The Dow Chemical Company
Gulf Coast Pipeline Subsidiaries
1000 County Road 340
Angleton, Texas 77515

November 29, 2007

US Department of Transportation
Pipeline and Hazardous Materials Safety Administration
Southwest Region
8701 S. Gessner – Suite 1110
Houston, Texas 77074

Attn: Mr. R. M. Seeley

Reference: CPF 4-2007-1010M

Dear Mr. Seeley,

This letter and attachments are UCAR's follow-up response to the Notice of Amendments letter referenced above and dated August 1, 2007. We have completed these items by November 30, 2007, the date that I had asked for in my initial response letter dated August 28, 2007. All changes and actions have been addressed at this time.

Attached is a revised summary of the actions taken for the items listed in the letter of Amendment. Actions are complete at this time.

Please contact the undersigned if you have any questions.

Sincerely,

Richard L. Scott

Richard L. Scott
Pipeline Regulatory Compliance Specialist
Dow Pipeline Subsidiaries

Incl.

Copy: K. C. Weyer
Dow Pipeline Company
1000 CR 340
Angleton, TX 77515

Resolutions to PHMSA
Notice of Amendment CPF 4-2007-1010M
Dated 8/1/07

Item 1.

The UCAR procedures for making revisions to the Operations, Maintenance, and Emergency manual seem to contain contradictory statements. One statement indicates that supervisory approval is not needed for an author to change a procedure and another specifies that supervisory approval is required. The explanation provided by UCAR personnel is that minor changes, such as grammar and punctuation, can be made without approval. UCAR should modify the procedures to clarify the requirements for making minor vs. major changes to the manual.

The operations and maintenance manual also has contradictory statements pertaining to the review process. One reference states that the review will take place every two years while another states that a review must take place annually. UCAR personnel explained that the two year interval was based on Dow Chemical review requirements while the annual review requirement is for compliance with §192.605(a). UCAR should make appropriate modifications to clarify the procedures and eliminate any contradictions in the review requirements.

1.a. OM&E Manual procedure A-02, in the "Revisions to Manual " section now says "Minor changes including spelling, grammar, phone number changes, format of documents, and minor typographical changes will not require a document to go through the Management of Change process. Major changes to this manual or a procedure would be ones that affect the way work is done, the way processes are conducted, the numeric order of steps if sequence is mandatory, temperature or pressure deviations etc. Any revisions other than minor changes require an MOC (GCPL Management of Change Procedure).

1.b. OM&E Manual procedure A-03 now states: "A DOT review is required of all the procedures in the manual each year as follows: • A DOT review of this manual to ensure its effectiveness in providing procedures for conducting normal operations and maintenance activities and for handling abnormal operations and emergency response is conducted each calendar year not to exceed 15 months. • The annual review of this manual will be noted in the document history section of A-03 (this document)"

Item 2.

The UCAR procedures contained in the Operations, Maintenance, and Emergency manual for starting up and shutting down the pipeline system consist mainly of information on hazardous air/fuel mixtures. While this is an important subject, it doesn't actually address any pipeline/compressor startup or shutdown procedures. UCAR personnel have stated that the system is completely automated and the field personnel do not need to have any information for starting or stopping the pipeline system. The UCAR procedures titled Startup/Shutdown of Pipeline Facilities should at least include some basic information about the required startup/shutdown processes and potential abnormal operating conditions.

I have added wording to OM&E, M-3, to give an overall description as to how our pipeline systems are operated (start-up and shut-down) and have made reference (provided pathway) to all of the manuals involved as well as the Product Controllers" Manual. This revised information is now in the "Scope" of M-3 which now reads:
"This procedure defines the proper way to start up or shut down a segment of pipeline or other equipment in order to prevent the formation of flammable or explosive air-hydrocarbon mixtures when taking the pipeline segment or other equipment out of service.

Generally, under normal operating conditions, pipeline flows within "in-service" pipelines are started up or shut down by Commands from the Product Control Center at the Houston Dow Center, not by personnel in the field. The Product Controllers (on duty 24/7) are highly trained and Qualified individuals. They are able to "see" the various pipeline/station conditions by means of computer screens in Houston which are fed data constantly by RTU's in the field. This data includes, but is not limited to: pressure, vibration, heat, valve condition (open or closed), pump/compressor condition (running or stand-by), flow direction, flow rate, etc. Remotely operated equipment is able to be manipulated by the use of commands to PLC's which operate the equipment in a programmed logical sequence to ensure safety and reliability. Communications between the Product Controller and the PLC's are effected by means of phone lines, radio, microwave, etc. Remote pump/compressor stations (i.e. Groves, Seadrift, Anahuac, Kaplan etc.) each have Operations Manuals unique to that station for conducting local operation (as needed), responding to abnormal conditions and for emergencies. The manuals for these remote stations, as well as the Product Controllers Manuals are all located at Hsnt05/Approved/Procedures/ (Choose the appropriate manual)

Item 3.

