Manual Section 6	Issue Date 03/17/10	Revision Date 01/01/24	Policy Number LLCP-053
	Waste Management		

Purpose:
The purpose of this Procedure is to provide guidelines for the safe handling and/or storage of waste and surplus products associated with Company operations, including management of hazardous wastes.

Scope:
All LLC Companies including, Blanchard Industrial, LLC, GIS Engineering, LLC, Grand Isle Shipyard, Inc., and GWIS, Mack Steel, NuWave, Sun Industries, Valvemax, Discovery Industries, Inc.; hereafter identified as "Company".

Each project shall develop a site-specific waste management plan (WMP). For new projects, waste streams will be identified prior to project start and a WMP developed using these identified waste streams.

Introduction
This waste management plan has been prepared as a tool to ensure that the Company is cost effectively managing its waste streams in compliance with applicable laws and regulations.

Waste handling and disposal has evolved into a complex process that involves waste identification by regulatory definitions, sampling and testing, labeling, permitting, manifesting, and detailed record keeping, etc. Regulations are ever changing and yesterday's accepted practice may be today's violation.

The goal of the Waste Management Plan is to encourage employees to reduce the volumes and toxicity of any waste we generate. A few things that can be done to accomplish this are:

Each employee can help the Company achieve these goals by choosing a waste handling method from the options below, following the hierarchy of preference.

1. Waste Reduction - The best and most cost effective method of dealing with waste is not to generate it in the first place. But, if a waste must be produced, every attempt should be made to make it non-hazardous or less hazardous and waste, trash and scrap materials will be estimated prior to work being performed. The Project Manager must estimate the waste that will be generated prior to work being performed so that the need for containers and waste removal, if necessary, can be determined. Substituting non-hazardous materials for hazardous materials in our processes is one method of waste reduction.
2. Reuse/ Recycling - When a waste is generated we need to look at both internal and external opportunities to reuse/recycle. Sometimes common trash or refuse has recycling value.
3. Disposal - This is the last choice and should be used when all other economic possibilities have been exhausted.

Disposal of Waste Materials All waste that will need to be disposed on the owner's site will be coordinated to ensure the best means of disposal which shall be acceptable by Company Policy and Governmental Regulation. The on-site Supervisor is responsible to ensure that Company and Customer guidelines are being followed.

All scrap lumber, waste material, and rubbish shall be removed from the immediate work area as the work progresses and stored properly and in an organized and segregated fashion so that recycling opportunities can exist.

Disposal of waste material or debris by burning shall comply with local fire regulations.
All solvent waste, oily rags and flammable liquids shall be kept in fire resistant covered containers until removed from worksite.

All trash will be removed at the end of each shift and the site will be reviewed for trash and debris so as to not attract and nearby animals or wildlife. Debris should be removed as frequently as needed for activities that generate excessive amounts of waste material.

Abbreviations
The following abbreviations will be used throughout this document. For further explanation, please contact the Corporate HSE Department.

- DOT – Department Of Transportation
- EPA – Environmental Protection Agency
- DEQ – Department of Environmental Quality
- LDEQ – Louisiana Department of Environmental Quality
- TCLP – Toxic Characteristic Leaching Procedure
- UHWM – Uniform Hazardous Waste Manifest
- SDS – Safety Data Sheet (Formally MSDS)
- RQ – Reportable Quantity
- NPDES – National Pollutant Discharge Elimination System
- LWDPS – Louisiana Water Discharge Permit System
- NOW – Non-Hazardous Oilfield Waste

EMPLOYEE AWARENESS PROGRAM

Employees are made aware of Company waste minimization efforts primarily through meetings and discussions. The departments that generate waste (Operations, Drilling, Electrical, etc.) have worked closely with the Environment, Safety, Fire and Health Group to keep abreast of new regulations and to propose waste minimization ideas. The Recycling Program is being initiated as a grass roots program. Facilities participating in the program hold meetings to discuss ways to further enhance the program. These meetings and discussions will continue to take place, and all potential minimization ideas will be thoroughly reviewed for feasibility.

