | Sample Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Average | Maximum | Units | Minimum | Average | Maximum | Units | | | |
| BOD, 5-day, 20 deg. C | SAMPLE MEASUREMENT | 1035 | 4028 | lb/d | ****** | 7.3 | 30.0 | mg/L | 0 | WEEKLY | COMP24 |
| 00310 1 0 0 Effluent Gross | PERMIT REQUIREMENT | 4161 MO AVG | 8164 DAILY MX | | | Report MO AVG | Report DAILY MX | | | Weekly | COMP24 |
| pH | SAMPLE MEASUREMENT | ****** | ****** | | 7.4 | ****** | 8.1 | SU | 0 | 3/WEEK | GRAB |
| 00400 1 0 0 Effluent Gross | PERMIT REQUIREMENT | | | | 6 DAILY MN | | 9 DAILY MX | | | Three Per Week | GRAB |
| Solids, total suspended | SAMPLE MEASUREMENT | <417 | 905 | lb/d | ****** | <2.5 | 5.0 | mg/L | 0 | 2/WEEK | COMP24 |
| 00530 1 0 0 Effluent Gross | PERMIT REQUIREMENT | 4925 MO AVG | 7723 DAILY MX | | | Report MO AVG | Report DAILY MX | | | Twice Every Week | COMP24 |
| Oil and grease, hexane extr method | SAMPLE MEASUREMENT | <89 | 148 | lb/d | ****** | <0.6* | 1.1 | mg/L | 0 | WEEKLY | GRAB |
| 00552 1 0 0 Effluent Gross | PERMIT REQUIREMENT | 1368 MO AVG | 2600 DAILY MX | | | Report MO AVG | Report DAILY MX | | | Weekly | GRAB |
| Nitrogen, ammonia total (as N) | SAMPLE MEASUREMENT | <188 | 933 | lb/d | ****** | <1.16 | 5.54 | mg/L | 0 | 5/WEEK | COMP24 |
| 00610 1 0 0 Effluent Gross | PERMIT REQUIREMENT | 1584 MO AVG | 3572 DAILY MX | | | Report MO AVG | Report DAILY MX | | | Five Per Week | COMP24 |
| Phosphorus, total (as P) | SAMPLE MEASUREMENT | 14.6 | 24.2 | lb/d | ****** | 0.10 | 0.16 | mg/L | 0 | WEEKLY | COMP24 |
| 00665 1 0 0 Effluent Gross | PERMIT REQUIREMENT | Report MO AVG | Report DAILY MX | | | Report MO AVG | 1 DAILY MX | | | Weekly | COMP24 |
| Sulfide, total (as S) | SAMPLE MEASUREMENT | 2.0 | 2.8 | lb/d | ****** | 0.01 | 0.02 | mg/L | 0 | WEEKLY | COMP24 |
| 00745 1 0 0 Effluent Gross | PERMIT REQUIREMENT | 23.1 MO AVG | 51.4 DAILY MX | | | Report MO AVG | Report DAILY MX | | | Weekly | COMP24 |

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| Nick Spencer, Business Unit Leader | N.D. | 219 473-3149 | 8 | 23 | 13 |
| TYPED OR PRINTED | SIGNATURE | AREA CODE AND NO. | MO | DAY | YEAR |

