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PERMIT TO CONSTRUCT

APPLICANT'S NAME: LUNDAY-THAGARD COMPANY

MAILING ADDRESS: 9302 GARFIELD AVENUE
SOUTH GATE, CA 90280

EQUIPMENT ADDRESS: 9301 GARFIELD AVENUE
SOUTH GATE, CA 90280

FACILITY ID NO.: 800080
RECLAIM NOx Cycle 2 Facility
RECLAIM SOx Cycle 2 Facility

EQUIPMENT DESCRIPTION:

FACILITY PERMIT SECTION H					
PROCESS 3	SYSTEM 3			SYSTEM CONDITIONS	
LOADING AND UNLOADING	EAST AREA NAPHTHA LOADING			S13.3, S15.3	
Description	ID No.	Connected To	RECLAIM Source Type	Emissions* And Requirements	Conditions
LOADING ARM, TANK TRUCK/TRAILER, NAPHTHA, 2 TOTAL, DIAMETER: 3 IN A/N: <u>310123-527592</u>	D136	C105 C246, C247		VOC: 0.08 LBS/1000GAL (5) [RULE 462, 5-14, 1999]; VOC: 0.04LBS/1000GAL (4) [RULE1303(A)-BACT]	C1.5, C1.33, D29.4, H23.9, H4.1
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: <u>310123-527592</u>	D170				H23.8

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PROCESS 3		SYSTEM 5			SYSTEM CONDITIONS
LOADING AND UNLOADING		BULK PETROLEUM LOADING			
Description	ID No.	Connected To	RECLAIM Source Type	Emissions* And Requirements	Conditions
LOADING ARM, TANK TRUCK/TRAILER, BULK PETROLEUM, 6 TOTAL, DIAMETER: 4 IN A/N: 310125 527595	D142	C105 C246, C247			H1.1
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 310125 527595	D172	D163			H23.8
PROCESS 9		SYSTEM 2			SYSTEM CONDITIONS
AIR POLLUTION CONTROL		APC SYSTEM SERVING NAPHTHA LOADING			S54.1
Description	ID No.	Connected To	RECLAIM Source Type	Emissions* And Requirements	Conditions
SCRUBBER, PACKED BED, SULFATREAT, 1500 LB CAPACITY A/N: 527588	C246	D136 D142 C105			E73.4, E193.4, E193.6
SCRUBBER, PACKED BED, SULFATREAT, 1500 LB CAPACITY A/N: 527588	C247	D136 D142 C105			E73.4, E193.4, E193.6
BLOWER, NAPHTHA TURBO A/N: 437467 527594	D102				
SEAL POT, DIAMETER: 2 FT 6 IN, HEIGHT: 12 FT A/N: 527594	D250				

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INCINERATOR, NAO-VAPOR DISPOSAL, NATURAL GAS, PROCESS GAS, 1.4 MMBTU/HR A/N: 137467 <u>527594</u>	C105	D136, D142, S200 C246 , <u>C257</u>	NOX: PROCESS UNIT, **; SOX: PROCESS UNIT **	CO:2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 0.13 LBS/MMBTU (1) [RULE 2012, 12-7-1995]; RULE 2012, 3-16-2001]; PM; (9)[RULE 404, 2-7-1986] PM; 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]; SOX: 0.6 LBS/MMSCF NATURAL GAS (1) [RULE 2011, 5-6-2005]; SOX: 500 PPMV (5) [RULE 407, 4-2-1982].	A63.1 , C8.1, D28.4, D332.2, H23.16, H1
FUGITIVE EMISSIONS, MISCELLANEOUS A/N: 137467 <u>527594</u>	D184				H23.8
STACK A/N: 137467	S200	C105			

BACKGROUND:

Lunday-Thagard Co. (LTR) had been operating under Order for Abatement, Case No. 2033-10A (previously Case No. 2033-10) primarily for issues related to 40CFR Part 60, Subpart J (but also for issues related to Rule 203, Rule 431.1, Rule 462, and Rule 2004). A/N 403054 contains a more detailed explanation of the events leading up to the issuance of this Order for Abatement. With the issuance of the amended facility permit on June 21, 2011, the compliance issues that this Order had been intended for were resolved.

However, in an amendment of this order, an allowance for LTR to exceed 20,000 gallons per day on loading rack D136 (FP Condition C1.5) was incorporated into the Order, since although LTR had applied for a higher permit limit, and complied with monitoring conditions to become a Class "A" loading facility (the reason the permit limit was placed in the first place), the ability to issue a condition for the throughput increase was delayed because of facility compliance issues until a legal determination was made on what constitutes "facility compliance" for purposes for Regulation XIII. LTR is also currently operating under a settlement agreement which allows for loading up to 80,000 gallons per day at loading rack D136.