The Corporate HSE Department asks that if an employee identifies a new waste stream or new waste management method, they relay their suggestion to one of the members of the group. Each suggestion will be evaluated as to the degree of compliance, economics, and feasibility.

Storage
You must comply with the following:

- The date upon which accumulation begins is clearly marked and visible for inspection on each container.
- While wastes are being accumulated on site, each container shall be clearly marked with the "Content" and the words **"HAZARDOUS WASTE"** when applicable.
- Proper container management practices are maintained, including a weekly inspection looking for container deterioration, malfunctions, operator error, or discharges that may cause or lead to a release of hazardous waste to the environment or a threat to human health. Records of the inspection should be maintained at the facility.

Transportation
Because this category generator would qualify as a small quantity generator if in the State of Louisiana, transportation requirements are similar.

SQG to Shore Base - Transporters do not need an EPA ID number for Louisiana SQG shipments. The waste can be shipped from the SQG facility using a Department of Transportation (DOT) hazardous material shipping paper.

Shore Base to TSD Facility - Existing manifesting and hazardous waste transporter requirements should be followed for shipments from the central location to the TSD facility. This includes use of the Uniform Hazardous Waste Manifest and shipping to a TSD that has approved our waste profile.

Note, since the office locations have been identified with the State of Louisiana as the central collection location for Company solid waste, facilities that are conditionally exempt SQG can store waste at the shore base for 90 days (40 CFR 261.5g3iv).

Training
Facility personnel should be familiarized with proper waste handling methods and relevant emergency procedures. Familiarization methods used (i.e., on-the-job training, safety meeting, etc.) should be documented in detail, including an outline of issues covered and a list of attendees. All project employees shall review the site specific WMP prior to start of work. This review will include instruction on potential waste streams, waste segregation, recycling opportunities, disposal methods and accumulation sites. Line supervision is responsible to ensure that workers are competent to perform assigned tasks and also to assess the competency of each worker they supervise. Particular attention must be given to the new worker, who represents an unknown with respect to ability and who may take risks.

Documentation:
The WMP will be distributed to:

- Management teams for Company and Client working out of the same facility for a specific Project.
- All Superintendents, Foreman, HSE Supervisor, Environmental Advisors working for either our Company or Client working out of the same facility for a specific Project.
- All mechanics and service personnel connected with any waste removal or transfer on any phase working out of the same facility for a specific Project.

The WMP will be updated as needed during the project and will be available electronically in conjunction with the HSE Plan and Interface documentation as applicable to any project.

WASTE MANAGEMENT GUIDELINES (Frequent Products)

Oily Absorbent Boom & Pads

Regulatory Status
Absorbent booms and pads not suitable for management at a 29-B facility are managed as an Industrial Solid Waste based on TCLP results. Disposal is subject to Louisiana DEQ Solid Waste Regulations.

Recommended Management
LDEQ Solid Waste and Air Quality regulations prohibit open burning. Employees should dispose of oiled absorbent booms and pads not recycled at a Company "Approved for Use" facility.

Recommended Storage

- OFFSHORE: Drained booms and pads may be stored in a metal, open-head drum. Protect from rain accumulation. Properly and clearly mark drum with the words "ABSORBENT BOOM/PADS". There is no time limit on storage.
- SHORE BASE: Review profile to verify if absorbents may be commingled with other industrial solid waste such as used filters or oily rags. Store in roll-offs or other appropriate container. Protect from rainfall. There is no time limit on storage.

Pre-Transport Requirements
Drain containers of ALL free liquids.

Transportation Documents

- Offshore: Ship to shore base using Straight Bill of Lading or Shipping Notice, as appropriate.
- Shore Base: Transport to approved landfill using landfill's Solid Waste Manifest. Include your solid waste generator number, solid waste code, solid waste transporter number and disposer number on manifest. Retain records for 2 years.