COMMENTS AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

INDUSTRIAL MAJOR LAKE COUNTY



* Not Quantifiable

# BP PRODUCTS NORTH AMERICA Inc., WHITING REFINERY
## 2815 INDIANAPOLIS BLVD., WHITING, INDIANA 46394

PERMIT NO IN0000108 OUTFALL 002 Jul-13 JUL COOLING WATER EFFLUENT

| PARAMETER | FLOW | IN-TEMP | OUT-TEMP | HEAT | pH | OUT-OIL | IN-TOC | OUT-TOC | DELTA-TOC | RESID-CL | | IN-TEMP | OUT-TEMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CODE | 50050 | 00011 | 00011 | 00179 | 00400 | 00552 | 00680 | 00680 | 00680 | 50060 | | 00011 | 00011 |
| SAMPLE TYPE | | | | | | | | | | | | | |
| PERMIT | CONT | CONT | CONT | CONT | GRAB | GRAB | GRAB | GRAB | GRAB | GRAB | | CONT | CONT |
| ACTUAL | CONT | CONT | CONT | CONT | GRAB | GRAB | GRAB | GRAB | GRAB | GRAB | | CONT | CONT |
| FREQUENCY | | | | | | | | | | | | | |
| PERMIT | CONT | 5/7 | 5/7 | 5/7 | 3/7 | 1/MO | 1/YR | 1/YR | 1/YR | 1/7 | | 5/7 | 5/7 |
| ACTUAL | CONT | CONT | CONT | CONT | 3/7 | 1/MO | 1/YR | 1/YR | 1/YR | 1/7 | | CONT | CONT |
| LIMITS: AVG. | | | | 1.70 | | | | | | | 20 | | |
| MAX. | | | | 2.00 | 6.0-9.0 | | | | 5 | .06 | 60 | | |
| DATE | MG/D | DEG C | DEG C | GBTU/HR | SU | mg/l | mg/l | mg/l | mg/l | mg/l | LB/D | DEG F | DEG F |
| 1 | 72.6 | 19 | 35 | 0.726 | 7.9 | — | — | — | — | — | — | 66.2 | 95.0 |
| 2 | 72.5 | 20 | 36 | 0.725 | — | — | — | — | — | — | — | 68.0 | 96.8 |
| 3 | 73.5 | 19 | 35 | 0.735 | 8.2 | — | — | — | — | — | — | 66.2 | 95.0 |
| 4 | 73.3 | 19 | 35 | 0.733 | — | — | — | — | — | — | — | 66.2 | 95.0 |
| 5 | 72.8 | 19 | 35 | 0.728 | 8.2 | — | — | — | — | 0 | 0 | 66.2 | 95.0 |
| 6 | 70.5 | 19 | 35 | 0.705 | — | — | — | — | — | — | — | 66.2 | 95.0 |
| 7 | 70.5 | 19 | 36 | 0.749 | — | — | — | — | — | — | — | 66.2 | 96.8 |
| 8 | 70.1 | 19 | 35 | 0.701 | 8.2 | — | — | — | — | — | — | 66.2 | 95.0 |
| 9 | 69.8 | 20 | 36 | 0.698 | — | — | — | — | — | — | — | 68.0 | 96.8 |
| 10 | 69.9 | 20 | 37 | 0.742 | 8.2 | <0.3 | — | — | — | — | — | 68.0 | 98.6 |
| 11 | 71.7 | 21 | 38 | 0.762 | — | — | — | — | — | 0 | 0 | 69.8 | 100.4 |
| 12 | 70.4 | 22 | 38 | 0.704 | 8.2 | — | — | — | — | — | — | 71.6 | 100.4 |
| 13 | 69.5 | 22 | 38 | 0.695 | — | — | — | — | — | — | — | 71.6 | 100.4 |
| 14 | 67.5 | 23 | 39 | 0.675 | — | — | — | — | — | — | — | 73.4 | 102.2 |
| 15 | 67.9 | 24 | 39 | 0.636 | 8.0 | — | — | — | — | — | — | 75.2 | 102.2 |
| 16 | 67.5 | 22 | 38 | 0.675 | — | — | — | — | — | — | — | 71.6 | 100.4 |
| 17 | 67.2 | 22 | 37 | 0.630 | 8.1 | — | — | — | — | — | — | 71.6 | 98.6 |
| 18 | 67.0 | 21 | 37 | 0.670 | — | — | — | — | — | 0 | 0 | 69.8 | 98.6 |
| 19 | 67.3 | 20 | 36 | 0.673 | 8.0 | — | — | — | — | — | — | 68.0 | 96.8 |
| 20 | 67.9 | 22 | 38 | 0.679 | — | — | — | — | — | — | — | 71.6 | 100.4 |
| 21 | 68.4 | 23 | 39 | 0.684 | — | — | — | — | — | — | — | 73.4 | 102.2 |
| 22 | 70.0 | 22 | 39 | 0.743 | 8.3 | — | — | — | — | — | — | 71.6 | 102.2 |
| 23 | 68.5 | 23 | 38 | 0.642 | — | — | — | — | — | — | — | 73.4 | 100.4 |
| 24 | 68.9 | 23 | 39 | 0.689 | 8.3 | — | — | — | — | — | — | 73.4 | 102.2 |
| 25 | 69.9 | 23 | 39 | 0.699 | — | — | — | — | — | 0 | 0 | 73.4 | 102.2 |
| 26 | 69.1 | 22 | 38 | 0.691 | 8.3 | — | — | — | — | — | — | 71.6 | 100.4 |
| 27 | 69.7 | 22 | 36 | 0.610 | — | — | — | — | — | — | — | 71.6 | 96.8 |
| 28 | 70.3 | 21 | 36 | 0.659 | — | — | — | — | — | — | — | 69.8 | 96.8 |
| 29 | 70.7 | 21 | 36 | 0.663 | 8.3 | — | — | — | — | — | — | 69.8 | 96.8 |
| 30 | 70.9 | 21 | 36 | 0.664 | — | — | — | — | — | — | — | 69.8 | 96.8 |
| 31 | 70.8 | 21 | 36 | 0.663 | 8.3 | — | — | — | — | — | — | 69.8 | 96.8 |
| AVERAGE | 69.9 | 21 | 37 | 0.692 | 8.2 | <0.3 | — | — | — | 0 | 0 | 70.0 | 98.5 |
| HIGHEST VAL. | 73.5 | 24 | 39 | 0.762 | 8.3 | <0.3 | — | — | — | 0 | 0 | 75.2 | 102.2 |
| LOWEST VAL. | 67.0 | 19 | 35 | 0.610 | 7.9 | <0.3 | — | — | — | 0 | 0 | 66.2 | 95.0 |
| OVER LIMIT | 0 | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | 0 | 0 |
| TOTAL | 2166.6 | | | | | | | | | | | | |