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PERMIT HISTORY:

The District received four (4) applications on December 27, 2006 from Lunday-Thagard for a new John Zink incinerator and modifications to loading arms D136 and D142, as well as a RECLAIM facility permit amendment.

In 2011, LTR determined that in the immediate future, LTR does not intend to connect loading arms to the new John Zink incinerator, but they need to make a modification to the existing Nao-Vapor Disposal (C105) incinerator, and need the increase throughput on D136. On September 23, 2011, LTR submitted four (4) applications for change of condition/modifications to loading arm D136, the addition of a sulfur removal system prior to C105, administrative changes to D142 and C105 to reflect the connection to the new sulfur removal system, and add in a missing seal pot to C105 that was on the command and control permits, in addition to a RECLAIM/Title V facility permit amendment.

Table 1: List of Applications covered in this evaluation

<u>AN</u>	<u>Status/Type</u>	<u>Equipment Descr./Device No.</u>	<u>Proposed Permit Action</u>
448470		Loading arm D136	To be canceled, superseded by A/N 527592
463843		N/A	RECLAIM only permit amendment to be canceled
463845		Loading arm to replace D136	To be canceled, superseded by A/N 527592
463846		Loading arm D142	To be canceled, superseded by A/N 527595
527585	21/86	N/A	TV/RECLAIM facility permit amendment
527588	20/50	Sulfur scrubbing vessels (CXXX)	Permit to construct sulfur treatment system connected to D136, D142, and C105
527592	20/60	Loading arm D136	Change of condition to increase throughput, add connection to C246/C247
527594	20/63	Incinerator C105	Add connection to C246/C247, add seal pot
527595	20/63	Loading rack D142	Add connection to C246/C247

COMPLIANCE RECORD REVIEW:

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The following information was obtained from the District's Compliance Tracking System for the period from November 1, 2009 to November 05, 2011.

NOV/NC:

No Notice of Violations or Notice to Comply was issued against the above loading arms or incinerator listed above. See above for an explanation of an expected NOV issuance, but the violation is now corrected.

Complaints:

No complaints were filed involving the loading arms or incinerator listed above.

Rule 301 Fee Evaluation:

The following fees are applicable to these applications.

Table 3: Rule 301 Fees

A/N	Equipment	Type	Fee Schedule	Fee Required	Fees Paid, \$	R301 Amend. Date
448470	Loading Rack D136		C	\$2,437.95	\$2,437.95	6/3/2005
463843	Facility Permit Amendment		n/a	\$697.36	\$697.36	6/9/2006
463845	Loading Rack D136 replace. (50% expedited processing)		C	\$4,022.63	\$4,022.63	6/9/2006
463846	Loding rack D142 (50% expedited processing)		C	\$4,022.63	\$4,022.63	6/9/2006
527585	Facility Permit Amendment		n/a	\$1,747.19	\$1,747.19	5/6/2011
527588	Sulfur treatment (50% expedited processing)		C	\$5,039.15	\$6,954.87	5/6/2011
527592	Loding Rack D136, c/c (50% expedited processing)		C	\$2,731.47	\$2,731.47	5/6/2011
527594	Loading rack D142 Admin (50% expedited processing)		Admin	\$1,041.24	\$1,041.24	5/6/2011
527595	Incinerator, C105 Admin (50% expedited processing)		Admin	\$1,041.24	\$1,041.24	5/6/2011
TOTAL:				\$20,342.91	\$22,258.63	

PROCESS DESCRIPTION:

Incinerator C105 controls vapors from a naphtha loading rack (D136) and a bulk petroleum loading rack (D142) located on the East side of the facility. A blower pulls the vapors from the loading operations through the system. After the blower, the vapors from loading pass through a knock-out vessel to a caustic scrubber to remove the H2S from the vapor stream, then the vapors pass through a water seal pot and a flame arrestor, then are incinerated in C105. The water seal

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pot was included on the command and control permits, but wasn't transferred to the RECLAIM permit.

Because of recent problems with the EPA Subpart J analyzer on the vapor stream to C105, LTR wants to install new sulfur-treatment (SulfaTreat) vessels in lieu of the existing caustic scrubbing (also not included on RECLAIM permit). This will change the "connected to" portions of loading rack D142 and incinerator C105. LTR is unsure at this time whether they want to install permanently 1 or 2 SulfaTreat, so is requesting the ability to have either one or two in operation for purposes of the Permit to Construct. One is expected to be sufficient to control SO_x prior to C105 to the level it is controlled now, so two would provide more sulfur removal. The fugitive component count is based on installing both SulfaTreat vessels.