Packaging Suggestions
See Recommended Storage above.

Analytical Test
Absorbent booms & pads are subject to TCLP testing to prove they are not hazardous. The Waste Programs Group coordinates sampling and testing to coincide with waste profile renewal, usually every other year.

Spill Handling
Unauthorized spills of oil absorbent booms & pads shall immediately be cleaned up or otherwise rendered safe and reported to the LDEQ Solid Waste Division.

For Additional Information
Read SDS for crude oil. Absorbent booms and pads contaminated with chemicals other than crude oil may require handling as Hazardous Waste.

Oily Rags

Regulatory Status
This waste is managed as an Industrial Solid Waste based on TCLP results. Disposal is subject to Louisiana DEQ Solid Waste Regulations.

Recommended Management
Oily rags can be reused by participating in an industrial laundry service, such as provided by CINTAS or similar company. Oily rags should be drained of ALL free liquids prior to disposal.

Recommended Storage
- Offshore: Drained oily rags may be stored in a metal, open-head drum. Protect from rain accumulation. Properly and clearly mark drum with the words "OILY RAGS". There is no time limit on storage.
- Shore Base: Review profile to verify if oily rags may be commingled with other industrial solid waste such as used filters or absorbents. Store in roll-offs or other appropriate container. Protect from rainfall. There is no time limit on storage.

Pre-Transport Requirements
Drain off ALL free liquids, then package in proper container.

Transportation Documents
- Offshore: Ship to shore base using Straight Bill of Lading or shipping notice, as appropriate.
- Shore Base: Transport to approved landfill using landfill's Solid Waste Manifest. Include your solid waste generator number, solid waste code, solid waste transporter number and disposer number on manifest. Retain records for two years. Data will be used for LDEQ's Annual Report.

Packaging Suggestions
See Recommended Storage above.

Analytical Test
Oily rags are subject to TCLP testing to prove they are no hazardous.

Spill Handling
Unauthorized spills of solid waste shall immediately be cleaned up or otherwise rendered safe and reported to the LDEQ Solid Waste Division.

For Additional Information
Read SDS for crude oil.

Paint

Regulatory Status
Depending on chemical composition, waste paint is either Industrial Solid Waste or Hazardous Waste.

Recommended Management
Typically, paint becomes waste to the Company either because it is past its expiration date and we would not use it to protect our structures, containers are severely deteriorated or there is residual left in container that is unusable. It is acceptable to donate this paint to another user, as long as we document the donation with a material transfer or similar document. Minimize generation of waste paint by purchasing only the quantity you need and painting all products received.

Recommended Storage
Paint for donation should be stored in the same manner as usable product until transported to the shore base. Depending on chemical composition, paint for disposal may have to be managed as hazardous waste. Contact the Corporate HSE department for specific guidance.

Pre-Transport Requirements
Inspect containers to verify they are in good condition suitable to enter the transportation loop without leaking or bursting. Repackage or over pack where necessary. Paint for Disposal - If paint is hazardous, waste disposal arrangements must be made & confirmed prior to shipping.

Transportation Documents

- Paint for Donations - Ship to shore base using same type paperwork as when received offshore: Shipping Notice for non-hazardous paint and Straight Bill of Lading for hazardous paint. DOT proper shipping info: Refer to SDS on original transportation documents.
- Paint for Disposal - Non-hazardous waste paint may be transported with a Shipping Notice. Hazardous waste paint MUST be transported with a Uniform Hazardous Waste Manifest (UHWM) aboard a vessel with an active EPA or DEQ Hazardous Waste Transporter ID Number

Packaging Suggestions
See Pre-Transport Requirements above.

Analytical Test
Depending on its final disposition, waste paint may be subject to TCLP analysis. If uncontaminated, the SDS and RCI analysis may be sufficient to characterize the waste for disposal.

Spill Handling
If the paint has an associated RQ, follow the hazardous substance spill reporting requirements as per LDEQ. Absorbents, pads and contaminated soil must be managed as Industrial Solid Waste.

