Dry Cleaner Example

During fiscal year 2006-2007, Spotless Cleaner's natural gas bills totaled 3,965 therms all burned in a permitted boiler. Facility invoices showed 274 gallons of perchloroethylene consumption. It had three shipments of waste totaling 1,180 pounds of standard size filters and 110 gallons of sludge (still bottoms) through a waste hauler. Based on the information supplied by the waste hauler, the filters contain 20 percent by weight and the still bottom contains 5 percent by volume of perchloroethylene. Copies of the manifests are enclosed with the emissions report. Spotless Cleaner qualifies as a small business as defined in the general definition of SCAQMD Rule 102.

Example 1: FORM DCB Dry Cleaning Operations Boiler Emissions

Since the boiler is permitted equipment, enter "1" in the box (a) identified in the illustration below. (Note: If there was additional non-permitted equipment natural gas usage, an extra form would have to be used with the entry of "2" in box (a).)

- 1. Annual Fuel Usage: Convert the natural gas usage (therms) to millions of standard cubic feet (mmscf) by multiplying it by 0.0000952, as given in Appendix I. The annual usage of natural gas for Spotless Cleaner is:
 - $(3,965 \text{ therms}) \times (0.0000952 \text{ mmscf/therms}) = 0.38 \text{ mmscf (enter in column (b) below)}$
- 2. Emissions: Calculate emissions from natural gas using the emission factors preprinted on the form:

(0.38 mmscf) X (5.50 lbs/mmscf) = 2.09 lbs (column c)

(0.38 mmscf) X (100.00 lbs/mmscf) = 38.00 lbs (column d)NOx:

SOx: (0.38 mmscf) X (0.60 lbs/mmscf) = 0.23 lbs (column e)

CO: (0.38 mmscf) X (84.00 lbs/mmscf) = 31.92 lbs (column f)

PM: (0.38 mmscf) X (7.60 lbs/mmscf) = 2.89 lbs (column g)

- 3. Total Emissions: Place the calculated emissions for each pollutant in the assigned column rounded-off to 2 decimal places on the line marked "EMISSIONS (lbs/year)".
- 4. Unit Conversion: Convert each of the emissions to tons (round off to 2 decimal places) and enter emissions (tons) on Line 2.

VOC: (2.09 lbs) / (2000 lbs/ton) = 0.00 tons (Line 2, column c; and FORM C, Line 1, column a) NOx: (38.00 lbs) / (2000 lbs/ton) = 0.02 tons (Line 2, column d; and FORM C, Line 1, column d) SOx: (0.23 lbs) / (2000 lbs/ton) = 0.00 tons (Line 2, column e; and FORM C, Line 1, column e) CO: (31.92 lbs) / (2000 lbs/ton) = 0.02 tons (Line 2, column f; and FORM C, Line 1, column f) (2.89 lbs)/(2000 lbs/ton) = 0.00 tons (Line 2. column g. and FORM C. Line 1. column g.) рм٠

orm DCB		EANING OPER IS FROM NATURAL G		Annual I	Emissions Repo July 2006 - June 20
ead instructions on the back ofore completing form. arry all emission calculations to 2 decimal laces. int neatly. ecord on Form ES.	SPOTLES	SS CLEANER		q q FACILIT	q q q q
Use a sep	arate form if you ha	ave both permitted	and non-permitte	ed boilers.	
Enter "1" for Permitted Boi		tu per hour or less)			
Enter "1" for Permitted Boi Enter "2" for Non-Permitted nual natural gas usage = 3965	d Boiler (2,000,000 Bt	tu per hour or less) X 0.0000952 =	2.0	on standard cubic fee	
Enter "1" for Permitted Boi Enter "2" for Non-Permitted hual natural gas usage = 3965	d Boiler (2,000,000 Bt	X 0.0000952 =	o.38 millio		et/year (MMSCF/ye Particulate Matte (g)
Enter "1" for Permitted Boi Enter "2" for Non-Permitted nual natural gas usage = 3965	therms/year) Organic Gases	X 0.0000952 =	o.38 millio	Carbon Monoxide	Particulate Matt
Enter "1" for Permitted Boi Enter "2" for Non-Permitted nual natural gas usage = 3965 Annual Usage (MMSCF) (b)	therms/year) Organic Gases	X 0.0000952 =	Sulfur Oxides	Carbon Monoxide (f)	Particulate Matt (g)



Example 2: FORM DC Dry Cleaning Perchloroethylene Emissions

Note: For emissions other than perchloroethylene (perc) or non-dry cleaning solvent emissions, refer to the General Instruction Book.