Procedures for addressing a periodic review of work performed by operations personnel to determine the effectiveness were not found in the UCAR Operations, Maintenance and Emergency manual. The UCAR Operator Qualification program documents an effectiveness review but is not referenced in the Operations, Maintenance and Emergency manual.

3.a. OM&E Manual, A-3, in the Manual Review section now states, "A periodic review of the work being done will be performed on operations and maintenance procedures according to the gas and liquid regulations (Dot 192 and 195) and the review will be recorded on the form, OME A-03, 'Review of Work Done by Operator'. This activity will be prompted by the Master Task List and will be assigned to the Activity Leaders (they may delegate this being done)."

3.b. The GCPL Operator Qualification program now has a section for addressing the Effectiveness Review as stated in section 4.1.3 of the program. The OQ Program is referenced and has a hyperlink to it in procedure O-16 of the OM&E Manual. The effectiveness review states: "The GCPL Operator Qualification Program will be reviewed on a five (5) year interval by the OQ Steering Team. This process will consist of quality assurance audits and an assessment of the program. The quality assurance audits will be designed to determine if the program is being implemented as stated. The assessment will be to evaluate the effectiveness of the qualification program. At a minimum, the program's effectiveness shall be evaluated by: • A review of the qualification program to identify items that require revision. • A review of the quality assurance audit results to identify areas for implementation improvements. • At least one effectiveness measure will be to verify if the program is achieving planned results."

Item 4.

The UCAR procedure for updating class locations contains a description in Step 7 that states "Divide the zone into lengths, each containing one mile of pipeline." Taken literally, this is not a proper application of the sliding mile concept required by the regulations to correctly determine class density. Since UCAR can assign any one of several pipeline technicians to make class change determinations as part of their UCAR responsibilities it is important that the procedures for making the proper class density determination are correct and applied consistently. UCAR should modify its Class Locations/HCA Update Procedures to ensure that the required class density studies are correctly described.

OM&E Manual, procedure O-01, Procedure section of Appendix A, Step 7. is now amended to say: "To determine the Class Location for a pipeline, lay out a zone one-quarter mile wide along the route of the pipeline with the pipeline on the center line of this zone (220 yards on each side of the pipeline centerline). Using the sliding mile concept (i.e. any continuous 1-mile length of

pipeline), count the number of buildings intended for human occupancy within the one-quarter mile wide zone in any continuous 1-mile length. An important point to remember is to be sure and make your building count within the sliding mile to include the most populated cluster of buildings. Do not split building clusters to stay under a Class Location unit threshold. The length of a Class Location Unit may be less than 1-mile, but will extend 220 yards from the nearest building with 4 or more stories (Class 4) or 220 yards from the nearest building in a cluster of buildings intended for human occupancy (Class 2 or 3)."

Item
5

The UCAR procedures include a task list of items that should be performed during an emergency. However, the task list does not specifically mention the contact of public officials. UCAR personnel stated that all accidents are different and determining if and when public officials should be contacted is dependent on the type and severity of the specific accident. This variability is true for many accident tasks but they still are rightfully included in the procedures. The basis for establishing communications and determining when public officials should be notified as well as the type of public officials that should be notified needs to be included in the UCAR procedures according to §192.615(a)(2) and (8). Also, the UCAR procedures don't specifically address procedures for when the transported commodity is detected in or near a building according to §192.615(a)(3)(i), no time frame is specified for completing an accident investigation according to §192.615(a)(10), and no mention is made of providing responsible supervisors a copy of the latest emergency procedures according to according to §192.615(b)(1). All of these items should be addressed by the UCAR Operations, Maintenance, and Emergency manual.