For Additional Information
Read SDS for appropriate paint. Liquids cannot be land filled.

Paint Solvents

Regulatory Status
Most waste paint solvents are hazardous waste. Management and disposal are regulated by federal and state regulations.

Recommended Management
Use paint solvents to clean equipment at the end of the day. Capture and reuse as paint solvent the next day or the next time that particular color is painted.

Recommended Storage
Store "tinted" paint solvent in the same manner as original product, appropriately label container. Paint solvent for disposal may have to be managed as hazardous waste.

Pre-Transport Requirements
Inspect containers to verify they are in good condition suitable to enter the transportation loop without leaking or bursting. Repackage or over pack where necessary. Paint for Disposal - If paint is hazardous waste, disposal arrangements must be made and confirmed prior to shipping.

Transportation Documents

- Paint for Donations - Ship to shore base using same type paperwork as when received offshore: Shipping Notice for non-hazardous paint and Straight Bill of Lading for hazardous paint. DOT proper shipping info: Refer to SDS on original transportation documents.
- Paint for Disposal – Non-hazardous waste paint may be transported with a Shipping Notice. Hazardous waste paint MUST be transported with a Uniform Hazardous Waste Manifest (UHWM) aboard a vessel with an active EPA or DEQ Hazardous Waste Transporter ID Number.

Packaging Suggestions
See Pre-Transport Requirements above.

Analytical Test
Depending on its final disposition, waste paint may be subject to TCLP analysis. If uncontaminated, the SDS and RCI analysis may be sufficient to characterize the waste for disposal.

Spill Handling
If the paint has an associated RQ, follow the hazardous substance spill reporting requirements as per LDEQ. Absorbents, pads and contaminated soil must be managed as Industrial Solid Waste.

For Additional Information
Read SDS for appropriate paint.

Sandblast Media (Non-hazardous)

Regulatory Status
This waste is managed as an Industrial Solid Waste based on TCLP results and SDS data. Disposal is subject to Louisiana DEQ Solid Waste Regulations. The Company will collect and contain spent sandblast media that falls on solid decking.

Recommended Management
Blasting media should be recycled whenever practical. Spent sandblast media that cannot be recycled/reused should be collected for disposal at an "Approved for Use" Company disposal facility. Exercise good housekeeping by removing oil from drip pans, isolating sumps, etc. to prevent blast from becoming contaminated or wet.

Recommended Storage
Collect and contain non-hazardous spent sandblast media in 55-gallon drums or disposable bulk bags. No time limit on storage. Roll-off containers are also suitable if facility's crane and transport vessel have capacity for very heavy loads. Verify capacity prior to using roll-offs.

Pre-Transport Requirements
Minimize exposure to rain. Free liquids cannot be disposed. Non-hazardous spent sandblast media is not a DOT hazardous material.

Transportation Documents
- Offshore: Ship to the shore base using the same type paperwork used to receive the new blasting media.
- Shore base: Transport to approved landfill using landfill's Solid Waste Manifest. Include your solid waste generator number, solid waste code, solid waste transporter number and disposer number on manifest.

Packaging Suggestions
See Recommended Storage above.

Analytical Test
Non-hazardous spent sandblast media is subject to TCLP testing to prove it is non-hazardous.

Spill Handling
Unauthorized spills of non-hazardous sandblast media shall immediately be cleaned up or otherwise rendered safe and reported to the LDEQ Solid Waste Division.

For Additional Information
Read SDS for blasting media.

Used Filters

Regulatory Status
This waste is managed as an Industrial Solid Waste based on TCLP results. Disposal is subject to Louisiana DEQ Solid Waste Regulations.

Recommended Management
Used filters should be drained of ALL free liquids prior to packaging for disposal. Company profiles this stream as an assortment of used filters; including engine, hydraulic, oil, glycol and salt water.