Steps to follow:

1. Perc usage:

From facility records (e.g., purchasing invoices), the perc usage is given as 274 gallons per year. Enter the usage data in the allocated space on Line (A). Convert the usage to pounds by multiplying by the density of 13.53 lbs/gallon.

Usage in lbs: 274 gal/yr X 13.53 lbs/gal = 3707.22 lbs/yr.

2. Recycling Credit:

Weight of filters = 1180 lbs (Column (a))

Perc.% in filters = 20 % wt. (Column (b))

Recycled Material (perc) from filters:

= 1180 lbs X 20/100 X 1 lb/lb = 236.00 lbs/yr (Column (d))

Volume of sludge (still bottoms) = 110 gal (Column (a)).

Perc % in still bottoms = 5 % v. (Column (b)).

Recycled Material (perc) from sludge (still bottoms):

= 110 gal X 5/100 X 13.53 lbs/gal = 74.42 lbs (Column (d))

Total Recycled Material (perc) = 236.00 lbs + 74.42 lbs = 310.42 lbs (Enter on last line in Column (d)). Recycling Credit of 50% = 50 % X 310.42 lbs = 155.21 lbs (Enter on Line B)

3. Total Fee due:

Net emissions = 3707.22 lbs -155.21 lbs = 3552.01 lbs, rounded to whole pound = 3552 lbs (Enter on Line C).

Check "yes" box indicating that you are a small business (per District Rule 102 definition).

Since the net emissions are less than 4000 lbs, and the facility is a small business, no fee is due. Zero is entered under Total Fee Due (\$).

Note: If Line (C) is equal to or greater than 4000 lbs. (e.g., 4500 lbs.), the total fee due would be 4500 lbs X \$0.35/lb = \$1575.00.

Form DC				G OPERATIONS YLENE EMISSIONS	S A	nnual Emissions Repor July 2006 - June 200		
Read instructions on the back before completing form. Print neatly. Record on Form ES.		SPOTL	9 9 9 9 9 FACILITY I.D. NUMBER					
If you us	sed any solvent oth	er than Perchlo	oroethylen	e for dry cleaning, p	lease use Form B3 or	Form TAC.		
(A) Perchloroethylene l	Usage (lbs/yr) =	274		gal/year	x 13.53 lb/gal =	3,707·22 (A)		
(B) Recycle credit (was quantities in columi credit.				the entire year by ty manifest for each sh				
Waste Type	Quantity (a)	Percent (%) Perc. in Waste (b)	Emission Factor (c)	Recycled Perc. (a) x [(b)/100] x (c) (d)				
Filters in Total lbs.	1180	20	1.0	236.00	1			
Oil (sludge) in Total gal.	110	5	13.53	74.42	1			
	Total Red	cycle Credit (I	bs/year)	310.42	x 0.50 =	155.21 (B)		
	(C) Net E	missions (Li	ne A - Line	e B) (Ibs/yr) (round to	the nearest whole pound)	3552 (c)		
If (C) is 4,000 lbs or gre	eater, multiply Line	(C) by fee rate	of \$0.35/lb	and enter calculate	d fee in Total Fee Due			
If (C) is less than 4,000	lbs, AND					TOTAL FEE DUE		
Small Business? (see back under "Exemption" for definition)	NO ☐ multiply YES ⊠ enter "0.			.35/lb and enter calc	ulated fee in Total Fee	Due. \$ 0.00		
						Transfer Total Fee Due		

Example 3: FORM ES List of Emission Sources

Based on the completed Forms DCB and DC Form ES would be completed as follows:

For												JI	JIY 200	6 - Jur	e 200
Read in before Print r	complet	ns on the back ing form.		SPOTI	ESS ACILI	<i>د</i> ۲۷ NA	EAN	ER	_	9	۹ FACI	9 LITY I	A .D. NU	9 MBER	9
Refer (a Form			Emissior	Sourc	ce Cat	egory	Desci	iption			Cor	or O	oxic Air zone D (Yes or (c)	epleter	
DC	1	Dry Cle	aning -	Perc.	Emiss	sions)						Yes		
DCB	١	Dry Cle Boiler	. Natur	al Ga	s - 7	Permi	Hed						No		
										,	-				
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						Р	AGE #	Ø	0	то	TAL	PAGE	ES IN	FOR	M ES

Example 4: FORM WT Credits for Waste Shipments Toxic Air Contaminants/Ozone Depleters

For recycling waste credit for compounds other than perchloroethylene, see the example in the General Instruction Book.