This action item must actually be divided into 4 parts and addressed separately. The first part: "Revise emergency procedures to include the contact of public officials". This is accomplished and spelled out in the OM&E Manual in E-01, section 1.2.1. The Product Controller shall, "If the hazard is classified as a LEVEL 1 Event by Operations, make necessary contacts by phone or company radio." Also OM&E, E-01, section 1.16 states, "Upon discovery of any leak of a gas or liquid from a GCPL operated facility, notifications to regulatory agencies and some cities must be made. These notifications must adhere to strict reporting requirements and timing. The following are the regulatory requirements and cities requiring specific notification." 1.16.1., states, "At the earliest practical moment, but not to exceed 2 hours, following discovery of a release of liquid or gas resulting in an event described below, the operator of the system shall give notice to the Department of Transportation (DOT) and must include the following information:

a. Name and address of the operator,
b. Name and telephone number of the reporter,
c. The location of the failure,
d. The time of the failure,
e. The fatalities and personal injuries, if any,
f. All other significant facts known by the operator that are relevant to the cause of the failure or extent of the damages."

1.16.2. states, "At the earliest practical moment, but not to exceed 2 hours, following the discovery of a release of liquid or gas resulting in an event described below, the operator of the system shall give notice to the Railroad Commission of Texas per E-12. and must include the following information:

a. Name and address of the operator,
b. Name and telephone number of the reporter,
c. The location of the failure,
d. The time of the failure,

e. The fatalities and personal injuries, if any,

All other significant facts known by the operator that are relevant to the cause of the failure or extent of the damages.
and 1.16.3. states, "Some cities in which GCPL operates facilities have specific notification requirements." These cities are listed in the procedure.

The second part: "add procedures for when the product is detected in or near a building" is addressed in OM&E, E-01, section 1.7.5. , **Activity Leader will:**

1. Dispatch area team personnel to the building location to investigate the reported hazard.
2. If evacuation of the building is required, proceed as per section 1.6 above.

If a GCPL line is determined to be leaking, proceed as per section 1.7.1, Leak – Location Known, above.
The third part: "time frame for completing an accident investigation" is addressed in OM&E, O-04, the entire procedure. The time for beginning the investigation begins when the First Responder arrives on the scene and begins to gather evidence.
The fourth part: "providing supervisors a copy of the latest emergency procedures". This is addressed in OM&E Manual, A-02, Revisions to Manuals section, which says, " Revisions to this manual should be submitted to the OM&E Manual Administrator as mentioned in the OM&E Manual Control document for the review and comment process. After final approval, revisions will be issued to each manual owner."

Item 6.

The UCAR Operations, Maintenance and Emergency manual does not include any information on odorization or information as to why the UCAR gas is not odorized in Class 3 locations. The UCAR pipeline is transporting ethylene in a gaseous state and, according to operations personnel, is not odorized under the exemption specified by §192.625(b)(iv). The UCAR manual should contain some information or reference to the exemption claimed by UCAR as the reason for not odorizing the transported commodity.

OM&E Manual, procedure O-04, "Scope" is amended to say that "ethylene will not be odorized because odorant is detrimental to the process in which it is used and it is not an "end product" for consumer use."

Item 7.

	Maximum interval between patrols	
Class location of line	Highway and Railroad Crossings	At all other places
1,2	7 ½ months; but at least twice each calendar year	15 months; but at least once each calendar year
3	4 ½ months; but at least four times each calendar year	7 ½ months; but at least twice each calendar year
4	4 ½ months; but at least four times each calendar year	4 ½ months; but at least four times each calendar year

The specific patrolling intervals prescribed by §192.705(b) were not found in the UCAR procedures. The UCAR Operations, Maintenance and Emergency manual should be amended to include these patrolling intervals.

In the pipeline OM&E manual. procedure O-11, in step 1. of the procedure it states that we will patrol our rights-of-ways at two week intervals not to exceed three weeks but at least 26 times per year per 195.412(a). This requirement is far more stringent that the most stringent of the gas pipeline requirements in 192.705(b). The most stringent of the gas pipeline requirements is patrolling every 4.5 months or 4 times per year in Class 4 locations. Our procedure far exceeds this gas requirement.

Item 8.

According to UCAR operations personnel, any damaged pipe segment must be repaired by cut out. However, there is a contradictory statement in the leak repair section that allows the damaged pipe to be repaired. UCAR operations personnel stated that this was sometimes used for other Dow facilities, but not for the UCAR pipeline system. The UCAR manual needs to be clear on the type of repairs allowed and contain an adequate description of the procedures allowed for making these repairs.