Recommended Storage

- Offshore: Drained used filters may be stored and packaged for transport in metal, open-head drums, properly and clearly mark with the words "USED FILTERS". There is no time limit on storage.
- Shore base: Store in metal drums, roll-offs or other container appropriate for landfill disposal. Protect from rainfall.

Pre-Transport Requirements
Drain containers of ALL free liquids.

Transportation Documents

- Offshore: Ship to shore base using Straight Bill of Lading or Shipping Notice, as appropriate.
- Shore base: Transport to approved landfill using landfill's solid waste manifest. Include your solid waste generator number, solid waste code, solid waste transporter number and disposer number on manifest. Retain records for two years.

Packaging Suggestions
See Recommended Storage above.

Analytical Test
Used filters are subject to TCLP testing to prove they are no hazardous.

Spill Handling
Unauthorized spills of used filters shall immediately be cleaned up or otherwise rendered safe and reported to the LDEQ Solid Waste Division.

For Additional Information
Read SDS for liquid being filtered.

Used Oil

Regulatory Status
This waste is managed as a recycled hazardous waste and is allowed certain exemptions to the hazardous waste regulations when recycled. (Federal): Regulated by the Environmental Protection Agency (EPA) 40 CFR Parts 260, 261, 264, 265, 266, 271 and 279. Regulations apply to Alaska, Wyoming and OCS locations only. Louisiana state locations should continue their current practices, as required above.

Recommended Management
Used oil is defined by the EPA as any oil that has been refined from crude oil or any synthetic oil that has been used and, as a result of such use, is contaminated by chemical or physical impurities. In Company operations, this would include oil changes from any type of equipment or machinery, such as compressors, generators, turbines, pumps, cranes, etc. Do NOT mix homogenate solvents, such as trichloroethylene or methylene chloride, with any used oil.

Case 1: The Company should continue our current practice of inserting used oil in crude oil or natural gas pipelines, on location per the Used Oil Generator Regulations.

Case 2: If case 1 is not possible, store the used oil on site for periods of less than 35 days, then transport to State location for insertion into crude oil or natural gas pipelines, or transport to shore base for pick up by a Company identified “Acceptable for Use” used oil recycler per Used Oil Generator and Transporter Regulations.

Recommended Storage
In no case should the used oil be stored for more than 35 days. If storage is necessary, it must be stored in tanks or containers labeled "USED OIL". Operator must maintain there are no visible spills or leaks and that the containers/tanks have no severe rusting, apparent structural defects or deterioration. Operators must make sure that adequate quantities of absorbent materials are available on site all the time and are used to contain spills or leaks occurring during normal activities. Releases must be responded to timely by stopping and containing the release, and replacing/repairing the tank/container before returning it to service.

Pre-Transport Requirements
Generators transporting individual shipments of 55 gallons or less (for example, from a field location to the shore base) are exempt from the requirement to have an EPA Transporter Identification Number. All shipments of used oil transported offsite from the shore base must be by a transporter who has an EPA transporter identification number.

Transportation Documents
Field personnel must ensure that all shipments of used oil reach the shore base, or designated state location. Non-bulk shipments of used oil, such as 55-gallon drums, are not DOT regulated; therefore, either a shipping ticket may be used.

Shore base should ship to an approved recycler using recycler's manifest/shipping paper or using LDEQ 5-part REUSE/RECYCLE Manifest (not 8-part UHWM). Retain all records for three years. Data will be used for tracking Company waste minimization efforts.

Packaging Suggestions
DOT approved metal drums, 55 gallons or smaller.

Analytical Test
Absorbent booms and pads are subject to TCLP testing to prove they are non-hazardous.

Spill Handling
Follow reporting requirements as detailed in the Corporate Incident Management program. Absorbents, pads and contaminated soil must be managed as Industrial Solid Waste. Contact the Corporate HSE department to arrange testing and acquire a LDEQ waste code.

For Additional Information
Read SDS for product oil.

