

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	Page	1
STATIONARY SOURCE AND COMPLIANCE DIVISION	Application Nos.	516869-516964
APPLICATION PROCESSING AND CALCULATION	Processed By:	AED
	Checked By:	
	Date	March 22, 2011

**PERMIT TO CONSTRUCT/OPERATE EVALUATION
Emergency I.C. Engine/ Film Cleaning**

APPLICANT'S NAME: DELUXE LABORATORIES

COMPANY ID: 009668

MAILING ADDRESS: 1377 NORTH SERRANO AVE., HOLLYWOOD, CA 90027

EQUIPMENT ADDRESS: SAME AS ABOVE

Title V FACILITY PERMIT REVISION:

A/N: 516964 (De minimis Significant)

EQUIPMENT DESCRIPTION (A/N : 516869) -Permit to Construct

INTERNAL COMBUSTION ENGINE, MTU DETROIT DIESEL, DIESEL-FUELED, EMERGENCY ELECTRICAL GENERATOR, MODEL NO. 12V2000G85, TURBOCHARGED, 12 CYLINDERS, 1193 BHP.

EQUIPMENT DESCRIPTION (A/N : 511419)- P/O no P/C, replacement of A/N 459610 (P/O F84247)

FILM-CLEANING MACHINE, LIPSNER SMITH, ULTRASONIC-TYPE, MODEL CF3000- MK VI, WITH AN ELECTRIC AIR HEATER, REFRIGERATED CONDENSER COILS, AND A COMMON THREE STAGE SOLVENT PURIFICATION SYSTEM AND SOLVENT RECLAIMING TANK.

BACKGROUND:

Deluxe Laboratories Inc. is a Title V facility which is in the business of film developing, film coloring and film duplication for the major motion picture industry. This company bids for jobs offered by the motion picture industry. A/N 511419 was submitted on 06/03/10 for functionally equivalent replacement of ultrasonic cleaner under P/O # F84247 (A/N 459610). The company installed the equipment without getting prior Permit to Construct; no penalty is applicable per Amnesty for Unpermitted Equipment (Rule 310), since the application was filed during the amnesty period. A/N 516869 was submitted on 12/08/10 for permit to construct for an emergency IC engine. The equipment is a certified Tier 2 ARB engine, and certified by AQMD (see attachment). The company needs to install the ICE on site for emergency purposes to support the equipment. A/N 516964 was submitted for Title V Facility Permit Revision. The Title V renewal permit was issued to the facility on October 1, 2006. This is the third revision since the renewal.

In addition, Deluxe laboratories submitted following applications that will be included with this revision:

Previous A/N	Previous P/O	New A/N	Equipment Description	Action	Status
NA	NA	481187*	APC Regenerative Thermal Oxidizer	New installation P/C to P/O	Issued PC Feb. 3, 2009
459610	F84247	481188*	Film Cleaning	Facility VOC Cap P/C to P/O	“
459611	F84248	481189*	Film Cleaning	“	“
459612	F84256	481190*	Film Cleaning	“	“
459613	F84257	481191*	Film Cleaning	“	“
459614	F84258	481192*	Film Cleaning	“	“
459615	F84261	481193*	Film Cleaning	“	“
459616	F59616	481194*	Film Cleaning	“	“
459617	F84274	481195*	Film Cleaning	“	“
459630	F84263	481196*	Film Cleaning	“	“
406439	F56679	481197*	Wet-Gate Printing	“	“
481198	F56678	481198*	Wet-Gate Printing	“	“
NA		481186*		TV 1 st . Revision	“
459631	F84309	493510*	APC Carbon Adsorber	Change of Condition, P/C to P/O	Issued PC May 15, 2009
NA		494095*		TV 2 nd Revision	

*Evaluations were done separately.

The ICE will be solely dedicated for emergency purpose. Deluxe Laboratories may also operate the ICE for maintenance and testing purposes as required. This engine is required to meet the Best Available Control Technology (BACT) requirements for Tier 2 engines. It meets the required Tier 2 emission standards for criteria pollutants. The BACT guidelines for stationary internal combustion engines, Ver. 10-03-2008, rev 4 is included in the evaluation file.