Contradictory statements were taken out and OM&E, M-6 now reads: "All known defects in the steel of line pipe shall be evaluated and repaired according to the GCPL Project Inspection Manual within the time requirements specified in 49 CFR 192 for Gas pipelines and 195 for Liquid pipelines. Repair types designated as temporary repairs by the GCPL Project Inspection Manual shall be scheduled for permanent repair when the pipeline can next be taken out of service. Pipe and components used for repairs must be hydrostatically tested to the appropriate pressure to support the MAOP of the system prior to installation. Defect, types and the decision process for repairs can be found in the GCPL Project Inspection Manual as follows • PIM 2.01 Blisters • PIM 2.02 Coupling • PIM 2.03 Defective Prior Repair • PIM 2.04 External Corrosion • PIM 2.05 Girth Weld Defects • PIM 2.06 Gouge-Dents • PIM 2.07 Hard Spots • PIM 2.08 Internal Corrosion • PIM 2.09 Longitudinal Cracks • PIM 2.10 Winkle-Bend-Buckle

Item 9.

If the MAOP produces a hoop stress that is:	Then the pressure limit is:
Greater than 72 percent of SMYS.....	MAOP plus 4 percent.
Unknown as a percentage of SMYS.....	A pressure that will prevent unsafe operation of the pipeline considering its operating and maintenance history and MAOP.

The relief valve procedures in the UCAR Operations, Maintenance and Emergency manual mainly cover testing and do not adequately discuss sizing, mechanical condition, or installation. In addition, the UCAR operations personnel stated that they no longer have the equipment or technicians qualified to test relief valves and a contractor is used to perform these tasks. These considerations make it especially important that the UCAR procedures adequately cover these topics.

OM&E, M-10, References (several) have been added (with links) that will take the reader to clarifying documents (programs) such as GMISS and GMIM. These 4 referenced manuals provide the information missing during the audit. References added:

Global Mechanical Integrity Manual (GMIM)-This manual defines the requirements for achieving compliance with GMISS and additional guidelines that are considered best practices. This manual covers all equipment that is within the scope of GMISS. http://maintenance.intranet.dow.com/Virtual/documents/GMIM.pdf

Global Mechanical Integrity Safety Standard (GMISS)-This standard defines the requirements, roles and responsibilities for mechanical integrity programs for all facilities of The Dow Chemical Company, its wholly owned subsidiaries and its joint ventures where Dow has management control.file://USNT17/Public_ehstm/Std_0608_Process_Safety/02-Standards/GlobalMechanicalIntegritySafetyStandard.doc

LPP 14.1- The purpose of this principle is to ensure that pressure and vacuum relief systems are engineered, installed, registered, operated, inspected, and documented in a manner that protects equipment from over pressure or vacuum hazards that have the potential to cause injury to people or damage to property or the environment. http://ehs.intranet.dow.com/library/standards/0603_lpp/lpp14/LPP-14-1.doc

Pressure Relief Design Manual (PRDM) - Dow's minimum requirements for Relief Design and Installation will be contained in the Pressure Relief Design Manual (PRDM) Chapter 1. The remaining chapters contain Dow's best practices for relief system design and installation. Pressure Relief Design Manual.

Item 10.

The UCAR procedures for relief devices do not specify an annual review of capacity or a determination that flow conditions used for the original sizing have not changed. The UCAR Operations, Maintenance and Emergency manual should be amended to include these topics.

OM&E Manual, procedure M-10, in the "Inspection of Regulated Pressure Limiting Devices" section it is now amended to say: "If a test is not feasible, review and calculation of the required capacity of the relieving device at each station must be made at intervals not exceeding 15 months, but at least once each calendar year, and these required capacities compared with the rated or experimentally determined relieving capacity of the device for the operating conditions under which it works. After the initial calculations, subsequent calculations are not required if the review documents that parameters have not changed in a manner which would cause the capacity to be less than required. This annual review will be conducted by the Run-Plant Engineers for their respective areas of coverage and will be triggered by the GCPL Master Task List."

Item 11.

The UCAR procedures state that if a valve problem is discovered during an inspection, the valve will be scheduled for repairs. There is no discussion about promptness or the immediacy of valve repairs, so the UCAR Operations, Maintenance and Emergency manual should be amended to cover this issue.

OM&E procedure, M-11, Step three is amended to state: "Each valve should operate freely; if not, schedule preparations for maintenance/repairs. Valves in need of repairs will have the work scheduled as soon as feasible. If a valve cannot be repaired in service or it is not economically advantageous to repair the valve, it will be replaced as soon as a suitable replacement can be obtained and a line outage can be scheduled."

Item 12.

The UCAR welding procedures should refer to the correct edition of API 1104 and Section IX of the Boiler and Pressure Vessel Code. The UCAR procedures should be amended to specify the 19th edition of API 1104 and the 2001 edition of Section IX of the ASME Boiler and Pressure Vessel Code.

