

The Ultimate Guide to **DPF and DOC Recycling**



Commercial Trucks



Buses and Coaches





Agriculture



Manufacturing



Mining



Construction

As a leading DPF and DOC recycling company, Red Fox Resources has seen it all and we've been asked question imaginable. This detailed guide to DPF recycling gives you a good grasp of 15 key areas to help you improve your recycling program or get started on the right track.

1. Used DPFs and DOCs Are Not Garbage

Old DPFs are definitely NOT garbage. The recycled value of used Diesel Particulate Filters (DPF) and Diesel Oxidation Catalysts (DOC) is based on the existence of Platinum Group Metals (PGM), typically \$10-700 for each part. Manufacturers coat the substrates of DPFs and DOCs with PGM (Platinum Group Metals) to provide a chemical reaction in the exhaust stream that enables engines to meet emission standards. The amount of PGM is each part determines the recycled value. Reputable DPF and DOC recyclers should be able to provide a price based on each part number.

2. Recycle Values

There is a vast range in the amount of PGM content in each DPF or DOC. This range not only varies significantly from manufacturer to manufacturer, but a single manufacturer could use a range of PGM coatings for different engine models, model years, horsepower ranges, and certain applications for a given engine model. The market price of PGM and the amount of PGM in each part determine their recycled value. There are also some parts in post-2010 engine models that do not carry a recycled value and can be treated as scrap metal.

3. Recycling Process (DPF/DOC)

The process to recycle DPFs and DOCs may vary somewhat from recycler to recycler. However, there are a few standard processes that reputable DPF and DOC recyclers should follow. Recyclers should be able to provide a quote for parts based on part number, arrange for freight transportation or direct pickup, pay for parts in a reasonable time (usually no longer than 45 days) and provide a written record of the transaction.



4. Recycling vs. Scrapping

Many fleets, service facilities and salvage yards claim to be "recycling" spent DPFs and DOCs by tossing them in the company scrap metal bin and having your local scrap metal company come and pick them up and because that material is reclaimed, they believe they are recycling the DPFs and DOCs. While it may be true that the steel housing of the DPFs and DOCs are being reclaimed, it is uncommon that scrap metal companies are extracting and paying you for the PGM (Platinum Group Metals) contained inside the filter substrate. As a result, if your company is including your used DPFs and DOCs in your scrap metal bins, you may not be earning the full "potential" of these higher value parts. The PGM contained in the DPF/DOC substrate typically returns 10 to 100 times the value of scrap metal. If you include emission parts in your scrap collection bins, make sure to ask your scrap metal company what they're paying you for the PGM and if it's itemized on your statement? Lastly, if the PGM is not being recycled and only the scrap metal housing is being recycled, you are missing the opportunity to earn a much higher payout, along with the benefit of returning these precious metals back to the production stream, which helps keep costs for new parts down.

5. Hazardous Waste Risk

What is important to remember when it comes to hazardous waste risk is that compliance is 100% the responsibility of your company. This includes understanding local regulations and determining the potential contaminants in your waste. Different states and municipalities have varying thresholds that trigger a classification of waste as hazardous. An experienced recycling company, dedicated to processing DPFs and DOCs, should be able to guide you through the process of determining the classification of your used DPFs and DOCs. Red Fox Resources has conducted multiple independent laboratory tests on used DPFs/DOCs and can help companies make this determination based on our years of experience. This advice includes guiding you through the cost/benefit analysis of having your waste emission control parts adequately assessed and tested.



6. Getting a Quote

Experienced recyclers will typically provide an estimate on your parts' recycle value before scheduling a pickup, so you know what you'll be earning on the front end. Such recycling estimates carry an expiration date as the price estimate is based on the market price of the precious metals (PGM). Be wary of buyers that don't provide a written estimate or state in writing when the estimate expires. These are good practices to protect both parties from the fluctuation in PGM market price changes.

Recyclers may require pictures or part numbers of the parts you intend to recycle before them providing an estimate. Often, part numbers may not be readily available, in this case knowing the make and model year of the associated engine is often enough to generate an estimate.

For example, Red Fox Resources issues price quotes valid for 15 days when a part number is provided. If a part number is not available, we offer a budgetary estimate based on photos or part descriptions that are subject to adjustment once we receive the parts for inspection.