The facility has had no citizen complaints filed in the last two years. However, the facility was issued a Notice of Violation on 04/16/2009 requiring the applicant to submit Forms 500-ACC and 500-SAM in timely manner, and NC # D28787 on 04/06/2010 requiring the facility to demonstrate compliance for all the operating boilers between 400,000 BTU/hr up to 2MM BTU/hr per Rule 1146.2.

The facility has complied with both notices.

PROCESS DESCRIPTION:

According to the applicant, the ICE (A/N 516869) will be used strictly for emergency purposes. The ICE will also be operated approximately 1 hr/wk (50 hr/yr) for testing and maintenance purposes. The engine is a Tier 2, certified ICE designed to meet current BACT emission rates for engines of its specification.

The Lipsner-Smith DC-3000 MK VI film cleaning machine (A/N 511419) uses perc for film cleaning, and is vented to the permitted carbon adsorber unit (APC under A/N 493510). The facility continues to use the same material, and there would be no change in operation hours for this equipment. This change of functionally identical equipment will not cause an emission increase from this equipment or the APC.

EMISSION CALCULATIONS:

A/N 516869: See attached spreadsheet for certified ICE.

A/N 511419: Hourly NSR and AEIS emissions for the ROG emissions will be entered as calculated by the previous evaluation, the copies of previous NSR and AEIS are located at the end of this evaluation.

RULES EVALUATION:

RULE 212 (c)(1): This section requires a public notice for all new or modified permit units that emit air contaminants located within 1,000 feet from the outer boundary of a school. No public notice is required since no school is located within 1,000 ft from the above site.

(c)(2) & (g): This section requires a public notice for all new or modified equipment and facilities that have emission increases exceeding any of the daily maximums as specified by Rule 212(g). The proposed project will result in emission increases for the IC Engine from the equipment and the facility. There is no emission increase from the replacement of the film cleaner. A Rule 212(c)(2) or (g) notice will not be triggered since the emission increases are below the daily maximum specified in Rule 212(g).

	Maximum Daily Emissions (lb/day)					
	ROG	NO _x	PM ₁₀	SO ₂	CO	Pb
Emission increase	0	11	0	0	3	0
MAX Limit (lb/day)	30	40	30	60	220	3
Compliance Status	Yes	Yes	Yes	Yes	Yes	Yes

(c)(3): This section requires a public notice for all new or modified permit unit with increases in emissions of toxic air contaminants listed in Table I of Rule 1401 resulting in MICR greater than 1E-6 per permit unit or greater than 10E-6 per facility. The proposed project will result in an emission increase of toxic emissions associated with the operation of this engine. However, as discussed in additional detail in the evaluation, the toxic emissions from this equipment will not result in an increase in MICR of more than 1×10^{-6} nor a hazard index greater than 1.0. There is no increase

from the replacement of the film cleaner. Public notice is not required under this section of the rule.

Rule 401: With the proper maintenance and operation of this equipment, compliance with rule is expected.

Rule 402: With proper maintenance and operation, this equipment is not expected to create a nuisance.

Rule 404: Based on experience with similar equipment, engine is expected to comply with this rule.

Rule 431.2: The facility shall use a diesel fuel in which the sulfur content will not exceed 15 ppm by weight (0.0015% by weight). Compliance is expected.

Rule 1110.2: Emissions from Gaseous and Liquid Fueled Stationary Internal Combustion Engines: This engine is exempt from the provisions of subdivision (d) per paragraph (h)(2) since the equipment is an emergency engine limited to less than 200 hours per year operation with maintenance hours expected to be less than 50 hours per year. An operating log will be kept that includes, on a monthly basis for the total hours of operation.

Rule 1303(a): The engine is designed and manufactured to operate under specific BACT emission limits based on the size of the engine. The engine meets the BACT limits (Tier 2).

