AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act as amended, (33 U.S.C. §§1251 et seq.; the "CWA", and the Massachusetts Clean Waters Act, as amended, (M.G.L. Chap. 21, §§26-53),

Global Petroleum Corporation

is authorized to discharge from a facility located at

Global South Terminal, LLC
49 & 96 Lee Burbank Highway
Revere, Massachusetts 02151

to receiving water named

Chelsea River/Mystic River Watershed (MA71)

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective sixty days from the date of signature.

This permit and the authorization to discharge expire at midnight, five (5) years from the effective date.

This permit supersedes the permit issued on October 2, 1997.

This permit consists of 13 pages in Part I including effluent limitations, monitoring requirements, and 35 pages in Part II including General Conditions and Definitions.

Signed this 3 day of June, 2005

Linda M. Murphy, Director
Office of Ecosystem Protection
Environmental Protection Agency
Boston, MA

Glenn Haas, Director
Division of Watershed Management
Department of Environmental Protection
Commonwealth of Massachusetts
Boston, MA

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge treated storm water runoff from the Global South Terminal, LLC through Outfall Serial Number 001 to the Chelsea River. Such discharge shall: 1) be limited and monitored by the permittee as specified below; and 2) not cause a violation of the State Water Quality Standards of the receiving water.

Effluent Characteristic	Units	Discharge Limitation		Monitoring Requirements (1)	
		Average Monthly	Maximum Daily	Measurement Frequency	Sample Type
Flow Rate(3)	gpm	----	700	When Discharging	Estimate
Total Flow (4)	Mgal/ Month	Report Monthly Total	----	When Discharging	Estimate
Total Suspended Solids (TSS)	mg/L	30	100	2/Month(2)	Grab
Oil and Grease (O&G) (5)	mg/L	----	15	1/Month(2)	Grab
pH	S.U.	----	6.5 to 8.5 (6)	1/Month(2)	Grab

See page 4 for explanation of footnotes

Part I.A.1, Continued

Effluent Characteristic	Units	Discharge Limitation		Monitoring Requirements [1]	
		Average Monthly	Maximum Daily	Measurement Frequency	Sample Type
Polynuclear Aromatic Hydrocarbons (PAHs) [7]					
Benzo(a)anthracene	µg/L	----	Report	Quarterly[2]	Grab
Benzo(a)pyrene	µg/L	----	Report	Quarterly[2]	Grab
Benzo(b)fluoranthene	µg/L	----	Report	Quarterly[2]	Grab
Benzo(k)fluoranthene	µg/L	----	Report	Quarterly[2]	Grab
Chrysene	µg/L	----	Report	Quarterly[2]	Grab
Dibenzo(a,h)anthracene	µg/L	----	Report	Quarterly[2]	Grab
Indeno(1,2,3-cd)pyrene	µg/L	----	Report	Quarterly[2]	Grab
Naphthalene	µg/L	----	Report	Quarterly[2]	Grab
Volatile Organic Compounds (VOCs)					
Benzene	µg/L	----	51	Quarterly[2]	Grab
Toluene	µg/L	----	Report	Quarterly[2]	Grab
Ethylbenzene	µg/L	----	Report	Quarterly[2]	Grab
Total Xylenes	µg/L	----	Report	Quarterly[2]	Grab
Methyl Tertiary-Butyl Ether (MTBE)	µg/L	----	Report	Quarterly[2]	Grab

See page 4 for explanation of footnotes

Footnotes:

1. All samples shall be collected from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (i.e., greater than 0.1 inch rainfall) storm event. All samples are to be grab samples taken within thirty (30) minutes of the initiation of the discharge from the outfall(s) where practicable, but in no case later than within the first hour of discharge from the outfall(s). Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: after treatment in the Oil/Water (O/W) Separator but before the effluent is discharged into and/or mixes with the Chelsea River.

2. Sampling frequency of 1/month and 2/month is defined respectively as the sampling of <u>one</u> (1) and <u>two</u> (2) storm event(s) (as defined above in Footnote No. 1) in each calendar month. Sampling frequency of quarterly is defined as the sampling of <u>one</u> (1) storm event (as defined above in Footnote No. 1) in each quarter. Quarters are defined as the interval of time between the months of: January through March, inclusive; April through June, inclusive; July through September, inclusive; and October through December, inclusive. **Quarterly sampling shall be performed concurrently with the monthly monitoring event.** The permittee shall submit the results to EPA and MADEP of any additional testing done to that required herein, if it is conducted in accordance with EPA approved methods consistent with the provisions of 40 CFR §122.41(l)(4)(ii).

