

Operating Industries, Inc. Site Manifest and Volume Database Information

This memorandum provides information about the Liquid Waste Hauler Records and Hazardous Waste Manifests (collectively referred to as “manifests”) that were used to track wastes received by the OII Site, how the U.S. EPA used the manifest information, and how to read the manifests and the U.S. EPA’s summary of information from the manifests (the “Manifest Summary Report”) for your company or organization. Your company or organization’s Manifest Summary Report is enclosed, together with a compact disc or hardcopies of the waste manifests attributed to your company or organization. Sample manifests, a key to the information on the sample manifests (the “Sample Manifest Key”), and a key to terms used on the Manifest Summary Report (the “Manifest Summary Report Key”) are attached to this memorandum.

THE MANIFESTS

The enclosed manifests are records of wastes generated by your company or organization or its predecessor (“your company”). The U.S. EPA obtained the manifests for wastes disposed of at the OII Site from the following sources: the State of California; the Operating Industries, Inc. business office; and waste haulers. Samples of two types of commonly used manifests and a Sample Manifest Key (a guide to the information on the sample manifests) are attached. Your company's manifests may differ in appearance from the samples, as varying forms of manifests were used during the time that the OII Site was in operation, but the manifests contain essentially the same information as the samples. It may be helpful for you to look at your company’s manifests as you read this memorandum.

The U.S. EPA entered relevant information from these manifests into a computer database, which we refer to as the “volumetric database”. This database assisted the U.S. EPA in calculating the total volume of manifested waste disposed of at the OII Site, as well as the volume of waste disposed of by each individual generator. The primary categories of information extracted from each manifest are shown in the table on the following page. The U.S. EPA’s use of these categories of information to develop a summary of your company’s manifests (the enclosed “Manifest Summary Report”) is explained below.

MANIFEST INFORMATION USED IN EPA’S VOLUMETRIC DATABASE	
Date	The date shown in the Disposal Date section of the manifest - See the information marked “A” on the sample manifests
Manifest number	The original number shown on the manifest - See the information marked “B” on the sample manifests
Bates number	The number stamped on the copy of the manifest when the copy was made for the U.S. EPA’s files - See the information marked “C” on the sample manifests
SDMS number	The number stamped on the copy of the manifest when the copy was indexed by the U.S. EPA’s Superfund Records Center. There is no SDMS number on the sample manifest

MANIFEST INFORMATION USED IN EPA'S VOLUMETRIC DATABASE	
Generator	The entity that generated the waste (marked "producer of waste" on some manifests) - See the information marked "D" on the sample manifests
Quantity	The weight or volume of the waste (must be read with the "Units" information to determine the actual quantity of waste disposed) - See the information marked "E" on the sample manifests
Units	The units of weight or volume used (e.g., gallons (GAL) barrels (BBL), drums (DRM), pounds (LBS), tons (TON), yards (YDS)) to measure the quantity (must be read with the "Quantity" information to determine the actual quantity of waste disposed) - See the information marked "F" on the sample manifests
Number of loads or trips	The hauler's indication of the number of trips using a single manifest (i.e., "2" would mean that the same manifest was used to represent two trips from the same location to the same destination carrying the same volume) - See the information marked "G" on the sample manifests

THE MANIFEST SUMMARY REPORT

The Manifest Summary Report for your company is a report generated from the volumetric database which compiles information extracted from the manifests. It identifies the total waste volume the U.S. EPA has assessed to your company and lists several items of information for each of your company's manifests. The Manifest Summary Report Key attached to this memorandum provides a brief guide to each of the terms used on the Manifest Summary Report.

The Manifest Date, Bates #, Manifest #, and SDMS # Columns. The first column of the Manifest Summary Report provides the disposal date shown on the manifest. The next three columns ("Bates #," "Manifest #," and "SDMS #") provide identifying information for the manifest. Special stamps, called "Bates stamps," are widely used in the legal profession to help identify individual documents by marking them with unique numbers. The "Bates #" column provides the Bates number assigned by the U.S. EPA to the individual manifest. The "Manifest #" column provides the identifying number originally stamped on the manifest at the time it was used. The "SDMS #" column provides a unique identifying number assigned to the manifest when it was indexed by the EPA's Superfund Records Center.

The Quantity, Units, and Gallons Columns. The "Quantity" and "Units" columns on the Manifest Summary Report display the quantity and unit information extracted from the original manifest. To determine the amount of waste represented by the manifest, you must read both the quantity information, which is just a simple number, and the unit information, which tells you if the number was a measurement of gallons, barrels, pounds, tons, or other units of measurement. The "Gallons" column displays the volume of waste for the manifest in terms of gallons. If units other than gallons were used on the original manifest (e.g., barrels, drums, pounds, tons, or yards), the U.S. EPA applied a formula to convert the volume to gallons. The conversion factors

used by the U.S. EPA are provided on the Manifest Summary Report Key attached to this memorandum.