CERTIFIED OPERATOR : Barry L. Cook 8/15/2013 NO. 14407 Exp. 6/30/2013 Tel. 219-473-5298

--MEANS NOT TESTED THIS DATE

* Note: Not Quantifiable

DATE : 8-23-13 AUTHORIZED AGENT : N.D.

# BP PRODUCTS NORTH AMERICA Inc., WHITING REFINERY
## 2815 INDIANAPOLIS BLVD., WHITING, INDIANA 46394

PERMIT NO. IN0000108 Jul-13 JUL STORM WATER RUNOFF

- - - -OUTFALL 003- - - -

*** NOTE: TO BE SAMPLED AFTER EACH RAIN EVENT IF DISCHARGE OCCURS - ONCE PER WEEK

| PARAMETER | | pH | OIL | TOC | FLOW |
|---|---|---|---|---|---|
| CODE: | | 00400 | 00552 | 00680 | 50050 |
| LIMITS: | MAX. | 6-9 | 15 | 110 | |
| DATE | | SU | mg/l | mg/l | MG/D |
| | 1 | 7.5 | 0.3* | 13 | 0.32 |
| | 2 | -------- | -------- | -------- | 0.13 |
| | 3 | -------- | -------- | -------- | 0.11 |
| | 4 | -------- | -------- | -------- | 0.19 |
| | 5 | -------- | -------- | -------- | 0.08 |
| | 6 | -------- | -------- | -------- | 0.07 |
| | 7 | -------- | -------- | -------- | 0.01 |
| | 8 | 7.6 | 2.5 | 24 | 0.27 |
| | 9 | -------- | -------- | -------- | 0.37 |
| | 10 | -------- | -------- | -------- | 0.29 |
| | 11 | -------- | -------- | -------- | 0.12 |
| | 12 | -------- | -------- | -------- | 0.06 |
| | 13 | -------- | -------- | -------- | 0.02 |
| | 14 | -------- | -------- | -------- | 0.01 |
| | 15 | -------- | -------- | -------- | 0.01 |
| | 16 | 7.4 | 0.6* | 25 | 0.20 |
| | 17 | -------- | -------- | -------- | 0.09 |
| | 18 | -------- | -------- | -------- | 0.06 |
| | 19 | -------- | -------- | -------- | 0.05 |
| | 20 | -------- | -------- | -------- | 0.00 |
| | 21 | -------- | -------- | -------- | 0.07 |
| | 22 | 7.5 | 2.0 | 80 | 0.04 |
| | 23 | -------- | -------- | -------- | 0.00 |
| | 24 | -------- | -------- | -------- | 0.00 |
| | 25 | -------- | -------- | -------- | 0.00 |
| | 26 | -------- | -------- | -------- | 0.10 |
| | 27 | -------- | -------- | -------- | 0.03 |
| | 28 | -------- | -------- | -------- | 0.00 |
| | 29 | 7.7 | 0.8 | 41 | 0.01 |
| | 30 | -------- | -------- | -------- | 0.00 |
| | 31 | -------- | -------- | -------- | 0.05 |
| AVERAGE | | 7.5 | 1.2 | 37 | 0.09 |
| HIGHEST VAL. | | 7.7 | 2.5 | 80 | 0.37 |
| LOWEST VAL. | | 7.4 | 0.3* | 13 | 0.00 |
| OVER LIMIT | | 0 | 0 | 0 | 0 |