Example 5: FORM TAC Toxic Air Contaminants/Ozone Depleters

For reporting Toxic Air Contaminants/Ozone Depleters other than perchloroethylene, see the example in the General Instruction Book.

Example 6: FORM C Permitted Annual Emissions Summary

Based on Example 1: FORM DCB for Spotless Cleaner shown earlier, FORM C is completed as follows:

Form C	;		PERM ANNUAL EMISS	Annual Emissions Repor July 2006 - June 200				
Read instructions on t before completing for Carry all emission cale places. Print neatly.	m.		SPOTLES.	S CLEANER		9 9 9 FACILITY	9 9 9	
	Organic Gases (tons) (a)	Methane (tons) (b)	Specific Organics (tons) (c)	Nitrogen Oxides (tons) (d)	Sulfur Oxides (tons) (e)	Carbon Monoxide (tons) (f)	Particulate Matter (tons) (g)	
1. FORM B1, DCB or AB	0.00			0 -02	0 - 00	0-02	0 -00	
2. FORM B2	•			•	•			
3. FORM B3								
4. FORM B4				•		•	•	
5. FORM E1				•				
6. FORM R1								
7. Total Permitted Emissions (Add Lines 1 Through 6)	0 •00	0 -00	0.00	0 - 02	0-00	0 - 02	0 - 00	
		Transfer Line	7 Totals to Form S	, Column (a), exc	ept for Methane			

S.C.A.Q.M.D. reserves the right to audit the reported emissions. All records and calculations used in completing this summary are recommended to be retained for a minimum of five years

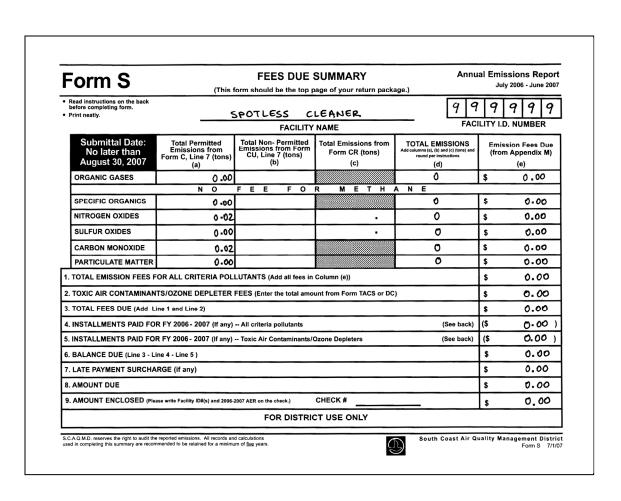
Example 7: FORM CU Non-Permitted Annual Emissions Summary

Since Spotless Cleaner only has permitted equipment, FORM CU is completed by entering "not applicable" (N/A) as shown.

Read instructions on ti							
before completing form Carry all emission calc places. Print neatly.			SPOTLES:	S CLEANER NAME		9 9 9 FACILITY	9 9 9 I.D. NUMBER
	Organic Gases (tons) (a)	Methane (tons) (b)	Specific Organics (tons) (c)	Nitrogen Oxides (tons) (d)	Sulfur Oxides (tons) (e)	Carbon Monoxide (tons) (f)	Particulate Matte (tons) (g)
1. FORM B1U, DCB or AB	•	-		•			
2. FORM B2U		-		•			
3. FORM B3U	•		•				
4. FORM B4U	•		•	•			
5. FORM E1U							
6. FORM R1U							
. Total Non-Permitted Emissions (Add Lines 1 Through 6)	N/A .	N/A .	N/A .	N/A .	N/A .	N/A .	N/A .
		Transfer Line 7	Totals to Form S	, Column (b), exc	ept for Methane		

Example 8: FORM S Fees Due Summary

Based on the examples for Spotless Cleaner, FORM S is completed as follows:



Example 9: FORM A Status Update, Exemption Request, Refund Request, and Use of Alternative Emission Factors or Calculations

Spotless Cleaners shutdown on May 05, 2007. Spotless Cleaners reported emissions from July 1, 2006 to May 05, 2007.

