

GENERAL INSTRUCTION MANUALISSUING
ORG.

ACCOUNTING POLICIES & SYSTEMS DEPARTMENT

ISSUE DATE
12/10/2015REPLACES
New

SUBJECT

OWN-USE DIESEL FUELAPPROVAL
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CONTENT: This General Instruction defines the control framework which Proponent Organizations consuming, storing or transporting Own-Use diesel fuel must adhere to. The text includes:

1. Glossary
2. Definitions
3. Purpose
4. Roles and Responsibilities
5. Background
6. Control Framework
7. Corporate Accountability

Appendix: Monitoring and Reconciliation Examples

1. GLOSSARY**1.1. ABBREVIATIONS & ACRONYMS**

AP&SD	-	Accounting Policies & Systems Department
D&WO	-	Drilling and Workover Admin Area
IS	-	Industrial Services Admin Area
Marine	-	Marine Department
OAD	-	Operations Accounting Department
OPD	-	Offshore Projects Department
PD&T	-	Pipelines, Distribution & Terminals Admin Area
PM	-	Project Management Admin Area
WBS	-	Work Breakdown Structure

1.2. RELATED POLICIES

GI 214.014	Procedures For Domestic Sales Of Petroleum Products
GI 241.021	Material Balancing of Hydrocarbon Liquids
INT-1	Corporate Policies - Business Ethics

1.3. RELATED MANUALS AND PROCEDURES

Organization	Identifying Number	Description
D&WO	D&WOSD/108/13	Drilling Rig Supply System Procedure (DRSS)
D&WO	D&WOSD:074/11	Drilling Rig Support Division - DRSS Request Diesel Procedure
IS (Marine)	MIM #: 1186.502	Marine Vessel Fueling
IS (Marine)	MIM #: 1192.503	Bulk Fuel Cargoes for Tanajib Pier

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Organization	Identifying Number	Description
PD&T	TIM 232202	Custody Transfer Diesel to Marine Department (West Pier)
PD&T	DOM 1.1.7	Truck Sealing & Seal Custody
PD&T	DOM 1.2.2	Receive Product by Truck
PD&T	DOM 1.4.2	Truck Loading Operations
PD&T	DOM 4.8	Product Management Control
PD&T	DOM 4.12	Liquid Fuel and Feedstock Allocation
PD&T	DOM 6.01	Process Own Use Transactions
PM	DE-119895	Procedure for offshore reporting requirement

2. DEFINITIONS

- 2.1. Proponent Organization: Any organization that consumes, stores or transports Own-Use diesel fuel.

Note: If necessary, Organizations should contact AP&SD to determine if they qualify as Proponent Organizations as defined in this General Instruction.

- 2.2. Consumer: Drilling rig, vessel, facility or place physically consuming Own-Use diesel fuel. Examples of such uses are provided in section 5, "BACKGROUND".
- 2.3. Consumer's Location: Physical location, onshore or offshore (e.g., drilling rig, vessel), where Own-Use diesel fuel is consumed.
- 2.4. Formally: The process is supported by an officially recognized authorization mechanism within Saudi Aramco. Examples include: (1) SAP Workflow, (2) Approved Saudi Aramco or Proponent-specific forms, (3) written letter in hard-copy form bearing an authorized signature.
- 2.5. Organization: A business area such as a Unit, Division, Department or another operational entity.
- 2.6. Own-Use diesel fuel: See definition provided in section 5, "BACKGROUND".
- 2.7. Manual Signature: Authorized person's identification details comprising 4 separate elements: Name in block letters (e.g., John Smith), signature, identification number (e.g., badge #: 987654) and date of signature.
- 2.8. Proponent Organization's Management: Department Manager level or above within the Proponent's Organization.

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The objective of this GI is to define the control framework for Proponent Organizations that must be in place and functioning effectively across all Own-Use diesel fuel related processes.

4. ROLES AND RESPONSIBILITIES

- 4.1. AP&SD: Responsible for establishing the control framework for Own-Use of diesel fuel across all organizations of Saudi Aramco.
- 4.2. Proponent Organizations: Responsible to comprehensively identify, develop and implement the specific control mechanisms required to address all elements of the Control Framework described in this General Instruction. It is also the responsibility of Proponent Organizations to ensure that the specific controls are (1) fully documented (e.g., Departmental Manuals and Procedures) and (2) the effective application of these controls is continuously monitored.

Proponent Organizations must collaborate to ensure an effective and efficient end-to-end Control Framework. Integrated processes supported by system automation should be sought out as necessary to facilitate communication and control within and across Proponent Organizations.

5. BACKGROUND

Own-Use diesel fuel is defined as Saudi Aramco supplied diesel fuel provided to internal Organizations within Saudi Aramco or to contractors or subcontractors operating within these Organizations, where no formal invoicing or payment takes place (i.e., diesel fuel is provided free of charge). Own-Use diesel fuel is mainly used for the following purposes:

- fuel for the diesel engines of onshore and offshore Saudi Aramco-Owned or contractor-owned drilling rigs;
- fuel for the diesel engines of water well pumps supporting drilling operations at rig sites;
- as an additive in drilling fluids;
- fuel for Marine and PM Saudi Aramco-owned or contractor vessels; and
- fuel used by Industrial Services for transportation.

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The Own-Use diesel fuel process is broken down in the following sub-processes:

Plan / Forecast	Forecasted consumption of Own-Use diesel fuel over a given period
Request / Order	Where a specific need for Own-Use diesel fuel is communicated and approved
Loading and Delivery	Process of loading Own-Use diesel fuel and delivering it to the receiving location
Receipt	Receiving of Own-Use diesel fuel at the receiving location
Consumption / Inventory Management at Consumer's Location	Usage and management of Own-Use diesel fuel inventory at Consumer's Location
Accounting	Recording and reporting of Own-Use diesel fuel consumption in the Consumer's Cost Center or WBS
Monitoring and Reconciliation	Overall review and oversight of Own-Use diesel fuel consumption

6. CONTROL FRAMEWORK**6.1. Plan / Forecast**

- 6.1.1. All Proponent Organizations will plan / forecast their consumption of Own-Use diesel fuel on an annual and monthly basis and include these plans / forecasts as part of their internal Admin Area accountability reporting.
- 6.1.2. Periodic plan / forecast quantities must be approved by the Proponent Organization's Management.
- 6.1.3. The plan / forecast must be broken down by Consumer's Location of Own-Use diesel fuel.
- 6.1.4. Actual usage versus plan / forecast must be reviewed on a monthly and annual basis and significant discrepancies investigated, properly explained and sent to the Proponent Organization's Management.

6.2. Request / Order

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A request is the action initiated by the Consumer of the Own-Use diesel fuel (or a representative of the Consumer) to obtain the required Own-Use diesel fuel. The Order is the action which formalizes the request.

- 6.2.1. Proponent Organization's Management must designate in a Formally documented manner, the personnel that are authorized to request / order Own-Use diesel fuel.
- 6.2.2. Only authorized personnel are allowed to request Own-Use diesel fuel.
- 6.2.3. All Requests / Orders must be Formally documented and approved, either via Manual Signature or a system-based approval process (e.g., SAP workflow).
- 6.2.4. All Requests / Orders must be logged by Proponent Organizations for future reconciliation with actual deliveries and receipts.
- 6.2.5. Appropriate segregation of duties must be designed and enforced in the request / order process. A two-tier approval is required (separation between the request / order creation and final order approval).

6.3. Loading and Delivery

- 6.3.1. All loading and deliveries of Own-Use diesel fuel must be properly documented (e.g., date, quantities, requesting organization's SAP cost object, deliverer's information, receiver's information, readings from the fuel monitoring system).
- 6.3.2. Both the Own-Use diesel fuel loading personnel and the receiver of the Own-Use diesel fuel must Formally acknowledge the receipt (Manual Signature or system-based acknowledgement).
- 6.3.3. Loaded Own-Use diesel fuel quantities must be determined using an effective and accurate diesel fuel monitoring system (e.g., flow meters).
- 6.3.4. An effective fuel monitoring system must be in place at the fuel loading point. The system must be approved in a Formally documented manner by the Proponent Organization's Management.
- 6.3.5. The fuel monitoring system (e.g., flow meters) must be properly calibrated and calibration must be performed on a regular basis in accordance with the fuel monitoring system manufacturer's recommendations.

- 6.3.6. Calibration documentation (e.g., calibration certificate) must be retained for audit purposes.
- 6.3.7. For onshore Own-Use diesel fuel loading operations (Own-Use diesel fuel loaded at Bulk Plants):
- All drivers must be authorized to enter the loading facility.
 - All trucks transporting Own-Use diesel fuel from delivery point to Consumer's Location must be authorized to enter the fuel storage facility and must be inspected prior to loading of Own-Use diesel fuel.
 - Documentation of the inspection must be retained for audit purposes.
 - Diesel fuel tank access points and offload valves must be effectively sealed at the fuel loading point to prevent unauthorized offloading. Seal numbers must be documented on the delivery document by the Bulk Plant personnel, not the truck driver.
- 6.3.8. For offshore Own-Use diesel fuel loading and transfer operations:
- All vessels transporting Own-Use diesel fuel must be authorized to access the pier and berthing points. Authorization must be Formally granted and documented in accordance with Marine Department procedures.
 - The vessel must be listed on the Marine Department Fleet List or be a PM vessel which has been Formally approved by the Marine Department.
 - Authorized officer (e.g., Captain or Chief Engineer) involved in fueling operations must be approved by Marine Department to serve on Marine vessels.
 - Onshore berth station valves shall be closed and locked when not in operation.
- 6.3.9. Loading locations must keep detailed records of all outgoing deliveries and delivery documents (delivery order tickets, bills of lading, truck manifests, etc.) for audit and reconciliation purposes.

6.4. Receipt

- 6.4.1. Only personnel Formally authorized by the Proponent Organization's Management are allowed to receive Own-Use diesel fuel at the receiving location (e.g., Rig Foreman, vessel Captain or Chief Engineer).
- 6.4.2. Receipts of Own-Use diesel fuel must be accurately and fully documented by Formally authorized personnel (e.g., date, quantities, deliverer's information, receiver's information, readings from the fuel monitoring system).

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- 6.4.3. The receiver must Formally acknowledge the receipt (Manual Signature or system-based acknowledgement).
- 6.4.4. Received (offloaded) Own-Use diesel fuel quantities must be determined using an effective fuel monitoring system (e.g., flow meters).
- 6.4.5. An effective fuel monitoring system (e.g., flow meters) must be in place at the fuel receiving location. The fuel monitoring system must be approved by the Proponent Organization's Management.
- 6.4.6. The fuel monitoring system (e.g., flow meters) must be properly calibrated and calibration must be performed on a regular basis in accordance with the fuel monitoring system manufacturer's recommendations.
- 6.4.7. Calibration documentation (e.g., calibration certificate) must be retained for audit purposes.
- 6.4.8. Receiving locations must keep sufficiently detailed records of all incoming receipts and receiving documents (e.g., delivery order tickets, bills of lading, truck manifests, etc.) for audit and reconciliation purposes.
- 6.4.9. Receiving locations must record differences between quantities per the delivery documentation and quantities actually received. Differences greater than or less than the acceptable approved tolerance levels must be immediately reported to the receiving location's management.
- 6.4.10. Acceptable tolerance levels must be established and Formally communicated to receiving locations by the Proponent Organization's management.
- 6.4.11. Receiving locations must Formally confirm receipt of Own-Use diesel fuel in accordance with their established procedures (to the loading location management or to the receiving location management).

6.5. Consumption / Inventory Management at Consumer's Location

- 6.5.1. Own-Use diesel fuel storage and dispensing mechanisms must be properly secured.
- 6.5.2. Only personnel Formally authorized by the Proponent Organization's Management are allowed to access and dispense Own-Use diesel fuel.
- 6.5.3. Own-Use diesel fuel must only be dispensed for authorized purposes. These purposes must be Formally documented and communicated by the Proponent Organization's Management.

- 6.5.4. Periodic inventory management reconciliations and consumption analysis must be performed subject to the detailed procedures, manuals or contracts established by the Proponent Organizations.

Acceptable tolerance levels must be established and Formally documented by the Proponent Organization's Management.

6.6. Accounting

- 6.6.1. The cost of the Own-Use diesel fuel must be charged to the specific SAP cost object of the Consumer (e.g., Cost Center or WBS). Use of generic or administrative level Cost Centers is not permitted.

6.7. Monitoring and Reconciliation

- 6.7.1. Proponent Organizations must monitor and reconcile Own-Use diesel fuel volumes for the following control framework elements:

- From Request / Order **to** Loading and Delivery **to** Receipt
- Inventory management and consumption analysis (see section 6.5.4.)
- Consumption to Plan (see section 6.1.4.)

Examples are provided in APPENDIX I for reference only.

- 6.7.2. Such monitoring and reconciliation processes must be performed on a periodic basis and reviewed by Proponent Organization's Management.

- 6.7.3. Variances identified in these monitoring and reconciliation processes should be explained and documented.

- 6.7.4. OAD will perform the following corporate-wide reconciliations:

- Quantities recorded in the Material Balancing Report (MBR) with quantities accounted for in Cost Centers and WBS's
- Quantities accounted for in Cost Centers and WBS's with the quantities received by the Proponent Organizations

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7. CORPORATE ACCOUNTABILITY

- 7.1. Own-Use diesel fuel charged to cost centers shall be included as a Controllable Cost in the Proponent Organizations' operating statement effective with the 2017-2019 business planning cycle. Own-Use diesel fuel charged directly to WBS elements will be controlled under the capital budgeting process.

Approved: _____

A. A. AL-RUWAI, Manager

Accounting Policies & Systems Department

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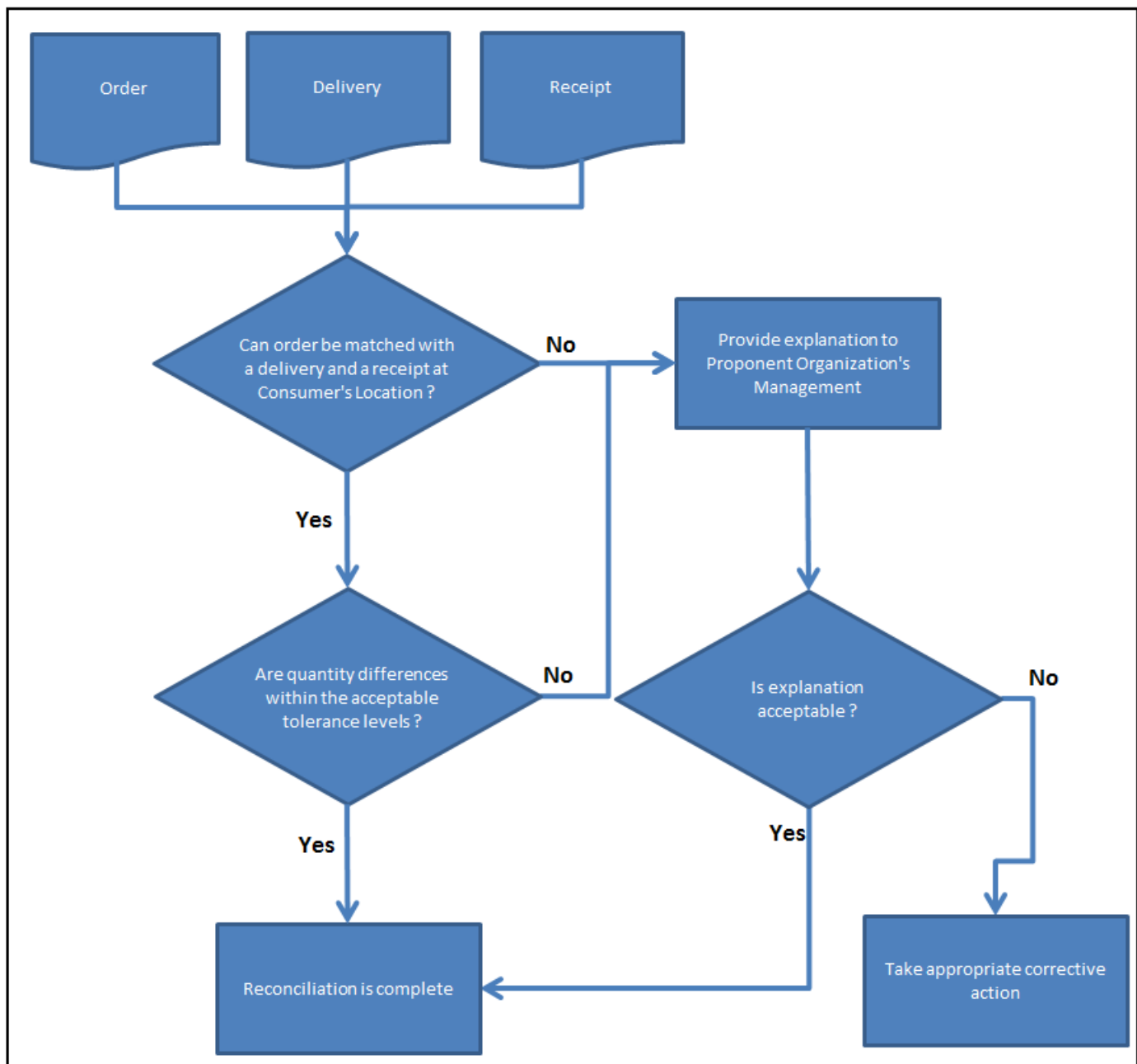
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APPENDIX – MONITORING AND RECONCILIATION EXAMPLES

The following provides examples of the types of reconciliations described in section 6.7., which are expected to be performed by the Proponent Organizations.

EXAMPLE 1: From Request / Order to Loading and Delivery to Receipt

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This requires that an actual inventory measurement be taken at the end of every measurement period / cycle.

For the purposes of this example, the Consumer's Location is assumed to dispense diesel fuel in 2 ways: (1) diesel fuel is drawn automatically from the storage tanks by the equipment that requires the diesel fuel (continuous flow); (2) diesel fuel is manually dispensed by an operator (e.g., diesel fuel pumped to a truck).

Step 1: Calculate actual consumption for a given period (e.g., 1 month)

Inventory at end of previous period

Plus: Receipts during period**Minus:** Inventory at end of current period**Equals:** Calculated actual consumption based on receipts and inventory changes**Step 2:** Estimate expected consumption during the same period.

- i. Estimate consumption from equipment that receives a continuous flow of diesel fuel (e.g., drilling rig motors, motors used for propulsion of vessels):

Average consumption per hour (D)

Number of hours of operation during period (E)

Estimated consumption during period (D) X (E)

- ii. For diesel fuel that is manually dispensed, retrieve actual disbursement quantities from the disbursement logs. (Note: It is also expected that the quantities manually dispensed should be analyzed to determine if the consumption is reasonable).

The sum of (i) and (ii) represent the total expected consumption during period.

Step 3: Compare total calculated actual consumption (step 1) with the total expected consumption (step 2) and explain any variance higher than the acceptable tolerance level approved by Proponent Organization's Management. Take appropriate corrective action if necessary.