CERTIFIED OPERATOR : Barry L. Cook 8/15/2013 NO. 14407 DATE : 8/23/13 AUTHORIZED AGENT : N.R.J.

--MEANS NOT TESTED THIS DATE Exp. 6/30/2013

* Note: Not Quantifiable Tel. 219-473-5298

# BP PRODUCTS NORTH AMERICA Inc., WHITING REFINERY
# 2815 INDIANAPOLIS BLVD., WHITING, INDIANA 46394

PERMIT NO. IN0000108 Jul-13 JUL STORM WATER RUNOFF

- - - -OUTFALL 004- - - -

*** NOTE: TO BE SAMPLED AFTER EACH RAIN EVENT IF DISCHARGE OCCURS - ONCE PER WEEK

| PARAMETER | | pH | OIL | TOC | FLOW |
|---|---|---|---|---|---|
| CODE: | | 00400 | 00552 | 00680 | 50050 |
| LIMITS: | MAX. | 6-9 | 15 | 110 | |
| DATE | | SU | mg/l | mg/l | MG/D |
| | 1 | 8.3 | <0.3 | 15 | 0.04 |
| | 2 | -------- | -------- | -------- | 0.10 |
| | 3 | -------- | -------- | -------- | 0.11 |
| | 4 | -------- | -------- | -------- | 0.00 |
| | 5 | -------- | -------- | -------- | 0.00 |
| | 6 | -------- | -------- | -------- | 0.00 |
| | 7 | -------- | -------- | -------- | 0.00 |
| | 8 | 8.4 | 2.9 | 16 | 0.11 |
| | 9 | -------- | -------- | -------- | 0.07 |
| | 10 | -------- | -------- | -------- | 0.10 |
| | 11 | -------- | -------- | -------- | 0.09 |
| | 12 | -------- | -------- | -------- | 0.12 |
| | 13 | -------- | -------- | -------- | 0.11 |
| | 14 | -------- | -------- | -------- | 0.00 |
| | 15 | 7.9 | <0.3 | 20 | 0.08 |
| | 16 | -------- | -------- | -------- | 0.05 |
| | 17 | -------- | -------- | -------- | 0.08 |
| | 18 | -------- | -------- | -------- | 0.04 |
| | 19 | -------- | -------- | -------- | 0.00 |
| | 20 | -------- | -------- | -------- | 0.03 |
| | 21 | -------- | -------- | -------- | 0.08 |
| | 22 | 7.3 | 0.4* | 16 | 0.05 |
| | 23 | -------- | -------- | -------- | 0.09 |
| | 24 | -------- | -------- | -------- | 0.00 |
| | 25 | -------- | -------- | -------- | 0.00 |
| | 26 | -------- | -------- | -------- | 0.00 |
| | 27 | -------- | -------- | -------- | 0.00 |
| | 28 | -------- | -------- | -------- | 0.00 |
| | 29 | 8.4 | <0.3 | 16 | 0.01 |
| | 30 | -------- | -------- | -------- | 0.00 |
| | 31 | -------- | -------- | -------- | 0.00 |
| AVERAGE | | 8.1 | <0.8 | 17 | 0.04 |
| HIGHEST VAL. | | 8.4 | 2.9 | 20 | 0.12 |
| LOWEST VAL. | | 7.3 | <0.3 | 15 | 0.00 |
| OVER LIMIT | | 0 | 0 | 0 | 0 |