Project Inspection Manual procedure 1.06 (which is part of the OM&E by Reference) is amended to say that all welding and all welding inspection will be conducted according to API 1104,"19th Edition or the latest edition acceptable to the DOT".

Item 13.

There appears to be a contradiction between references in the UCAR procedures as the repair section indicates that weld defects must be cut-out while the welding procedures seem to indicate that a weld defect can be repaired. UCAR operations personnel indicated that weld defects are cut-out on this pipeline and the procedures should consistently reflect this policy.

The statement that all weld defects must be cut out was removed. OM&E, M-6 now reads: "All known defects in the steel of line pipe shall be evaluated and repaired according to the GCPL Project Inspection Manual within the time requirements specified in 49 CFR 192 for Gas pipelines and 195 for Liquid pipelines. Repairs types designated as temporary repairs by the GCPL Project Inspection Manual shall be scheduled for permanent repair when the pipeline can next be taken

out of service. Pipe and components used for repairs must be hydrostatically tested to the appropriate pressure to support the MAOP of the system prior to installation. Defect, types and the decision process for repairs can be found in the GCPL Project Inspection Manual as follows • PIM 2.01 Blisters • PIM 2.02 Coupling • PIM 2.03 Defective Prior Repair • PIM 2.04 External Corrosion • PIM 2.05 Girth Weld Defects • PIM 2.06 Gouge-Dents • PIM 2.07 Hard Spots • PIM 2.08 Internal Corrosion • PIM 2.09 Longitudinal Cracks • PIM 2.10 Winkle-Bend-Buckle So now girth weld defects are addressed in the Project Inspection Manual in section 2.05. There is now latitude to repair a weld.

Item 14.

UCAR's procedures do not specify the nondestructive procedures that are to be used. In addition, there are not any procedures for ensuring the acceptability of welds by nondestructive testing. The UCAR Operations, Maintenance and Emergency manual should be amended to cover or provide a reference for these topics.

Section 5.01 of the Project Inspection Manual has been amended and states: "Welding on Company facilities shall be performed by qualified welders in accordance with appropriately qualified welding procedures that meet the requirements of the ASME Boiler and Pressure Vessel Code Section IX or API-1104 Section 6.0." Also Section 1.0 is amended and now states, "All welds on pipe carrying GCPL products (jurisdictional) shall be nondestructively tested (192.243) by any means that will detect any defects that affects the integrity of the weld." And in PIM procedure 1.05 it has been amended to state, "Inspect all welds to ensure compliance with this procedure, PIM 1.00 and PIM 5.01". Weld inspectors must be knowledgeable of welding procedure qualification requirements, welder qualification requirements, and section 6 of API 1104, 19th Edition or the latest edition accepted by DOT, which is the controlling standard. [195.228, 192.214] And ultimately, in PIM 1.06, Mandatory Standard number 17 has been amended to state: "Welds are nondestructively tested by any process that will detect any defects that affects the integrity of the weld, as required by PIM 1.00 in accordance with written NDE procedures by appropriately qualified personnel."

Item 15.

UCAR's procedures do not specifically require the operator to investigate circumferentially and longitudinally beyond the exposed portion to determine whether additional corrosion requiring remedial action exists in the vicinity of the exposed portion. The UCAR Operations, Maintenance and Emergency manual should be amended to cover this issue.

The OM&E Manual, in procedure M-15, "Examination of Exposed Pipe" section, Step 2. now is amended to say: "Whenever any buried pipe is exposed for any reason, the operator shall examine the pipe for evidence of external corrosion. If the operator finds that there is active corrosion, that the surface of the pipe is generally pitted, or that corrosion has caused a leak, he shall investigate further to determine the extent of the corrosion by investigating circumferentially and longitudinally beyond the exposed portion to determine whether additional corrosion requiring remedial action exists in the vicinity of the exposed portion."

Item 16.

UCAR's procedures do not contain any provisions requiring prompt remedial action if deficiencies are indicated by the monitoring. The UCAR Operations, Maintenance and Emergency manual should be amended to cover this issue.

Corrosion Control Manual, Procedure CCM-CCM-1 states: "An electrical survey will be conducted annually to make certain that all pipelines remain at an adequate level of cathodic protection potential. The survey will also establish the degree to which the lines are subject to or are causing electrical interference with foreign lines or other foreign structures. Additionally, the extent of stray currents on the lines will be determined so that they can be maintained at or below safe levels.