3. For Flow Rate, the maximum daily value represents the estimated maximum instantaneous flow rate identified by the facility as passing through the Oil/Water (O/W) Separator for each day that storm water is discharged during the reporting period. The maximum instantaneous flow rate, which is to be reported in the units of gallons per minute (gpm), shall be based upon the summation of the pump curve value(s) for all pumps operating and controlling the rate of flow through the O/W Separator when the discharge is occurring during the reporting period.

4. For Total Flow, the value reported represents the estimated sum of the flow for each day that storm water is discharged during that month. The total monthly flow rate shall be calculated based upon the pump curve value(s) and the hours of operation for the pump(s) during the reporting period and shall be reported in the units of millions of gallons/month (Mgal/month). The permittee shall also report the total number of days during the reporting period in which there was a discharge from the outfall(s) (to be noted on DMR form under "Event Total" parameter).

5. O&G is to be measured using EPA Method 1664

6. See Part I.A.3., Page 5

7. See Part I.A.15., Page 6

Part 1.A. (Continued)

2. The discharges either individually or in combination shall not cause a violation of State Water Quality Standards of the receiving waters.

3. The pH of the effluent shall not be less than 6.5 nor greater than 8.5 at any time unless these values are exceeded as a result of natural causes.

4. The discharge shall not cause objectionable discoloration of the receiving waters.

5. The discharge shall not contain a visible oil sheen, foam, nor floating solids at any time.

6. The discharge shall not contain materials in concentrations or combinations which are hazardous or toxic to human health, aquatic life of the receiving surface waters or which would impair the uses designated by its classification.

7. There shall be no discharge of tank bottom water and/or bilge water alone or in combination with storm water discharge or other wastewater.

8. The discharge shall not impart color, taste, turbidity, toxicity, radioactivity or other properties which cause those waters to be unsuitable for the designated uses and characteristics ascribed to their use.

9. Notwithstanding specific conditions of this permit, the effluent must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.

10. The permittee shall inspect, operate, and maintain the O/W Separator(s) at the facility to ensure that the Effluent Limitations and Conditions contained in this permit are met. The permittee shall ensure that all components of the facility's Storm Water Pollution Prevention Plan including those which specifically address the operation and maintenance of the O/W Separator(s) and other components of the storm water conveyance system are complied with.

11. Chemicals (i.e. disinfecting agents, detergents, emulsifiers, etc.), bioremedial agents including microbes shall not be added to the collection and treatment systems without prior approval by the U. S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MADEP) to prevent hydrocarbon and/or particulate matter carryover into the Chelsea River.

12. There shall be no discharge of any sludge and/or bottom deposits from any storage tank(s), basin(s), and/or diked area(s) to the receiving waters. Examples of storage tanks and/or basins include, but are not limited to: primary catch basins, stilling basins, O/W Separators, petroleum product storage tanks, baffled storage tanks collecting spills, and tank truck loading rack sumps.

13. The bypass of storm water runoff, wash water, or water used at the facility is prohibited except where necessary to avoid loss of life, injury, or severe property damage. Each bypass shall be sampled for all of the effluent characteristics identified in Part I.A.1 of this permit (i.e., monthly and quarterly) and the results reported to EPA within forty-five (45) days of the initiation of the bypass. These bypass reporting requirements are in addition to those already identified in 40 Code of Federal Regulations (CFR) §122.41(m).

14. EPA may modify this permit in accordance with EPA regulations in 40 Code of Federal Regulations (CFR) §122.62 and §122.63 to incorporate more stringent effluent limitations, increase the frequency of analyses, or impose additional sampling and analytical requirements.

15. The appearance of any size sheen attributable to the discharge from the Global South Terminal, LLC shall be reported immediately by the permittee to the appropriate U.S. Coast Guard Officer in accordance with Section 311 of the Clean Water Act (CWA). This requirement is in addition to any reporting requirements contained in this National Pollutant Discharge Elimination System (NPDES) permit.