CERTIFIED OPERATOR : Barry L. Cook 8/15/2013 NO. 14407 DATE : 8/23/13 AUTHORIZED AGENT :

--MEANS NOT TESTED THIS DATE Exp. 6/30/2013

* Note: Not Quantifiable Tel. 219-473-5298

# BP PRODUCTS NORTH AMERICA Inc., WHITING REFINERY
## 2815 INDIANAPOLIS BLVD., WHITING, INDIANA 46394

PERMIT NO IN0000108 OUTFALL 005 Jul-13 JUL PROCESS WATER EFFLUENT

| PARAMETER | FLOW | BOD | | COD | | pH | TSS | | OIL | | NH3-N | | SULFIDE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CODE | 50050 | 00310 | | 81017 | | 00400 | 00530 | | 00552 | | 00610 | | 00745 | |
| SAMPLE TYPE | | | | | | | | | | | | | | |
| PERMIT | CONT | 24 | | 24 | | GRAB | 24 | | GRAB | | 24 | | 24 | |
| ACTUAL | CONT | 24 | | 24 | | GRAB | 24 | | GRAB | | 24 | | 24 | |
| FREQUENCY | | | | | | | | | | | | | | |
| PERMIT | CONT | 1/7 | | 1/7 | | 3/7 | 2/7 | | 1/7 | | 5/7 | | 1/7 | |
| ACTUAL | CONT | 1/7 | | 1/7 | | 3/7 | 2/7 | | 1/7 | | 5/7 | | 1/7 | |
| LIMITS: AVG | | | 4161 | | 30323 | | | 4925 | | 1368 | | 1584 | | 23.1 |
| MAX | | | 8164 | | 58427 | 6.0-9.0 | | 7723 | | 2600 | | 3572 | | 51.4 |
| DATE | MG/D | mg/l | LB/D | mg/l | LB/D | SU | mg/l | LB/D | mg/l | LB/D | mg/l | LB/D | mg/l | LB/D |
| 1 | 19.6 | — | — | — | — | 8.0 | <1.0 | <163 | — | — | <0.10 | <16 | 0.01 | 1.6 |
| 2 | 19.2 | — | — | 16 | 2562 | — | — | — | — | — | <0.10 | <16 | — | — |
| 3 | 18.5 | 0.5 | 77 | — | — | 7.8 | — | — | 0.5* | 77 | <0.10 | <15 | — | — |
| 4 | 18.1 | — | — | — | — | — | 4.0 | 604 | — | — | <0.10 | <15 | — | — |
| 5 | 18.3 | — | — | — | — | 8.1 | — | — | — | — | — | — | — | — |
| 6 | 18.9 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 7 | 17.3 | — | — | — | — | — | — | — | — | — | <0.10 | <14 | — | — |
| 8 | 21.5 | — | — | — | — | 7.9 | 1.6 | 287 | — | — | <0.10 | <18 | 0.01 | 1.8 |
| 9 | 25.0 | — | — | 21 | 4379 | — | — | — | — | — | <0.10 | <21 | — | — |
| 10 | 19.0 | 0.5 | 79 | — | — | 7.8 | — | — | 0.3* | 48 | <0.10 | <16 | — | — |
| 11 | 15.0 | — | — | — | — | — | 1.0 | 125 | — | — | 0.11 | 14 | — | — |
| 12 | 21.2 | — | — | — | — | 7.7 | — | — | — | — | — | — | — | — |
| 13 | 23.6 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 14 | 20.2 | — | — | — | — | — | — | — | — | — | 5.54 | 933 | — | — |
| 15 | 21.6 | — | — | — | — | 7.4 | 4.4 | 793 | — | — | 2.57 | 463 | 0.01 | 1.8 |
| 16 | 21.3 | — | — | 40 | 7106 | — | — | — | — | — | 0.50 | 89 | — | — |
| 17 | 21.3 | 4.7 | 835 | — | — | 7.5 | — | — | 0.7 | 124 | 1.05 | 187 | — | — |
| 18 | 21.7 | — | — | — | — | — | 5.0 | 905 | — | — | 2.96 | 536 | — | — |
| 19 | 22.1 | — | — | — | — | 7.5 | — | — | — | — | — | — | — | — |
| 20 | 22.2 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 21 | 22.0 | — | — | — | — | — | — | — | — | — | 3.28 | 602 | — | — |
| 22 | 21.1 | — | — | — | — | 7.5 | 2.2 | 387 | — | — | 1.31 | 231 | 0.01 | 1.8 |
| 23 | 21.4 | — | — | 25 | 4462 | — | — | — | — | — | 0.28 | 50 | — | — |
| 24 | 19.0 | 1.0 | 158 | — | — | 7.6 | — | — | <0.3 | <48 | <0.10 | <16 | — | — |
| 25 | 18.1 | — | — | — | — | — | <1.0 | <151 | — | — | 3.69 | 557 | — | — |
| 26 | 19.0 | — | — | — | — | 7.4 | — | — | — | — | — | — | — | — |
| 27 | 16.5 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 28 | 16.5 | — | — | — | — | — | — | — | — | — | <0.10 | <14 | — | — |
| 29 | 16.7 | — | — | — | — | 7.8 | 2.4 | 334 | — | — | <0.10 | <14 | 0.02 | 2.8 |
| 30 | 16.4 | — | — | 40 | 5471 | — | — | — | — | — | 0.72 | 98 | — | — |
| 31 | 16.1 | 30.0 | 4028 | — | — | 7.6 | — | — | 1.1 | 148 | 2.91 | 391 | — | — |
| AVERAGE | 19.6 | 7.3 | 1035 | 28 | 4796 | 7.7 | <2.5 | <417 | <0.6* | <89 | <1.16 | <188 | 0.01 | 2.0 |
| HIGHEST VAL. | 25.0 | 30.0 | 4028 | 40 | 7106 | 8.1 | 5.0 | 905 | 1.1 | 148 | 5.54 | 933 | 0.02 | 2.8 |
| LOWEST VAL. | 15.0 | 0.5 | 77 | 16 | 2562 | 7.4 | <1.0 | <125 | <0.3 | <48 | <0.10 | <14 | 0.01 | 1.6 |
| OVER LIMIT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 608.4 | | | | | | | | | | | | | |