29-B Waste Code 16 – Oil Spill Waste

Regulatory Status (Louisiana)
Material generated in crude oil spill clean-up operations. Regulated as Non-hazardous Oilfield Waste (NOW) by Louisiana Department of Natural Resources (LDNR) Statewide Order 29-B (LAC 43:XIX.129.B). Federal regulation excludes these wastes from hazardous waste regulations (40 CFR 261.4(b)(5). Typically these wastes are disposed of at an LDNR approved commercial facility. When generated in association with drilling or working over a well, a summary report ENG-16 must be filed with the LDNR.

Recommended Management
In general, Statewide Order 29-B applies to fluids that have been circulated down hole or originated down hole. It does not include unused fluids or surplus chemicals. Non-hazardous Oilfield Wastes should be disposed at a Company "Selected For Use" NOW facility. Materials not defined as NOW should not be mixed with NOW. Depending on toxicity and permit conditions some NOW waste may be discharged at the well site under permission of a NPDES or LWDPS permit.

Recommended Storage
There are no time limits associated with storage. Waste should be stored in a manner to prevent pollution.

Pre-Transport Requirements
Prior to shipping, the generator at the remote location should notify the Shore base of the intent to transport NOW waste. The Shore base will advise as to the selected disposer.

Transportation Documents
All shipments of NOW must be accompanied with the LDNR's Non-hazardous Oilfield Waste Shipping Control Ticket. This serves as the official shipping paper.

Packaging Suggestions
NOW should be packaged in DOT approved drums, Coast Guard approved cutting boxes or Coast Guard approved barges.

Analytical Test
The Company does not have to run any special analysis on this waste prior to disposal. The transfer facility or commercial facility receiving the waste will analyze for pH, chlorides and NORM. Waste exceeding the 29-B limits will be rejected and returned to the generator. The commercial facility will notify LDNR of rejection.

Spill Handling
Absorbents and other clean-up material typically are not accepted for disposal at NOW commercial facilities.

For Additional Information
Read SDS for appropriate fluid or waste stream.

WASTE MINIMIZATION GOALS

Minimization Strategy

The oil and gas industry is an extractive industry. Consequently, the source of certain wastes (i.e., produced water, sand, sludge, etc.) cannot be drastically reduced because they are inherent in our raw materials (i.e., oil and gas) production. Similarly, the amount of drilling fluids and cuttings generated is directly proportional to drilling activity. With this in perspective, we can feasibly only focus on better commercial product management, treatment of certain wastes, and recycle options for associated wastes.

Below are a few simple suggestions to aid in waste minimization:

- Spent glycol is either reused for dehydration in the production system, or returned to the supplier for credit. Facilities can purchase "re-generated" glycol.
- Switch to bulk product where possible. Bulk poly or metal tanks are used in lieu of purchasing materials in 55 gallon drums. Bulk product is often less expensive than drummed material. Bulk containers also eliminate problems associated with handling and disposal of empty drums. Use caution to avoid cross contamination and waste generation when refilling bulk tanks.
- Install drip pans under chemical drums and other equipment that are prone to leakage, allowing the material capture and return to the system for use in its intended purpose. These drip pans also eliminate the need to remediate contaminated ground.
- If a product is discontinued at one location, prior to being completely used, every effort should be made to return the product to the vendor or find another Company location that has a need for the product.

Other Wastes:

CONSTRUCTION DUMPSTER

The Company will have a contracted construction dumpster for all construction waste. A sign will be located by the dumpster which indicates NO FOOD or OILY WASTES. Dumpster owner will handle removal of construction waste when construction dumpster is full. Common types of construction debris that may be generated during this project include: scrap wire, scrap metal, wood scraps, plastic/metal piping, and paint cans or pails (dry with no liquids).

Food Waste

While on site, a Company crew will only eat in the designated “break room” trailer. No food or drink will be consumed outdoors or in vehicles except water when possible.

Crews shall minimize generation of food wastes. Food wrappers, scraps, cups, and utensils will be stored inside the designated dining facility. Food wastes shall be removed daily and taken back to a shop for disposal.