7. Shipping

Reputable DPF/DOC recycling companies will most often provide free shipping or regional pickup/delivery to their recycling center. Although there are often quantity minimums to qualify for free shipping, it's typically a great deal for the seller who recycles 10+ DPF/DOC parts per transaction. These free shipping programs are geared towards fleets, dealers, and dismantlers who are recycling multiple parts, not individual vehicle owners with one part. If you have 10 or more parts, contact your recycler to get a quote that includes free shipping.

8. Getting Paid

Getting paid by your recycler should not be a hassle. Ask up front what the typical payment takes once parts are received and how the payment made (e.g., company check, wire, cash, other)? The typical range is 15-45 days,



once the parts are received and inspected. If your recycler rarely pays in 45 days, look for a new recycling partner. Also, depending on your local regulations, many sellers (fleets, dealers, etc.) only work with recyclers that use a "compliant process" (explained below – item #9).

9. Compliant Process

Does your recycler provide a written record of each transaction with part number detail? Many collectors or buyers may try to purchase scrap DPF and DOC cores with cash, which in and of itself is not a cause for concern. However, to limit your risk as a seller, a written record can help protect you and your company from future liability related to what's done with your parts. This may include local regulations related to hazardous waste disposal, laws restricting the sale of used DPF/DOC parts, and more. The potential liability depends on your location and the local regulations, which is your responsibility to understand.

10. Sustainability

Companies talk a lot about developing a "sustainable supply chain." A sustainable supply chain makes great business sense for manufacturers because producing products with reusable materials can be cheaper than using new raw materials, reduces waste, and ensures long-term availability of products. Recycling DPFs and DOCs is a perfect example of how businesses can promote a sustainable supply chain while keeping down costs for new parts. When a fleet or shop recycles a DPF, they're supporting sustainability (reducing the need to mine new material) and bolstering the supply of a scarce product, thus keeping in check the price for new DPFs and DOCs.

11. Online Tools (Quotes and Shipping)

Many leading recycling companies provide online tools to help you expedite the process. A few worth noting are 1) Frequently asked questions; 2) price quotes and pricing tools; 3) scheduling free shipments and pickups; 4) getting paid electronically. These user-friendly tools can make the process of recycling DPFs and DOCs much more manageable, especially during non-business hours.



12. Recycling Services in California

If you operate in California, regulatory compliance can be more complicated, even for DPF recycling. Due to this complexity, not all recycling companies operate in California. Leading fleets, repair shops, and dealers understand the risks of hazardous waste management and select a recycling partner that can help them follow a compliant process.

13. Replacement DPFs

When replacement DPFs are needed, most equipment operators source new DPF filters from OEMs or aftermarket suppliers. However, depending on your location (e.g., California), the installation of aftermarket, remanufactured, or used DPFs may not be legal. It's your responsibility to understand the local regulations based on your operation.

14. Aftermarket DPFs

In addition to replacement DPFs from OEMs, many companies now offer aftermarket or "will-fit" DPF filters as a lower cost alternative to OEM filters. However, while most OEMs offer a core exchange program to recycle or remanufacture old filters, most aftermarket DPF suppliers do not. Therefore, you'll be responsible for recycling or properly disposing of your old DPFs. In this case, using a reputable DPF recycling company is the right approach. (Note: as of this article, the use of used, remanufactured, or aftermarket DPFs is not legal in California.)

15. Possible Red Flags

Selecting a DPF recycling partner does not need to be a complicated process. As with the selection of any vendor, you want a reputable company with the experience and knowledge that matches your needs. Possible warning signs of recycling companies to avoid are: 1) extremely high payouts compared to other recyclers (a sign of reselling or remanufacturing, not recycling); 2) payments in cash with no written record of transactions; 3) shipping/processing DPF ash without proper labeling/handling as a haz-



ardous waste; 4) limited references and time in business (e.g., less than 12 months in business); 5) high turnover of employees; 6) payouts that take more than 45 days.

Getting Help with Your DPF Recycling Program

Red Fox Resources is a leading recycler of DPFs and DOCs for fleets, dealers, OEMs, dismantlers, and scrap metal companies. If you have questions or need assistance with DPF recycling, contact us at 844-733-3695 or visit our website at RedFoxResources.com.

Helpful Links

How Recycling Works at Red Fox
Get a Quote
Schedule a Shipment
Frequently Asked Questions