CERTIFIED OPERATOR : Barry L. Cook 8/15/2013 NO. 14407 DATE : 8/23/13 AUTHORIZED AGENT : N.D.

– MEANS NOT TESTED THIS DATE Exp. 6/30/2013

* Note: Not Quantifiable Tel. 219-473-5298

# BP PRODUCTS NORTH AMERICA, Inc., WHITING REFINERY
## 2815 INDIANAPOLIS BLVD., WHITING, INDIANA 46394

PERMIT NO IN0000108 OUTFALL 005 Jul-13 JUL PROCESS WATER EFFLUENT

| PARAMETER | HX. CHRM | TL.CHRM | PHENOL | VANADIUM | ORTHO-P | MERCURY |
|---|---|---|---|---|---|---|
| CODE | 01220 | 01034/01118 | 32730 | 01128 | 00665 | 71901 |
| SAMPLE TYPE | | | | | | |
| PERMIT | GRAB | 24 | 24 | 24 | 24 | GRAB |
| ACTUAL | GRAB | 24 | 24 | 24 | 24 | GRAB |
| FREQUENCY | | | | | | |
| PERMIT | 1/7 | 1/7 | 1/7 | 1/MO | 1/7 | 6/YR |
| ACTUAL | 1/7 | 1/7 | 1/7 | 1/MO | 1/7 | 6/YR |