		TE, EXEMPTION REQUI						ssions F y 2006 - Ju	•
		SPOTLESS C	LEANER	Ī	9	9	9	9 9	9
CTA.	THE HIDDATE (If Applicable)	FACILITY N		•	F	ACIL	ITY I.	D. NUMB	R
(Conta	TUS UPDATE (If Applicable) ct Permit Services For Official Status Changes)	Month Day Year	REFUND REQUE	ST					
X	Facility Shutdown	05 05 07	☐ I request a refun	d for overn	wmo	nt of t	one n	aid for this	
П	Change of Ownership	ШШШ	reporting period	(installmen	, pay	ment	excee	ded total f	ees
Ш	New Facility I.D./ Name		due). Provide or emissions during						
	Old Facility I.D./ Name		compared to pre- which has result					2005-Jun	200
	Change in Equipment Location		WillCit has result	eu iii overp	ayınıe	iii oi	ees.		
	New Facility I.D./ Location		\$ Amount requeste	ed					
П	Variance/Abatement Order That Resulted in E	xcess Emissions							
	Case Number(s)								_
	Emissions Are Zero for this year's Report, or or more from last year's Annual Emissions Re	Emissions Reduced by 50% eport. (Provide or attach a brief explanation)							
									-
	-								-
FXF	MPTION REQUEST		USE OF ALTERN					CTORS	OF
	uest to be exempt from next year's Annual am for the reason marked below. If appro		CALCULATION N				-		
l rec			To expedite Dist						
l rec Progr facili	ty will still be required to report its annual	AOMOla-							ı
l req Progr facili appli chan	cable fee in future years if operations char ge, in any manner that results in increased	emissions above those	calculation meth)(C), r			
l req Progr facili appli chan	cable fee in future years if operations char ge, in any manner that results in increased fied under the Exemption Criteria specified	emissions above those d on the back of this form.	calculation meth pursuant to AQM this box and atta	MD Rule 301 ach your su	(e)(8 ppor	ting d			
l req Progr facili appli chan	cable fee in future years if operations char ge, in any manner that results in increased	emissions above those d on the back of this form. Exemption Criteria, and	calculation meth pursuant to AQM this box and atta your report. Do reported on For	MD Rule 301 ach your su not check to ms B3 or B3	(e)(8 ppor his b 3U (U	ting d ox for se of	emis: Orgar	sion factorics) which	1
l req Progr facili appli chan	cable fee in future years if operations char ge, in any manner that results in increased fied under the Exemption Criteria specified Annual Emissions for this year meet the emissions for next year will also me	emissions above those d on the back of this form. Exemption Criteria, and et the Exemption Criteria.	calculation meth pursuant to AQM this box and att your report. Do reported on For are based on VC the Form(s) for	MD Rule 301 ach your su not check ti ms B3 or B3 OC contents which an al	ppor ppor his b 3U (U liste terna	ting d ox for se of d on tive fa	emis: Orgar MSDS actor o	sion factor nics) which . Please ico or method	ı entif
l req Progr facili appli chan	cable fee in future years if operations char ge, in any manner that results in increased fied under the Exemption Criteria specified Annual Emissions for this year meet the emissions for next year will also me	emissions above those d on the back of this form. Exemption Criteria, and et the Exemption Criteria.	calculation meth pursuant to AQM this box and atta your report. Do reported on For are based on VC	MD Rule 301 ach your su not check ti ms B3 or B3 OC contents which an al	ppor ppor his b 3U (U liste terna	ting d ox for se of d on tive fa	emis: Orgar MSDS actor o	sion factor nics) which . Please ico or method	ı entif

Example 10: FORM X Signature Sheet

The preprinted mailing address on FORM X for Spotless Cleaner is correct. Their business operating hours are 10 hours per day, 6 days per week, and 50 weeks per year. The SIC code that best describes the operation is 7216.

The completed FORM X for Spotless Cleaner is as follows:

Form X	SIGNATURE SHEET	Annual Emissions Report July 2006 - June 2007
Read instructions on the back before completing form. Print neatly.	SUBMITTAL DATE: No later than August 30, 2007	999999
Company Name SPOTLESS CLEANE Address 123 CLEAR LANE City SUNNY PARK ZIp-Code State CA ZIp-Code	Equipment Location 123 CLEAR City SUNNY PARK	LANE
MAILING INFORMATION UPDATES (if applica Company Name Street Address City Contact Person First Name Telephone Telephone Telephone	Street Name Stx Apus State Zip-Code Last Name Tide	BUSINESS OPERATING HOURS Hours per day \[\frac{1}{2} \] Days per week \[\frac{6}{2} \] Weeks per year \[\frac{5}{2} \]
my company in the calculation of annual emissions. (This Authorized Signature	Last Name	the completed report A any applicable fees) OWNER Ext 100 Fex(213) 123-1235 WHER CLEANER
Preparer Name		Preparer E-mail