Additionally, LTR wants to increase the throughput on loading rack D136 from 20,000 gallons per day to 80,000 gallons per day. Currently, as part of the previous Order for Abatement (Case No. 2033-10A) and a settlement agreement, LTR has been permitted to load this higher amount.

Emissions Calculations:

The addition of the SulfaTreat vessel(s) instead of the existing caustic scrubber is expected to keep the SO₂ emissions unchanged. However, there will be a slight increase in VOC emissions because of the addition of fugitive components to install the SulfaTreat vessel(s). Table 4 lists the fugitive components.

Additionally, the requested increase in the loading rate from 20,000 gpd to 80,000 gpd on naphtha loading rack D136 will increase the VOC emissions. Bulk Loading Loss emissions from loading petroleum products into trucks are calculated using EPA's bulk loading equation in Chapter 5.2 of AP-42. The Pre- and Post-modification emissions are summarized in Tables 5 & 6. Since the incinerator C105 firing rate is unchanged, emissions from C105 associated with combustion are unchanged. See Attachment I for the calculations.

Table 4: Sulfa Treat System FUGITIVE COMPONENT COUNT AND EMISSIONS

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Source Unit	Service	No. of Existing Components (1)	No. of New Components (2)	No. of Removed Components	Net Change in No. of Components	Correlati on Equation Factor, 500 ppm screening value	Change In Emissions (lb/day)
Valves	Sealed Bellows	All	0	0	0		
	SCAQMD Approved I & M Program	Gas / Vapor	0	6		+6	
		Light Liquid (3)	0	0		0	
		Heavy Liquid (4)	0	0		0	
Pumps	Sealless Type	Light Liquid (3)	0	0		0	
	Double Mechanical Seals or Equivalent Seals	Light Liquid (3)	0	0		0	
	Single Mechanical Seals	Heavy Liquid (4)	0	0		0	
Compressors	Gas / Vapor						
Blowers	Gas/Vapor	0	0		0		
Flanges (ANSI 16.5-1988)	All	0	0		0		
Pressure Relief Valves	All	0	0		0		
Process Drains with P-Trap or Seal Pot	All	0	0		0		
Other (including fittings, hatches, sight-glasses, and meters)	All	0	24		+24	9.09	0.598
Emissions Increase (lb/day):							0.598

(LL) = Light Liquid

- (1) Any component currently installed prior to the modification.
- (2) Any new component proposed to be installed due to the modification; this also includes new components to be installed to replace existing components.
- (3) Light liquid and gas/liquid streams: Liquid or gas/liquid stream with a vapor pressure greater than that of kerosene (>0.1 psia @ 100°F or 689 Pa @ 38°C), based on the most volatile class present at 20% by volume.
- (4) Heavy liquid: streams with a vapor pressure equal to or less than that of kerosene (<0.1 psia @ 100°F or 689 Pa @ 38°C), based on the most volatile class present at 20% by volume.

Pre-modification emissions are based on Incinerator C105 efficiency of 97.5% (from previous A/N 137467). Post-Modification Emissions are based on the BACT-requirement of 0.04 lbs

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VOC/1,000 gallons loaded. This BACT limit is proposed, but LTR will be conducting additional source testing to ensure it can be met. (Attachment I contains emission calculations)

Table 5: Pre-Modification Maximum VOC Emissions for D136

<u>Uncontrolled</u>			<u>Controlled</u>		
<u>lb/yr</u>	<u>lb/day</u>	<u>lb/hr</u>	<u>lb/yr</u>	<u>lb/day</u>	<u>lb/hr</u>
35,083.8	96.12	4.005	877.1	2.403	0.100

Table 6: Post-Modification Maximum VOC Emissions for D136

<u>Uncontrolled</u>			<u>Controlled</u>		
<u>lb/yr</u>	<u>lb/day</u>	<u>lb/hr</u>	<u>lb/yr</u>	<u>lb/day</u>	<u>lb/hr</u>
140,335.2	384.48	16.02	1,168	3.2	0.1333

There is a VOC increase of 0.797 lbs/day attributed to the increased throughput of D136.

Table 7: Individual and Overall Emissions Increase And Required Offset Amount

<u>Device No.</u>	<u>30 DA Increase</u>
D136	0.797
Fugitives for SulfaTreat	0.598
SUM OF INCREASES	1.395
OFFSET REQUIRED	2 LB

The total emission increase of 1.395 lb/day is multiplied by the 1.2 offset ratio to get the total number of offsets required. 2 lbs VOC offsets are required.