16. Reporting of Polynuclear Aromatic Hydrocarbons (PAHs) will be based on the Minimum Level (ML) of reporting. The ML is defined as the level at which the entire analytical system gives recognizable mass spectra and acceptable calibration points. This level corresponds to the lower points at which the calibration curve is determined based on the analysis of the pollutant(s) of concern in reagent water. PAHs analysis shall include the following compounds and their respective MLS as identified in parenthesis for each compound: Benzo(a)anthracene (<0.05 μg/L), benzo(a)pyrene (<2.0 μg/L), benzo(b)fluoranthene (<0.1 μg/L), benzo(k)fluoranthene (<2.0 μg/L), Chrysene (<5.0 μg/L), Dibenzo(a,h)anthracene (<0.1 μg/L), Indeno(1,2,3-cd)pyrene (<0.15 μg/L), and naphthalene (0.2 μg/L).

17. The permittee shall attach a copy of the laboratory case narrative to the respective Discharge Monitoring Report Form submitted to EPA and MADEP for each sampling event reported. The laboratory case narrative shall include a copy of the laboratory data sheets for each analyses (identifying the test method, the analytical results, and the detection limits for each analyte) and provide a brief discussion of whether all appropriate QA/QC procedures were met and were within acceptable limits.

18. All existing manufacturing, commercial, mining and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"

(1) One hundred micrograms per liter (100 ug/l);

(2) Two hundred micrograms per liter (200 ug/l)for acrolein and acrylonitrite; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

(3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 C.F.R.§122.21(g)(7); or

(4) Any other notification level established by the Director in accordance with 40 C.F.R.§122.44(f).

b. That any activity has occurred or will occur which would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"

(1) Five hundred micrograms per liter (500 ug/l);

(2) One milligram per liter (1 mg/l) for antimony;

(3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 C.F.R.§122.21(g)(7).

(4) Any other notification level established by the Director in accordance with 40 C.F.R.§122.44(f).

c. That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.

19. Wastewater Treatment System Flow Control

a. Written notification and approval by EPA and the MADEP shall be required, should the permittee propose changes to either the storm water conveyance or treatment systems which have the potential to cause the maximum design flow rate through the O/W Separator to be exceeded.

20. Toxics Control

a. The permittee shall not discharge any pollutant or combination of pollutants in toxic amounts.

b. Any toxic components of the effluent shall not result in any demonstrable harm to aquatic life or violate any state or federal water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards.

21. Hydrostatic Test Water Discharges

a. The hydrostatic test water shall be monitored as described below and treated through the O/W separator prior to being discharged through Outfall 001 to the Chelsea River. In addition, the flow of hydrostatic test water into the O/W separator shall be controlled to prevent it from exceeding the maximum design flow rate of the separator.

b. At a minimum, four (4) representative samples shall be taken of the hydrostatic test water: one (1) grab sample of the influent test water; and three (3) serial-grab samples of the hydrostatic test water effluent. The influent grab sample shall be taken approximately midway through the fill segment of the hydrostatic test procedure. The three (3) effluent serial-grab samples shall be taken over the duration of the entire discharge segment of the hydrostatic test procedure. The first effluent serial-grab sample shall be taken during the initial phase of discharge; the second around the midpoint; and the third near the end of the discharge. The effluent serial-grab samples shall be obtained before discharge into the O/W Separator and/or mixing with any storm water or other non-storm water flow.

These influent and effluent samples shall be analyzed for the following parameters:

1. Total Suspended Solids (TSS)
2. Oil & Grease (O&G)
3. pH
4. Dissolved Oxygen (DO)
5. Total Residual Chlorine
6. Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX)
7. MTBE
8. PAHs

c. Testing for total residual chlorine is only required when potable water or a similar source of water which is likely to contain a residual chlorine concentration is used for hydrostatic testing. Testing for MTBE is only required if the tank undergoing testing was recently (i.e., within three years of the proposed testing date) used to store gasoline.

d. During discharge (i.e., approximately at the same time the three effluent grab samples are taken), the flow exiting through the O/W Separator or outfall should be observed in order to prevent the inadvertent release of hydrocarbons to the receiving water(s). In the event that there is evidence of such a release (e.g., visible oil sheen and/or noticeable increase in turbidity of discharge water), the permittee shall immediately halt the discharge of hydrostatic test water and take steps to correct the problem.