| LIMITS: | AVG. | 2.01 | | 23.90 | | 20.33 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MAX. | 4.48 | | 68.53 | | 73.01 | | | | 1 | | |
| DATE | mg/l | LB/D | mg/l | LB/D | mg/l | LB/D | mg/l | LB/D | mg/l | LB/D | ng/L | LB/D |
| 1 | — | — | — | — | <0.01 | <1.63 | — | — | — | — | — | — |
| 2 | — | — | — | — | — | — | — | — | — | — | — | — |
| 3 | <0.005 | <0.8 | <0.01 | <1.5 | — | — | — | — | — | — | — | — |
| 4 | — | — | — | — | — | — | — | — | 0.16 | 24.2 | — | — |
| 5 | — | — | — | — | — | — | — | — | — | — | — | — |
| 6 | — | — | — | — | — | — | — | — | — | — | — | — |
| 7 | — | — | — | — | — | — | 0.016 | 2.3 | — | — | — | — |
| 8 | — | — | — | — | <0.01 | <1.79 | — | — | — | — | — | — |
| 9 | — | — | — | — | — | — | — | — | — | — | — | — |
| 10 | <0.005 | <0.8 | <0.01 | <1.6 | — | — | — | — | — | — | — | — |
| 11 | — | — | — | — | — | — | — | — | 0.14 | 17.5 | — | — |
| 12 | — | — | — | — | — | — | — | — | — | — | — | — |
| 13 | — | — | — | — | — | — | — | — | — | — | — | — |
| 14 | — | — | — | — | — | — | — | — | — | — | — | — |
| 15 | — | — | — | — | <0.01 | <1.80 | — | — | — | — | — | — |
| 16 | — | — | — | — | — | — | — | — | — | — | — | — |
| 17 | <0.005 | <0.9 | <0.01 | <1.8 | — | — | — | — | — | — | — | — |
| 18 | — | — | — | — | — | — | — | — | 0.01 | 1.81 | — | — |
| 19 | — | — | — | — | — | — | — | — | — | — | — | — |
| 20 | — | — | — | — | — | — | — | — | — | — | — | — |
| 21 | — | — | — | — | — | — | — | — | — | — | — | — |
| 22 | — | — | — | — | <0.01 | <1.76 | — | — | — | — | — | — |
| 23 | — | — | — | — | — | — | — | — | — | — | — | — |
| 24 | <0.005 | <0.8 | <0.01 | <1.6 | — | — | — | — | — | — | — | — |
| 25 | — | — | — | — | — | — | — | — | 0.10 | 15.1 | — | — |
| 26 | — | — | — | — | — | — | — | — | — | — | — | — |
| 27 | — | — | — | — | — | — | — | — | — | — | — | — |
| 28 | — | — | — | — | — | — | — | — | — | — | — | — |
| 29 | — | — | — | — | <0.01 | <1.39 | — | — | — | — | — | — |
| 30 | — | — | — | — | — | — | — | — | — | — | — | — |
| 31 | <0.005 | <0.7 | <0.01 | <1.3 | — | — | — | — | — | — | — | — |
| AVERAGE | <0.005 | <0.8 | <0.01 | <1.6 | <0.01 | <1.67 | 0.016 | 2.3 | 0.10 | 14.6 | — | — |
| HIGHEST VAL. | <0.005 | <0.9 | <0.01 | <1.8 | <0.01 | <1.80 | 0.016 | 2.3 | 0.16 | 24.2 | — | — |
| LOWEST VAL. | <0.005 | <0.7 | <0.01 | <1.3 | <0.01 | <1.39 | 0.016 | 2.3 | 0.01 | 1.81 | — | — |
| OVER LIMIT | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |

CERTIFIED OPERATOR : Barry L. Cook 8/15/2013 NO. 14407 Exp. 6/30/2013 Tel. 219-473-5298

-- MEANS NOT TESTED THIS DATE

DATE : 8/23/13

AUTHORIZED AGENT : N.P.