EVALUATION AND RULE REVIEW:
Rule 212 – Standards for Approving Permits

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A 30-day public notice is not required since the maximum daily VOC emissions from the addition of the sulfur treatment vessel and increase in D136 loading rate does not exceed the threshold for VOC as specified in subdivision (g). This facility is not located within 1,000 ft of a school.

Rule 401 – Visible Emissions (Amended November 9, 2001)

Visible emissions are not expected under normal operation. Compliance is expected.

Rule 402 – Nuisance (Adopted May 7, 1976)

Compliance with rule is expected.

Rule 407

- 407(a)(1): Using SCAQMD default factors for natural gas combustion of 35 lbs/MMSCF CO, the estimated CO concentration for incinerator I-301 is 474 ppmv and is less than 2,000 ppmv as specified in this rule. Compliance is expected.
- 407(a)(2): The sulfur requirements of Rule 407 are superseded by RECLAIM since this facility is a SO_x RECLAIM facility.

Rule 462 – Organic Liquid Loading (Amended May 14, 1999)

With the increase of throughput at loading rack D136 from 20,000 gallons/day (gpd) to 80,000 gpd, naphtha loading rack D136 is considered a Class A facility, and must comply with all Class A loading requirements. Previously, as required by Order for Abatement Case No. 2033-10A, LTR had submitted a Rule 462 plan, since although a permit conditions limited LTR to 20,000 gpd, in actuality they were loading over this amount, so considered a Class A facility. (For more detailed information on the Rule 462 plan and compliance events leading up to the issuance, see A/N 483832).

- 462(d)(1)(A): Loading rack D136 is equipped with a District-approved vapor recovery and/or disposal system (C105).
- 462(d)(1)(B): The vapor recovery/disposal system (C105) is equipped with a continuous monitoring system (CMS) which was approved by AQMD (Rule 462 Plan A/N 483832).
- 462(d)(1)(C): Displaced vapors are vented to the vapor recovery and/or disposal system (C105).

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- 462(d)(1)(D): A source test conducted May 8, 2008 indicated that the vapor recovery and/or disposal system reduced emissions to below 0.08 lb/1,000 gallons loaded. Continued compliance is expected.
- 462(d)(1)(E): D136 is designed for bottom-loading only. Compliance is expected.
- 462(d)(1)(F): The transfer equipment is expected to operated and maintained so that there are no overfills, facility vapor leaks, liquid leaks, or liquid leaks from disconnect operations. Compliance is expected.
- 462(d)(1)(G): The backpressure on the vapor recovery and/or disposal system is not expected to exceed 18 inches w.c. A pressure gauge is installed and is monitored by the data collections system. Compliance is expected.

Loading arm D142 loads Light Distillate Oil (LDO) and Light Vacuum Gas Oil (LVGO) which have a vapor pressure of less than 1.5 psia, and thus is not an “organic liquid” per Rule 462. Loading arm D142 is not subject to this rule.

Rule 1173 – Fugitive Emissions of Volatile Organic Compounds (Amended Dec. 6, 2002)

Rule 1173 categorizes leak types and stipulates maintenance & reporting requirements for fugitive components. LTR is required to include these new installed components as a result of this project into their existing 1173 inspection and maintenance program. LTR will be adding new fugitive components as a result of the installation of the sulfur treatment system prior to C105. Compliance is expected.

REGULATION XIII – New Source Review

Rule 1303(a) – BACT

Since the proposed modifications and change in condition result in emissions more than one (1) pound per day of VOC, BACT is required. Incinerator C105 is the existing control device that services loading arm D136. The increase in VOC because of the addition of fugitive components is less than one lb/day, and so is not subject to BACT. The throughput increase on D136 increases pre-control VOC emissions over one pound per day, so BACT is triggered.

BACT for gasoline bulk loading is 0.02 lb VOC/1,000 gallons loaded; however, this limit has not been confirmed for non-gasoline liquid loading into tank trucks. BAAQMD has different VOC requirements for gasoline and all other (than gasoline bulk terminals) liquid loading, so the difference in controlling commodities other than gasoline is recognized. LTR is willing to accept a 0.04 lb VOC/1,000 gallons loading limit on D136 for BACT purposes (subject to a second

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source test confirming that D136 can meet this limit). LTR conducted a source test on May 8, 2008 which showed they can comply with the 0.04 lb VOC/1,000 gallon limit, but since the data from this source test was based only on 2 tank trucks with trailers, they want to confirm the ability of the existing incinerator (C105) to meet the 0.04 lb VOC/1,000 gallons loading with a second source test for more data points.

Rule 1303(b)(1) – Modeling

Modeling is not required since VOC emissions are not subjected to Stringent Air Quality Standard as listed in table A-2 of Rule 1303.