e. Any changes to these procedures must be approved by EPA and the MADEP prior to their implementation.

f. The permittee shall submit a letter/report to EPA, the MADEP, and the Director of Public Works of the municipality in which the facility is located, summarizing the results of the hydrostatic test within forty-five (45) days of completion of the test. This report shall contain: the date(s) during which the hydrostatic testing occurred; the volume of hydrostatic test water discharged; a copy of the laboratory data sheets for each analyses, providing the test method, the detection limits for each analyte, and a brief discussion of whether all appropriate QA/QC procedures were met and were within acceptable limits; and a brief discussion of the overall test results and how they relate to the Effluent Limitations in this permit.

g. The U.S. Environmental Protection Agency shall reserve the right to re-open the permit, in accordance with 40 CFR §122.62(a)(2), to examine hydrostatic test water discharges in the event that sampling results indicate that the standards for the assigned classification of the Chelsea River might not be attained using only an O/W Separator for treatment of such discharges.

22. The permittee can process for treatment storm water accumulated in the tank farm area of the adjacent Global Petroleum Corporation Terminal (NPDES Permit No. MA0003425) under the following conditions.

a. The permittee shall obtain a representative sample of the storm water contained in each individual tank farm area which is to be transferred from the Global Petroleum Corporation Terminal to the Global South Terminal, LLC tank farm. Each sample shall be analyzed for the Effluent Characteristics identified in Part I.A.1 of this permit (excluding the flow-related parameters). The permittee shall be allowed to transfer the water upon receipt of the analytical results which support that all of the Effluent Limitations and Conditions contained in this permit shall be met.

b. The flow of transferred storm water shall be controlled to prevent it from exceeding the maximum design flow rate of the O/W Separator (i.e., 700 gpm). In addition, appropriate engineering control measures (e.g., hay bales, silt curtains, filter bags) shall be put in place at the transfer discharge location, to prevent increased sediment loading of the O/W

Separator during the transfer of water. The permittee shall notify EPA and the MADEP of the engineering control measures to be used prior to the transfer of storm water.

c. During discharge (i.e., during the discharge of the approximate first 10 percent and last 10 percent of storm water to be transferred), the flow exiting through the O/W Separator or outfall should be observed in order to prevent the inadvertent release of hydrocarbons to the receiving water(s). In the event that there is evidence of such a release (e.g., visible oil sheen and/or noticeable increase in turbidity of discharge water), the permittee shall immediately halt the transfer of water and notify EPA and the MADEP of the steps that will be taken to correct the problem.

d. The permittee shall submit a letter/report to EPA and the MADEP, summarizing the results of the transfer within sixty (60) days of completion of the transfer. This letter/report shall contain: the date(s) of transfer; the approximate volume of storm water transferred; a copy of the laboratory data sheets for each analyses, providing the test method, the detection limits for each analyte, and a brief discussion of whether all appropriate QA/QC procedures were met and were within acceptable limits; and a brief discussion of the overall test results and how they relate to the NPDES Effluent Limitations.

e. Any changes to these procedures must be approved by EPA and the State prior to their implementation.

B. BEST MANAGEMENT PRACTICES/STORM WATER POLLUTION PREVENTION PLAN

1. The permittee shall maintain, update and implement the Storm Water Pollution Prevention Plan (SWPPP) to account for any changes that occur at the facility which could impact the plan. The permittee shall be required to provide annual certification to EPA and the MADEP documenting that the previous year's inspections and maintenance activities were conducted, results recorded, records maintained, and that the facility is in compliance with the SWPPP.

2. In order to reduce the transportation of particulate matter to storm water conveyance and treatment devices at this facility, the permittee shall amend its existing SWPPP to include sweeping of paved areas at a frequency of no less than twice per year. At least one of the sweeping events shall occur in the early spring (i.e., March to April) to maximize the removal of solids which may have accumulated at the facility over the winter.