Deficiencies found during these surveys, or during interim checks of the system, will have an Action Plan in place within 90 days."

Item 17.

UCAR's procedures do not specifically address test station spacing. The UCAR Operations, Maintenance and Emergency manual should be amended to cover this issue.

In 192.469 there is no requirement to have test leads at any "set" interval. Our OM&E Manual, Procedure M-15 under "Monitoring", Step 3. addresses this requirement and now states: "Cathodically protected pipelines shall have sufficient electrical test points to monitor the effectiveness of the cathodic protection system. Land use, accessibility, distance from other test points, foreign line crossings and population density shall be considered when selecting test station locations." This wording is more than what is specified in 192.469.

Item 18.

UCAR's procedures state that all above ground piping will be coated with a paint system and if any facilities are found to be in need of repair, appropriate action shall be taken to complete the maintenance or repair in a timely fashion. However, the procedures do not indicate any criteria to be used by operations personnel for making a determination of when the maintenance work is or is not needed such as the requirements in §192.479(c)(1) and (2).

Corrosion Control Manual, CCM-CCm-2 states: "All aboveground carbon steel piping, and all steel piping and components exposed to the atmosphere in vaults, shall be coated with a material suitable for the prevention of atmospheric corrosion. The protective coating must be inspected and repaired at intervals as necessary to maintain effective anti-corrosion protection as long as the pipeline or facility remains in active, spare or standby status. For normal above-ground service, exposed metallic surfaces shall be painted according to Dow Global painting specifications. Non-buried piping and components which are exposed to severe industrial environments, to frequent wetting by condensation or water spray, or to occasional inundation by quiescent fresh or brackish waters, shall be completely covered with a petrolatum-based coating system of primer, mastic and impregnated tape. The Denso T-1 Tape System or approved equal shall be used, carefully observing each detail of the manufacturer's application instructions. Also, in OM&E, M-15, it states: "Each pipeline exposed to the atmosphere will be inspected at least once every 3 calendar years, but with intervals not exceeding 39 months for evidence of atmospheric corrosion. During inspections, particular attention to pipe at soil to air interfaces, under thermal insulation, under disbonded coatings, at pipe supports, in splash zones, at deck penetrations and in spans over water will be done." And "All above ground portions in corrosive areas shall be coated with a paint system designed to minimize atmospheric corrosion. The specific paint system for each location shall be chosen on the basis of the corrosiveness of the environment and applied to standard company specifications for the paint system."

Item 19.

UCAR's procedures do not specifically address the soil-to-air interfaces or the protection that must be provided if corrosion is found. The UCAR Operations, Maintenance and Emergency manual should be amended to cover this issue.

In OM&E procedure M-15 it now states in the "Aboveground Inspection" section: "Each pipeline exposed to the atmosphere will be inspected at least once every 3 calendar years, but with intervals not exceeding 39 months for evidence of atmospheric corrosion. During inspections, particular attention to pipe at soil to air interfaces, under thermal insulation, under disbonded coatings, at pipe supports, in splash zones, at deck penetrations and in spans over water will be done." In the Corrosion Control Manual, Procedure CCM-CCM-2 it states: "All aboveground carbon steel piping, and all steel piping and components exposed to the atmosphere in vaults, shall be coated with a material suitable for the prevention of atmospheric corrosion. The protective coating must be inspected and repaired at intervals as necessary to maintain effective anti-corrosion protection as long as the pipeline or facility remains in active, spare or standby

status. Ref 2 For normal above-ground service, exposed metallic surfaces shall be painted according to Dow Global painting specifications. Ref. 1 and 2 Non-buried piping and components which are exposed to severe industrial environments, to frequent wetting by condensation or water spray, or to occasional inundation by quiescent fresh or brackish waters, shall be completely covered with a petrolatum-based coating system of primer, mastic and impregnated tape. The Denso T-1 Tape System or approved equal shall be used, carefully observing each detail of the manufacturer's application instructions."

Seadrift Pipeline Corporation
A Subsidiary of The Dow Chemical Company
P.O. Box 186
Port Lavaca, TX 77979
U.S.A.

FACSIMILE COVER SHEET

TO: R. M. Seeley

COMPANY: US DOT

PHONE NO.:

FAX: 713 - 272 - 2831

FROM: Joyce Key / Richard Scott

COMPANY: Seadrift Pipeline Corp.

PHONE NO: (361) 553-3382

FAX: (361) 553-3311

DATE: 11-30-07

PAGES INCLUDING COVER:

COMMENTS: