
CHAPTER 12

Bulk Fuel Management

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12.01 Introduction

12.01.01 Chapter Content and Resources

This chapter contains information relevant to bulk fuel management for the use of the California Department of Transportation (Caltrans) mobile fleet and equipment.

Fuel is a valuable resource and is crucial to Caltrans' ability to improve and maintain California's infrastructure, as well as respond to traffic emergencies and natural disasters. There are three ways Caltrans obtains fuel, including bulk fuel, current state fuel card for retail fuel, and Cardlock. Maintenance gets most of its fuel from bulk fuel tanks located at many of its maintenance stations.

Bulk fuel management requires effective coordination among many participants in implementing Caltrans' policies and procedures. The primary outputs of bulk fuel management are the accurate tracking of fuel deliveries into fuel tanks and fuel disbursements from fuel pumps. Fuel deliveries are tracked by the type of fuel, delivery date, and quantity. Fuel disbursements are tracked by fuel type, operator and vehicle authorized to use the fuel, the date, and the quantity of fuel. Fuel deliveries and disbursements are reconciled at the end of each month and reported to Caltrans' management and the Division of Accounting in support of fuel asset management, invoicing other agency fuel users, and seeking reimbursement for taxes paid on diesel fuel used by off-road vehicles.

This chapter outlines and describes bulk fuel management roles and responsibilities and provides an overview of the necessary forms and steps an individual must follow to support effective management of bulk fuel.

For resources referenced within this chapter, please see the following:

Caltrans Electronic Forms System (CEFS): [CEFS - Forms \(ca.gov\)](#)

12.01.02 Definitions

BFIA	Bulk Fuel Invoice Analyst
CAL FIRE	California Department of Forestry and Fire Protection
CDTFA	California Department of Tax and Fee Administration
CHP	California Highway Patrol
CRC	Commercial Rental Card
CSA	California State Auditors
DGS	Department of General Services
DOE	Division of Equipment
DPAC	Division of Procurement and Contracts
ID	Identification
MSA	Mandatory Service Agreement
OE	Operating Expenses
OFAA	Office of Financial Accounting and Analysis
PY	Person Year
SBFA	Statewide Bulk Fuel Administrator
STARS	Service Transactions and Asset Reconciliation Section
VAV	Valid All Vehicle

The following are industry-specific terms that apply to automated and manually operated bulk fuel systems.

Tank Monitoring Units (TMU): Fuel storage in bulk fuel tanks require a means to measure tank volumes. Caltrans currently has electronic probes installed in all bulk tanks statewide which are used to measure the depth of fuel within the tank; the volume of fuel is calculated based on the capacity of the tank. These probes also detect water in the tank and any leakage that may occur.

Fuel Control Terminal (FCT) aka Card Reader: Electrical devices used at bulk fuel sites to control the fuel pumps, track fuel disbursements, and communicate data with the headquarters automated bulk fuel system. Fueling disbursements are initiated by swiping a valid fuel card into a card reader and then entering a user ID and PIN into the keypad.

Fuel Pump (aka Dispenser): A mechanical device that houses the necessary parts to physically pump, meter, and dispense fuel.

Fuel Pump Meter (aka Pulser): A mechanism within each fuel pump that measures the gallons of fuel dispensed.

Fuel Slippage: Variations in fuel readings are defined broadly as slippage and may result from fuel expansion or contraction due to temperature, tank water content, misreading of tank fuel levels due to probe calibration, theft, or leakage. All variances exceeding 2% must be investigated, resolved, and explained on monthly recapitulation of bulk fuel.

Tank Level Sensor (TLS): Sensors located within fuel tanks to communicate with the fuel control terminal to enable fuel volumes, tank leakage alarms, water content and temperatures to be automatically reported to the automated bulk fuel system.

State Fuel Cards: Cards used at bulk fuel sites to authenticate transactions. A vehicle's fuel card, valid all vehicle (VAV) or Commercial Rental Card (CRC) must be validated in the bulk fuel system for the vehicle to access fuel.

12.01.03 Resources and Hyperlinks

There are hyperlinked resource materials identified within this chapter. If any hyperlink is not accessible, please notify the appropriate personnel to inquire about that resource or reference.

12.01.04 Chapter Contact

This chapter of the Maintenance Manual is maintained by the Office of Equipment Management.

12.02 Bulk Fuel Program Overview

12.02.01 Background

Adequate bulk fuel supplies are essential for Maintenance staff to respond to events that can occur at any time. These events can range from non-injury to major traffic incidents, as well as natural disasters including fire, landslides, and earthquakes. In each of these cases, Caltrans must

respond quickly and with the appropriate resources., Maintenance relies upon the availability of equipment, and fuel to perform routine roadway maintenance and repair.

Other State agencies, including the California Highway Patrol (CHP) and the California Department of Forestry and Fire Protection (CAL FIRE), utilize Caltrans' bulk fuel in areas with limited availability of commercial fuel. Because many bulk fuel sites have their own generated power, a major power outage would not affect refueling vital emergency-service vehicles at these locations. Moreover, Caltrans has bulk fuel sites located in strategic and densely populated areas such as the Bay Area and southern California. These resources represent an immediate and deployable resource for emergency responders.

12.02.02 Safeguarding Bulk Fuel Assets

Fuel has a direct bearing on the means and resources to respond to emergencies and to maintain California's infrastructure. Protecting and carefully managing this asset ensures that fuel is available whenever needed. Effectively managing bulk fuel requires that Caltrans' employees follow established policies and procedures to accurately report fuel usage and to detect and prevent potential fraud.

12.02.03 Bulk Fuel Sites

Of the 250 maintenance stations located across the state, 236 have on-site bulk fuel storage tanks for diesel, biodiesel, or unleaded gasoline. Additionally, there are numerous Caltrans-owned sources of E85 fuel.

Bulk fuel is currently managed through an automation process. These sites use a cloud-based host application integrated with their fuel control terminals to authorize fueling, and tank level sensors for monitoring fuel tank levels.

12.03 Bulk Fuel Forms

Bulk fuel management at automated sites does not require special forms. If an automated site loses power or its equipment is not functioning, then each fuel transaction needs to be recorded on a Disbursement Record – Bulk Fuel form (DME-0045) and monthly recapitulations of bulk fuel are required using the Recapitulation of Bulk Fuel form (FA-0095). These forms and their requirements are described in the following sections.

All use of State-owned vehicle and fuel credit cards shall be in accordance with the State-Owned Vehicle and Fuel Credit Card User Agreement (DME-0310). This form shall be completed before use.

12.03.01 Disbursement Record – Bulk Fuel Form

The purpose of Disbursement Record – Bulk Fuel Form (DME-0045) is to capture information related to every fuel disbursement transaction that occurs with a manual dispensed fuel transaction. This form is available on CEFS. If not using a computer to complete the form, Form DME-0045 must be filled out in PEN.

Accurate reporting on the DME-0045 form ensures identifying and preventing fuel slippage,

receiving off-road tax credits and reimbursements from fueling non-Caltrans' vehicles, and enabling determination of vehicle fuel efficiencies.

A separate DME-0045 form is required for each fuel tank and pump. Furthermore, separate forms are required for other agencies with a current Interagency Agreement and for rental and miscellaneous equipment without a maintenance classification number.

When fueling rental or miscellaneous non-C type equipment such as chainsaws, weed eaters, and generators at manual bulk fuel sites, a VAV or CRC card must be used and the ID numbers listed in [Appendix 12-1](#), Rental and Non-C Equipment Fuel Codes, must be entered in the Equipment ID field of the DME-0045 form. Filling fuel cans for portable equipment is not to be charged to the vehicle used for transporting the fuel. Instead, fuel for cans must be charged to VAV cards.

Site Supervisors fill out the top of the DME-0045 form, including location name, phone number, district, agency, tank and pump identification numbers, month and year, and the type of fuel before providing for use. .

Fuel users should complete the DME-0045 form online. If users fill the form out manually, fuel users are required to use an ink pen to record a complete and legible entry on the DME-0045 after each fuel disbursement. The required information includes the date, equipment ID number, gallons disbursed, Employee S number, odometer/hour readings, printed operator name, and ending pump meter. It is critical that care be exercised to avoid errors, omissions, or illegible entries.

Copies of completed DME-0045 forms are sent to DOE for processing at bulk.fuel@dot.ca.gov; originals are sent to the Region Manager, or designee, who ensures that the forms are complete and that the Site Supervisor has identified other agency fuel usage and off-road vehicle IDs and their off-road percentages for reimbursement purposes.

The most current version of DME-0045 should be made available near the fuel pumps for vehicle operators to use. The most recent version of DME-0045 form is available through CEFS provided in Section [12.01.01](#) of this chapter. Instructions for proper use are included with the form.

12.03.02 Recapitulation of Bulk Fuel Form

The purpose of the Recapitulation of Bulk Fuel Form (FA-0095) is to calculate fuel usage, deliveries and end-of-month volumes for the different fuel types, pumps, and tanks. The FA-0095 form is also used to reconcile fuel usage as recorded using meter readings against tank level monitoring. The procedure is completed at the end of each month.

The information captured on the FA-0095 form enables effective management of bulk fuel inventories, reconciliation of fuel usage and invoices, monitoring of fuel budgets, and reimbursement for fuel taxes paid on diesel/biodiesel used in off-road vehicles.

Fuel Site Supervisors complete the FA-0095 form to report monthly volumes by fuel tank ID, pump ID, pump meter readings, fuel type, on-hand fuel, and fuel purchases and then obtain approval from the Area Superintendent prior to forwarding it to the Region Manager, or designee, for quality review.

If variances (fuel slippage) between the calculated versus actual fuel on hand exist when recapitulating bulk fuel over 2%, the Site Supervisor is required to investigate and resolve the reason(s) and obtain Area Superintendent's approval. Reasons for the slippage and the actions taken to resolve the discrepancy must be fully articulated on the FA-0095 form and approved by the Area Superintendent, with notification provided to the Region Manager, or designee. If the slippage is found to be the result of theft, the Region Manager, or designee, shall work with both the Statewide Bulk Fuel Administrator, who will contact Audits and Investigations, and the CHP.

The Region Manager, or designee, sends the FA-0095 form to the Division of Accounting, OFAA - Service Transactions & Asset Reconciliation Section (STARS), to calculate the monthly increase or decrease in Bulk Fuel inventory and to ~~for~~ reconcile off-road diesel fuel usage to request reimbursements of Fuel Tax paid from the California Department of Tax and Fee Administration (CDTFA) for fuel taxes paid on fuel used in off-road vehicles.

The most current version of the FA-0095 forms used for monthly recapitulation of bulk fuel. The most recent version of the form is available through CEFS, provided in Section [12.01.01](#) of this chapter. This form can be completed either electronically or manually and instructions are included with the form.

12.04 Roles and Responsibilities

This section summarizes the primary roles and responsibilities of key participants involved in the management and use of bulk fuel.

Chief, Division of Maintenance:

- Determines and allocates Maintenance bulk fuel resources to the districts for site upkeep; however, not for the fuel.
- Works with DOE to ensure that staff follow established fuel card guidelines, policy, and procedures. Establishes Maintenance bulk fuel goals and objectives within authorized resources.

Deputy District Directors, Maintenance:

- Allocates personal service dollars, PYs (person years), and OE (operating expenses) including contracting resources within the district/regions, and review regional work plans to assure conformance with district and bulk fuel program goals and objectives.

Region Managers:

- Conducts quality reviews of completed FA-0095 and DME-0045 forms, ensuring that all records are complete, legible, and accurate, and that off-road diesel/biodiesel usage has been properly accounted.
- Submits completed FA-0095 forms to the Division of Accounting, OFAA - STARS.
- Initiates investigation if fuel slippage exceeding 2% is identified in monthly

recapitulations of bulk fuel and cannot be resolved. Alerts the SBFA, who will contact Audits and Investigations, and the CHP if the slippage is the result of theft.

- Works with the SBFA to ensure that Interagency Agreements are in effect before authorizing any other agency to use Caltrans'-owned bulk fuel.

Area Superintendents:

- Conducts quality reviews of completed DME-0045 and FA-0095 forms ensuring that all manually completed records are recorded in ink, complete, legible, and accurate, off-road diesel/biodiesel usage has been properly accounted for, and that other agencies' use of bulk fuel, if it occurs, is authorized.
- Approves and sends completed FA-0095 forms to the Region Office for processing.
- Investigates and resolves, if possible, instances of fuel slippage exceeding 2% identified on monthly recapitulation of bulk fuel and notify Region Manager, or designee.

Site Supervisors:

- Monitors tank fuel levels using tank level sensors and order fuel as needed.
- Ensures all fuel-related equipment is in proper working order.
- Initiates emergency repairs for fuel-related equipment problems using contractors authorized within the area.
- Contacts District Automated Bulk Fuel Coordinator.
- Implements the use of DME-0045 forms if the automated system becomes inoperable.
- Ensures that an executed Interagency Agreement is in effect prior to allowing other agency access to bulk fuel, **except in the case of emergency**.
- Investigates and explains reasons if notified by headquarters that fuel slippage exceeds 2%. Inform and obtains approval from the Area Superintendent. Responds to the notification by email.

If Manual Operation is Required:

- Monitors fuel tank levels using dip sticks or tank level sensors, if installed, and order fuel as needed.
- If capturing fuel manually instead of using the form online, ensures bulk fuel users use an ink pen to accurately record all disbursements on the DME- 0045 form.
- Works with the District Automated Bulk Fuel Coordinator to ensure that any non-

Caltrans agency are not permitted to obtain Caltrans' bulk fuel without an executed Interagency Agreement in effect, **except in the case of emergency.**

- Ensures DME-0045 forms are available for each fuel type, pump, rental, and non-C equipment, and for use by other agencies with an executed Interagency Agreement in effect.
- Collects DME-0045 forms as completed, review for accuracy and legibility, and send them to bulk.fuel@dot.ca.gov and the District Automated Bulk Fuel Coordinator for processing.
- Obtains approval from the Area Superintendent on the DME-0045 forms.
- Sends copies of monthly DME-0045 forms to the Region Manager, or designee for approval and further processing.

Performs monthly recapitulation of bulk fuel using FA-0095 making sure to account for fuel deliveries and off-road diesel/biodiesel usage and submit to Area Superintendent for review and signature. If, when recapitulating monthly bulk fuel use, fuel slippage exceeds 2%, the process for investigating does not change as stated in section 12.03.02 above.

Statewide Bulk Fuel Administrator

- Administers the automated bulk fuel system's host application.
- Acts as Contract Manager for vendor hosted contract and all Inter Agency agreements.
- Centrally manages access to bulk fuel via fuel cards, audits reconciliation of deliveries and usage, and provides management and transaction reports.
- Using transaction reports, invoices agencies who utilize Caltrans' fuel.
- Processes automated bulk fuel site monthly reconciliations, identifies instances of fuel slippage that exceed 2%, and sends notifications to Site Supervisors that an investigation, resolution, and a response is necessary.
- Monitors the operation of the automated bulk fuel system to ensure that data is received from the district sites and that it is accurate regarding fuel usage.
- Assists as needed, in developing and administrating service contracts to maintain and repair the fuel- related equipment located at automated bulk fuel sites.
- Prepares monthly and special-request reports to support management, auditing, investigations, or other special requirements.

Division of Accounting

Service Transactions & Asset Reconciliation Section (STARS):

- Receives bulk fuel recapitulation reports provided from headquarters Maintenance Division's automated bulk fuel system and through manual bulk fuel site FA-0095 forms.
- Calculates statewide total bulk fuel usage and its inventory value.
- Completes monthly general ledger reconciliation for the State Highway Account (Fund 0042, BSA 1910, and Sub-BSA 1004).
- Prepares the fuel tax return to obtain a refund from the CDTFA for fuel taxes that applied to equipment used off-road (\$0.41 per gallon as of October 2022, but updates yearly).

Service, Commodity & CAL-Card Payments (OCCP):

- Processes payments of fuel invoices received from DOE Bulk Fuel Invoice Analyst for bulk fuel deliveries.

Office of Receivables, Systems and Administration (ORSA):

- Upon receipt of transaction reports from the SFBA, bills and collects payments from non-Caltrans agencies for their use of Caltrans' bulk fuel.
- Creates Account Receivable document (Abatement) in the form of RE document for the Bulk Fuel Tax refund received from CDTFA. ORSA will forward the RE document to Caltrans Cashiering to deposit the warrant. This deposited fund will be abated back to the Project ID used to purchase Bulk Fuel.

Division of Procurement and Contracts (DPAC)

Office of Procurement:

- DOE Bulk Fuel Invoice Analyst (BFIA) submits Purchase Orders to DPAC. Acquisition Analysts then process these requests to be in line with the Department of General Services (DGS) Mandatory Service Agreement (MSA) for Bulk Fuel. The Purchase Orders submitted are for the acquisition of various types of fuel for operating Caltrans' fleet vehicles and equipment.
- Acquisition Analysts create, execute, and obtain approval of the Purchase Orders for bulk fuel.
- The DOE BFIA will act as the liaison to bulk fuel maintenance stations for assistance in obtaining bulk fuel during effective contract periods.
- DOE BFIA works with the Department of General Services (DGS) in the development of contract language and establishing delivery locations in the statewide commodity contracts that meet Caltrans' needs.

- Purchasing Specification Analysts act as the Caltrans liaison to DGS when contract extensions, problems or needs arise.

Division of Equipment

Resource Management:

- Works with DPAC, to ensure sufficient funds are available prior to approving Purchase Orders for bulk fuel.
- As stated above, the DOE BFIA works with DPAC to process Purchase Orders for fuel off the DGS MSA.
- As stated above, the DOE BFIA acts as a liaison to bulk fuel maintenance stations for assistance in obtaining bulk fuel during effective contract period.
- DOE BFIA accepts delivery tickets and invoices, matches them up and process them through accounting for payment. Reconciles against Purchase Orders and subtracts from totals to keep track of funds.

Caltrans Fuel Users:

- Reports fuel-related equipment that is not in proper working order to the Site Supervisor.
- Uses approved/current State fuel card, user ID and PIN to authenticate fueling transaction at sites.
- If Automation system is not functioning, procures fuel manually and report usage using the computer and/or an ink pen, carefully, completely, and legibly enter each fuel disbursement on the DME-0045 form at all manually operated sites and at automated bulk fuel sites when the automated system is down.

Other Agencies

- **Except in the case of a true emergency**, vehicle operators from other agencies are to ensure that an executed Interagency Agreement is in effect at a specific location prior to using Caltrans' bulk fuel.
- If the Automation system is not functioning, vehicle operators are required to report usage using the computer and/or an ink pen to carefully record each transaction on the DME-0045 form provided at manual sites or enter the vehicle number on the keypad at automated sites.

12.05 Bulk Fuel Procedures

Key elements of bulk fuel processes include the ordering, delivery, and invoicing of bulk fuel. The Site Supervisor typically requests fuel deliveries in response to the amount of fuel remaining

in their tanks.

The following sections describe the major processes related to the management of bulk fuel:

12.05.01 Monitor Fuel Tank Levels

The bulk fuel process begins with the scheduling and delivery of fuel to the bulk fuel site. The site will contact the appropriate assigned supplier off the existing DOE Purchase Order. The supplier delivering fuel uses an associated delivery ticket that includes the date, fuel type, and volume supplied to the site. The goal of this process is the accurate logging of fuel type and quantity received at each bulk fuel site.

Fuel deliveries are requested when needed, either by manually dipping tanks to calculate the amount needed or by reviewing the tank level sensor readings which will show that additional fuel is needed. Fuel delivery terms and invoices reference the current executed DOE Purchase Order for that area which corresponds to the DGS MSA, by gallons of fuel delivered and not by tank levels “as received.” *Note* that discrepancies can occur between volumes of fuel delivered and tank level sensor readings due to variables such as fuel expansion or slippage from temperature, tank water content or misreading tank fuel levels.

Quality and Safety Checks for Monitoring Fuel Tank Levels:

Quality and safety checks should be done with each delivery. Monitoring fuel tank levels manually results in levels that are subject to more variation than levels provided by an automated TLS. Exercise care when dipping tanks and calculating tank fuel volumes. Sites should immediately address all defective fuel-related equipment or problems with equipment.

12.05.02 Authorize and Record Fuel Disbursements

Fueling is authorized by using the appropriate current State fuel card, entering the employee’s user ID and PIN. Cards must be activated in the system by the vendor before the card will function. This is done via a monthly data upload, but the vendor’s customer service center can also be contacted to have a card uploaded. The system automatically determines whether a vehicle is authorized, and if so, activates the pump and allows fueling.

If the automation system is not functioning and the site is in manual mode, fuel disbursements shall be recorded on a DME-0045. After each fuel disbursement, vehicle operators are required to complete the form either online or on the paper form provided next to the dispenser (if paper form, an ink pen is to be used). Please complete the date, Equipment ID, number of gallons, odometer reading, user’s printed name and ending pump meter reading onto the DME-0045 form.

Quality and Safety Checks for Disbursing Fuel:

Care should be taken to ensure that all fuel disbursements are authorized and adhere to the State’s fuel card guidelines. Sites should manage disbursements through periodic audits of responsible parties to ensure fuel cards are being properly managed, and those responsible are accurately administering, ordering, and maintaining an inventory of cards. . Some ways to

maintain safety and quality are:

- Each driver should be assigned a user ID and unique PIN that is to be kept strictly confidential.
- Avoid the overuse of VAV or CRC. Or obtaining “spare” cards to have on hand.
- **Immediately report lost, missing, or damaged fuel cards.**
- When employees leave or transfer, immediately cancel all assigned fuel cards (VAV/CRC).
- When a vehicle is retired or sold, immediately cancel the assigned fuel card.
- DME-0045 forms are often illegible due to rushed entries, dirt, or the effect of the elements on paper forms. This paper-based process relies on the individual who is fueling to provide complete, legible responses. Where possible, the form should be stored in a convenient location protected from the elements. The preferable method of completion is online via CEFS.
- When sites are in “manual mode”, a risk exists of pumping the wrong type of fuel into a vehicle. Alert new equipment users to the importance of using the correct fuel type for each vehicle or piece of equipment.
- Although fuel automation does provide a degree of security, fuel cards (not VAV and CRC) are allocated to a vehicle and not to an individual operator. All cards can fuel a different vehicle. Please ensure users understand that fuel cards assigned to a specific piece of equipment are to be used only for the assigned vehicle.

12.05.03 Reconcile Fuel Delivery and Usage

In order to reconcile fuel deliveries to fuel usage request a report from the vendor at any time or contacting the SBFA for assistance via bulk.fuel@dot.ca.gov email. Fuel tank deliveries, tank levels and fuel disbursements may be reconciled at any time.

For all manual disbursements and reconciliation, the Site Supervisor must complete the FA-0095 form that tracks monthly volumes by fuel tank ID, pump ID, pump meter reading, fuel type, on-hand fuel, and fuel purchases. The FA-0095 form compares the month-end calculated on-hand fuel with actual on-hand fuel. Fuel reconciliation amounts must be within 2% of calculated values.

All fuel slippage exceeding 2% must be investigated, resolved and the proper notifications made.

Additionally, the Site Supervisor must send all DME-0045 forms with the FA-0095 forms to the Region Manager, or designee, for quality review.

Quality and Safety Checks for the Reconciliation of Fuel Deliveries and Usage:

To ensure quality and safety at all sites, best practices for reconciliation of fuel deliveries and usage are:

- Take care when utilizing the manual tank level measurement process because errors such as misreading the dip stick, ineffective dipping techniques, miscalculating tank volumes, and number transposition can occur.
- The FA-0095 form can be completed electronically or manually, depending on the users' preference, but electronic completion is highly encouraged. . Keep accurate records and check for calculation errors. To avoid errors or inaccuracies while completing the FA-0095 form, take extra care to account for accuracy, and ensure that off-road diesel/biodiesel usage is properly accounted.
- For sites with TLS, users should take steps to accurately read TLS output and make sure that numbers are not transposed. Also, potential issues with the sensors themselves could arise. Therefore, take extra care to ensure accuracy and look out for any red flags that could point to possible equipment problems.
- Recapitulation of bulk fuel during manual mode is a procedure that, if done incorrectly, may result in lost revenues for Caltrans or unaccounted fuel. Tracking billable disbursements and off-road fuel usage requires more time and effort but increases revenue back to Caltrans for diesel fuel used in off-road equipment.
- When reading pump meters, take time and care to ensure accuracy and avoid misreading and transposition.
- Fuel tank leaks, while not common, may occur. Pay attention to data flags when comparing meter readings, tank levels, and calculated data as discrepancies could indicate tank leaks or other equipment failures. Pay attention to alarms from the automation system. Research the cause for any alarm for potential leaks. Do not just delete and ignore.
- Fuel 'slippage' or misappropriation may occur. Pay attention to data flags when comparing meter readings, tank levels, and calculated data as discrepancies could mean fuel has been misappropriated.

12.05.04 Manage Non-Caltrans Fuel Usage

Bulk fuel sites not only support Caltrans' vehicles, but may also support outside agency vehicles (e.g., CHP, CAL FIRE) that may need fuel periodically. The use of outside agencies may depend on weather conditions or while responding to emergency situations within the State.

In cases when other State agencies request to use Caltrans' bulk fuel, Caltrans and the agency are required to enter into an Interagency Agreement that enables Caltrans to seek an abatement for actual fuel costs. Notwithstanding an emergency, bulk fuel should not be provided to non-Caltrans' vehicles without an executed Interagency Agreement being in place. The Interagency Agreement specifies the terms and conditions for the use of Caltrans' bulk fuel and payment and is developed for approval by both the SBFA and the other agency. Agencies seeking to enter into an agreement should be referred to the following email for assistance: bulk.fuel@dot.ca.gov.

While a site is in manual mode, separate DME-0045 forms are provided for other agencies to record disbursements of bulk fuel. The Site Supervisor is required to ensure that all non-Caltrans fuel users are associated with an agency that has an executed Interagency Agreement on file. At the close of each month copies of the approved DME-0045 forms are forwarded by the appointed site personnel to the Statewide Bulk Fuel Administrator to reconcile usage with the automated transactions and submit to the Division of Accounting, Service, Commodity & CAL-Card payments (OCCP), which processes monthly invoices on total fuel.

Upon execution of an Inter-Agency Agreement, the SFBA instructs the agency to work directly with the vendor to have their cards uploaded into the system for confidentiality reasons. The system will then recognize allowable vehicles based on cards swiped and decline any card not in the system. The SFBA transaction reports to the Division of Accounting, Accounts Receivable. The Accounts Receivable staff reviews the transaction report and generates an invoice.

Copies of all executed Interagency Agreements are on file at DOE headquarters with the SFBA and Accounting and can be requested at any time by any site.

Quality and Safety Checks for Managing Non-Caltrans fuel usage:

To ensure quality and safety of managing non-Caltrans' fuel usage the Site Supervisor must ensure that non-Caltrans' users have an Interagency Agreement in place and that a separate DME-0045 form is provided near the fuel pump to record the relevant disbursement information with an ink pen. Any agency without a valid executed Interagency Agreement with Caltrans should not be permitted to obtain bulk fuel at any Caltrans' bulk fuel facility. Agencies requesting the use of fuel should be directed to the SFBA who can be reached at bulk.fuel@dot.ca.gov email. In the event of a state of emergency, the SFBA will initiate emergency protocols and allow for manual mode to be implemented and exceptions to be made for fuel use.

12.05.05 Track Off-Road Fuel Usage

For every documented gallon of diesel or biodiesel used by specific maintenance classes used for off road purposes Caltrans and DOE seek reimbursement from CDTFA. Caltrans, DOE and CDTFA have agreed upon set reimbursement percentages for specific maintenance classes of equipment. To determine the gallons of fuel used off road, the gallons used by each piece of equipment are multiplied by the off-road percentage. These calculations are all done by DOE's Resource Management Branch, while the recording of fuel disbursements is done by the sites.

During manual operation, Site Supervisors should make sure that disbursements for "off road" fuel are tracked, and forms are submitted to bulk.fuel@dot.ca.gov.

Quality and Safety Checks for Tracking off road fuel usage:

The ensure quality and safety checks are met, when reviewing DME-0045 forms confirm that all diesel and biodiesel disbursements are properly tracked for tax purposes.

12.05.06 Provide Bulk Fuel Data and Management Reports

The reporting of fuel consumption, represented in meaningful terms, is the primary tool to ensure oversight and control of bulk fuel. The automated bulk fuel system can generate many reports that contribute to effective management of bulk fuel.

- Tank Level Sensor (TLS) Reports: TLS reports provide information on the gallons in tank, water levels, leakage alarms, and input-output.
- Transaction Reports: Transaction reports play an important role in the auditing of the fuel program as well as budgeting of allocations and expenditures. These reports provide the following:
 - Equipment Card Transactions: transactions done with a card assigned to a specific piece of equipment (EQID)
 - VAV & CRC Transactions: transactions done with a supervisor (VAV or CRC) card which is assigned to a supervisor and not a specific piece of equipment.
 - Billable Disbursements: Reports fuel disbursed to other agencies.
 - Using transactions to check for “red flags” such as fuel disbursement quantities that exceed vehicle fuel tank capacity, back-to-back transactions, more than one transaction per day.
 - Unauthorized Attempts: Reports unsuccessful fueling attempts.
- System Alarm Reports and TLS Alarms: Reports the overall condition of the automated system including Site Equipment Status and Connectivity, power outages, when cabinets are opened, when the system is manually put into “manual override”, leakage in tanks, water in the tanks, etc.

APPENDIX 12-1

Rental and Non-C Equipment Fuel Codes

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Caltrans District Rental and Miscellaneous Equipment ID Numbers

Non-Caltrans Rental Equipment		Caltrans Miscellaneous Non-C Type Equipment	
Assigned Designation Numbers		Assigned Designation Numbers	
District	Equipment ID	District	Equipment ID
1	999999901	1	888880188
2	999999902	2	888880288
3	999999903	3	888880388
4	999999904	4	888880488
5	999999905	5	888880588
6	999999906	6	888880688
7	999999907	7	888880788
8	999999908	8	888880888
9	999999909	9	888880988
10	999999910	10	888881088
11	999999911	11	888881188
12	999999912	12	888881288
HQ	999999959	HQ	888885988

Notes:

Manual bulk fuel sites - Vehicle operators record the Assigned Designation number on the Disbursement Record - Bulk Fuel (DME-0045) form's Equipment ID field after each fueling.

Automated bulk fuel sites - When prompted at the Fuel Control Terminal (FCT) reader, enter the appropriate Assigned Designation number for District Equipment ID number.