The Code and # Trips Columns. The “Code” column on the Manifest Summary Report provides an explanation of certain adjustments the U.S. EPA made to correct for missing or incorrect volume information. The code “CMP” (short for “computed”) indicates that the volume was determined by multiplying quantity times unit and, if necessary, applying a formula to convert the volume to gallons, but that no other adjustment was made. The code “ZER” (short for “zero”) means that the U.S. EPA could not determine the volume for the manifest, because the manifest was missing quantity information. In those cases, the U.S. EPA applied a default value to determine the volume for the manifest. The default volume used was the 75th percentile of all of the computed manifest volumes, in gallons, for the waste generator as identified on the manifests (calculated independently for each individual waste generator). The code “UNT” (short for “unit”) means that the manifest did not include adequate information about the measurement units used. As with the “ZER” manifests, the U.S. EPA has applied a default value to determine the volume for the UNT manifests. The default volume used was the 75th percentile of all of the computed manifest volumes, in gallons, for the waste generator as identified on the manifests (calculated independently for each individual waste generator). The “# Trips” column, like the “Quantity” and “Units” columns, provides information from the manifest itself. The waste haulers generally used the place provided on some manifest forms for number of trips to indicate that they had used a single manifest to represent several trips (each of which involved the same quantity of waste from the same generator and the same disposal site). For example, if the hauler wrote the number “2” in the hauler trip space on a manifest listing a waste volume of 4,200 gallons, that single manifest will actually represent two trips, each of which transported 4,200 gallons, for a total computed waste volume of 8,400 gallons. If no number was specified for the number of trips on a given manifest, or if the manifest form did not provide a space for such information, the U.S. EPA has assumed that only one trip was made. If the manifest indicated that it represented more than one trip, the U.S. EPA multiplied the waste amount by the number of trips indicated to arrive at the amount in the gallons column.

The Assessed Volume (gl) Column. The last column in the Manifest Summary Report is the “Assessed Volume (gl)” column (short for “assessed volume (in gallons)”). This column displays the total volume for the individual waste manifest in gallons, after any adjustments were made. The total volume of waste attributed to your company is the sum of the “Assessed Volume (gl)” column, which is shown on the Manifest Summary Report at the bottom of this column. The sum of the “Assessed Volume (gl)” column is the same as the total volume indicated on the Settlement Cost Summary.

Sample Manifest Key

Two sample manifests are attached to this memorandum. Your company's manifests may differ in appearance from the samples, as various manifest formats were used during the time that the OII Site was in operation, but the essential information on the manifests should be the same. The following table provides a guide to the most important categories of information on the manifests. Each of these categories of information on the sample manifests is marked with a letter corresponding with the category name and explanation in the table.

A	Date	The disposal date shown on the manifest
B	Manifest number	The original number assigned to the manifest at the time of its first use
C	Bates number	The number stamped on the copy of the manifest when the copy was made for the U.S. EPA's files
D	Generator (or Producer)	The name and address of the entity that generated the waste
E	Quantity	The amount of the waste (must be read with the "Units" information to determine the actual quantity)
F	Units	The units of weight or volume used to measure the waste (must be read with the "Quantity" information to determine the actual quantity)
G	Number of loads or trips	Used by haulers to indicate the number of trips using a single manifest (i.e., "2" meaning the same manifest was used to represent two trips from the same location to the same destination carrying the same waste volume)
H	Disposal site	The ultimate disposal site for the waste. Note, however, that some manifests found at the OII Site business offices for wastes clearly disposed of at the OII Site incorrectly named other disposal sites. If the enclosed manifests for your company indicate a different disposal site, the U.S. EPA used other information to determine that the OII Site was used for disposal of the wastes.

Manifest Summary Report Key

<u>Field Title</u>	<u>Description</u>															
Manifest Date	Disposal Date shown on manifest (manifests appear in chronological order)															
Bates #	Bates number assigned by EPA															
Manifest #	Manifest number originally stamped on the manifest															
SDMS #	Unique identifier applied to the manifest when indexed by the EPA's Superfund Records Center															
Quantity	Amount of waste as shown on the manifest															
Units	Unit of measurement for waste material disposed															
# Trips	Number of trips stated by waste hauler															
Gallons	Volume, converted to gallons, as calculated for each manifest. If the original units used were not gallons, the following conversion factors were applied: <table><tbody><tr><td>BBL</td><td>=</td><td>42 gallons per barrel</td></tr><tr><td>DRM</td><td>=</td><td>55 gallons per drum</td></tr><tr><td>LBS</td><td>=</td><td>0.125 gallons per lb.</td></tr><tr><td>TON</td><td>=</td><td>250 gallons per ton</td></tr><tr><td>YDS</td><td>=</td><td>216 gallons per yard</td></tr></tbody></table>	BBL	=	42 gallons per barrel	DRM	=	55 gallons per drum	LBS	=	0.125 gallons per lb.	TON	=	250 gallons per ton	YDS	=	216 gallons per yard
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Code	Code showing derivation of the final volume for the manifest, as follows: <table><tbody><tr><td>CMP</td><td>=</td><td>Straight computation from manifest information</td></tr><tr><td>ZER</td><td>=</td><td>No Quantity information, so default volume applied</td></tr><tr><td>UNT</td><td>=</td><td>No Unit information, so default volume applied</td></tr></tbody></table>	CMP	=	Straight computation from manifest information	ZER	=	No Quantity information, so default volume applied	UNT	=	No Unit information, so default volume applied						
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Assessed Volume (gl)	Final volume, in gallons, assessed to the individual manifest															

The sum of the Assessed Volume (gl) column is the total volume of waste, in gallons, that the U.S. EPA attributes to your company. The total number of manifests for your company is also shown on the bottom of the Manifest Summary Report, as is the default volume for your company (used when the manifest did not contain adequate volume information).