	NMHC+NO _x (g/BHP-hr)	CO (g/BHP-hr)	PM (g/BHP-hr)
Rule Limit	4.8	2.6	0.15
Engine Emission Rates	4.15	1.2	0.12

Rules 1303(b)(1) & 1303(b)(2): Per Rule 1304(a)(4), emergency ICEs are exempt from modeling and emission offsets requirements.

Rule 1303(b)(4): The facility is expected to be in full compliance with all applicable rules and regulations of the District.

Rule 1401: Per Rule 1401(g)(1)(F), emergency ICEs are exempt from the requirements of this rule.

Rule 1470: The ICE is expected to operate in compliance with the requirements of this rule. The ICE will not be located within 500 feet of a school. It will be operated using CARB-approved diesel fuel. It is designed to emit PM emissions at a rate of (0.12 gm/bhp-hr). The operating hours for maintenance and testing will be limited to 50 hours per year or less. Per Rule 1470(c)(2)(C), the ICE must meet emissions criteria contained in Title 13, CCR section 2423. The emission limits for this ICE are listed below along with maximum emissions.

	NMHC+NO _x (g/bhp-hr)	CO (g/bhp-hr)	PM (g/bhp-hr)
Rule Limit	4.8	2.6	0.15

Engine Emission Rates	4.62	0.52	0.12
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REG XXX:

This facility is not in the RECLAIM program. The proposed project is considered as a “de minimis significant permit revision” to the Title V permit for this facility.

Rule 3000(b)(6) defines a “de minimis significant permit revision” as any Title V permit revision where the cumulative emission increases of non-RECLAIM pollutants or hazardous air pollutants (HAPs) from these permit revisions during the term of the permit are not greater than any of the following emission threshold levels:

Air Contaminant	Daily Maximum (lbs/day)
HAP	30
VOC	30
NO _x	40
PM ₁₀	30
SO _x	60
CO	220

To determine if a project is considered as a “de minimis significant permit revision” for non-RECLAIM pollutants or HAPs, emission increases for non-RECLAIM pollutants or HAPs resulting from all permit revisions that are made after the issuance of the Title V renewal permit shall be accumulated and compared to the above threshold levels. This proposed project is part of the 3rd permit revision to the Title V renewal permit issued to this facility on October 1, 2006. This revision also includes several other changes, as summarized in the following table (these evaluations were done separately). The following table summarizes the cumulative emission increases resulting from all permit revisions since the Title V renewal permit was issued:

Title V Permit Revisions Summary

Revision	HAP	VOC	NO _x	PM ₁₀	SO _x	CO
1 st Permit Revision, modification of eight film cleaning and two film printing machines by venting them to a new RTO (Application #s 481187, 481189-98), removal of A/N 418285 (F64065), a film cleaning machine.	0	0	1	0	0	0
2 nd Permit Revision, change of condition of one activated carbon permit under P/O F84309 by changing the adsorption cycle (A/N 493510)	0	0	0	0	0	0
3 rd Permit Revision, De minimis Significant Revision: installation of a functionally identical film cleaning (A/N 511419), install new ICE (A/N 516869), Administrative Revision: P/C to P/O for RTO (A/N 481187), Carbon Adsorber (A/N 493510), 8 film cleaners (A/N 481189-481196) & 2 wet-gate printers (A/N 481197-8)	0	0	11	0	0	3
Cumulative Total	0	0	12	0	0	3
Maximum Daily	30	30	40	30	60	220

Since the cumulative emission increases resulting from all permit revisions are not greater than any of the emission threshold levels, this proposed project is considered as a “de minimis significant permit revision”.

RECOMMENDATION/CONCLUSION:

The proposed project is expected to comply with all applicable District Rules and Regulations. Since the proposed project is considered as a “de minimis significant permit revision”, it is exempt from the public participation requirements under Rule 3006 (b). A proposed permit incorporating this permit revision will be submitted to EPA for a 45-day review pursuant to Rule 3003(j). If EPA does not have any objections within the review period, a revised Title V permit will be issued to this facility. Permit to Construct for ICE, and Permit to Operate for film cleaning machine are recommended, and Permits to Operate for the carbon adsorber, RTO, 8 film cleaners and two wet-gate printers.