3. The permittee shall reevaluate its Best Management Practices (BMPs) for preventing and controlling the discharge of TSS. The results of this evaluation shall be submitted to EPA concurrent with the first annual certification by each facility of its SWPPP. Specifically, as part of this evaluation each facility shall be required to discuss and identify whether any changes, modifications and/or improvements are needed at the facility for the following

items: 1) the effectiveness of the existing BMPs for reducing TSS loading; 2) the effectiveness of the current operation and maintenance performed on storm water conveyance and treatment systems for reducing TSS loading; 3) the effectiveness of surface soil conditions in the tank farm areas for reducing TSS loading; 4) the effectiveness of the existing treatment technology (i.e., Oil/Water Separator) for reducing TSS loading; and 5) the effectiveness of additional treatment technologies (and cost) which could be implemented to further reduce TSS levels.

4. The permittee shall submit a letter to the EPA and the MADEP notifying these agencies of the facility's intent to store ethanol, if applicable. Such notification shall be sent to the EPA and the MADEP at least ninety (90) days prior to the date that the facility intends to begin storing ethanol. The permittee shall also amend its existing SWPPP to identify what special provisions and conditions the facility will use for containing and treating ethanol, should it be spilled. This amendment shall take into account the analytical challenges for monitoring of this compound and the limited effectiveness of an Oil/Water Separator in treating this compound. The portions of the amended SWPPP shall accompany the ethanol notification letter sent to the EPA and the MADEP.

5. The certification shall be signed in accordance with the requirements identified in 40 CFR §122.22 and a copy of the certification will be sent each year to EPA and MADEP as well as appended to the SWPPP within thirty (30) days of the annual anniversary of the effective date of the Draft Permit. The permittee shall keep a copy of the most recent SWPPP at the facility and shall make it available for inspection by EPA and MADEP.

6. A copy of the SWPPP shall be provided to the municipality in which the facility is located upon written request by such municipality to the facility.

C. REOPENER CLAUSES

1. This permit shall be modified, or alternatively, revoked and reissued, to comply with any applicable standard or limitation promulgated or approved under sections 301(b)(2)(C) and (d), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:

   a. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

   b. Controls any pollutants not limited in the permit.

2. This permit may be modified to incorporate new analytical methods and/or additional treatment for ethanol in the event that this facility elects to store ethanol in the future, and/or the changes to the SWPPP are not effective and protective in controlling the discharge of this compound to the receiving water.

D. MONITORING AND REPORTING

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report Form(s) postmarked no later than the 15th day of the month following the effective date of the permit.

Signed and dated originals of these, and all other reports and evaluations required herein, shall be submitted to EPA at the following address:

Environmental Protection Agency, Region 1
Water Technical Unit (SEW)
P.O. Box 8127
Boston, Massachusetts 02114

In addition, a second copy of each hydrostatic testing letter/report submitted in accordance with this permit shall be sent to EPA at the following address:

Environmental Protection Agency, Region 1
OEP/Industrial Permits Branch
1 Congress Street, Suite 1100 (CIP)
Boston, Massachusetts 02114

Signed and dated Discharge Monitoring Report Form(s) and all other reports required by this permit shall also be submitted to the State at the following addresses:

Massachusetts Department of Environmental Protection
Northeast Regional Office
Bureau of Waste Prevention
One Winter Street
Boston, MA 02108

and

Massachusetts Department of Environmental Protection
Division of Watershed Management
Surface Water Discharge Permit Program
627 Main Street, 2nd Floor
Worcester, Massachusetts 01608

E. STATE PERMIT CONDITIONS

1. This Discharge Permit is issued jointly by the EPA and the MADEP under Federal and State law, respectively. As such, all the terms and conditions of this permit are hereby incorporated into and constitute a discharge permit issued by the Commissioner of the MA DEP pursuant to M.G.L. Chap.21, §43.

2. Each Agency shall have the independent right to enforce the terms and conditions of this Permit. Any modification, suspension or revocation of this Permit shall be effective only with respect to the Agency taking such action, and shall not affect the validity or status of this Permit as issued by the other Agency, unless and until each Agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this Permit is declared, invalid, illegal or otherwise issued in violation of State law such permit shall remain in full force and effect under Federal law as a NPDES Permit issued by the U.S. Environmental Protection Agency. In the event this Permit is declared invalid, illegal or otherwise issued in violation of Federal law, this Permit shall remain in full force and effect under State law as a Permit issued by the Commonwealth of Massachusetts.