Rule 1303(b)(2) – Emission Offsets

The VOC emissions increase from this modification as determined by Rule 1306(d)(2) is 1.4 lbs/day, which is greater than 0.5 pounds per day. 2 lb/day of VOC offsets are required. LTR will provide offsets.

1303(b)(2)(B): Short Term Credits - Not applicable

1303(b)(2)(C): Specific VOC ERCs - Not applicable

Rule 1303(b)(3) – Sensitivity Zone Requirements

Lunday-Thagard will use zone 1 VOC ERCs since the facility is located in zone 1.

Rule 1303(b)(4) – Facility Compliance

Lunday-Thagard facility complies with all rules and regulations of the District.

Rule 1303(b)(5) – Major Polluting Facilities

This refinery is a major polluting facility as defined in Rule 1302(s). Since the VOC increase is 1.4 lb/day which is greater than 1 as defined in Rule 1302(r), this application is a major modification at an existing major polluting facility.

1303(b)(5)(A): This paragraph is satisfied under Rule 1303(b)(5)(D)(i), where this project is exempt from CEQA.

1303(b)(5)(B): LTR has submitted a certification of statewide compliance.

1303(b)(5)(C): Not applicable

1303(b)(5)(D): The operator has submitted information in the application indicating that this application is exempt from CEQA.

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REGULATION XIV – Toxics and Other Non-Criteria Pollutants

Rule 1401 – New Source Review of Toxic Air Contaminants

This rule specifies limits for maximum individual cancer risk (MICR), cancer burden, and non-cancer acute and chronic hazard index (HI) for new permit units, relocations, or modifications to existing permits which emit toxic air contaminants (TAC).

Rule 1401 requirement levels are as follows:

MICR, without T-BACT:	≤ 1 in 1 million (1.0×10^{-6})
MICR, with T-BACT:	≤ 10 in 1 million (1.0×10^{-5})
Cancer Burden:	≤ 0.5
Maximum Chronic Hazard Index:	≤ 1.0
Maximum Acute Hazard Index:	≤ 1.0

Tier 1 involves the process of comparing equipment emissions to that of the Screening Levels, which are levels where emissions will not exceed a MICR of one in a million (1×10^{-6}) or a Chronic/ Acute hazard index (HI) of one (1). Tier 2 is a screening risk assessment, which includes procedures for determining the level of risk from a source for MICR, Cancer burden and Acute and Chronic Hazard Indices. If the estimated risk from Tier 2 screening is below a level of concern, then a more detailed evaluation is not necessary. The results for the new SulfaTreat system (fugitives) using Tier 1 screening and the increase of throughput to D136 using Tier 2 screening are listed in Tables 9 & 10. The calculations are included in Attachment II.

The TACs present in the naphtha as identified by the applicant are listed in the Table 8 along with its weight fraction. This information was submitted as part of the application.

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Table 8: TAC Weight Fraction Provided by Applicant

<u>Toxic Compound</u>	<u>Weight Fraction (wt/wt)</u>
Benzene	0.0167
Ethylbenzene	0.0019
n-Hexane	0.0628
Toluene	0.0188
Xylenes	0.0079

Table 9: Tier 1 Screening Risk Assessment for SulfaTreat

Tier 1 Results	
<u>Cancer/Chronic ASI</u>	<u>Acute ASI</u>
4.12E-01	1.13E-04
passed	passed

Table 10: Tier 2 Screening Risk Assessment for D136 Throughput Increase

SCREENING CRITERIA	VALUE	LIMIT	PASS
MICR	2.99E-07	1.0E-6	YES
ACUTE	6.65E-4 (Max Value: Developmental & Reproductive)	1	YES
CHRONIC	1.11E-3 (Max Value: Nervous System)	1	YES

1401(d)(1)(A): MICR.

The TACs present in VOC from naphtha are less than the screening levels and hence, MICR is less than one in a million.

1401(d)(1)(B): Not applicable.

1401(d)(1)(C): Cancer Burden.

Not applicable since MICR value is less than one in a million.

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1401(d)(2): Chronic HI - Passed Tier 1/Tier 2 screening.

1401(d)(3): Acute HI - Passed Tier 1/ Tier 2 screening.

1401(d)(4): Risk per Year - Since MICR value is less than one in a million, the risk per year for each is less than 1/70th this value.

1401(d)(5): Not applicable.

1401(d)(6): Federal New Source Review for Toxics.

Not applicable. Section 112 of the federal Clean Air Act (CAA) defines major source as any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant (HAP) or 25 tons per year or more of any combination of hazardous air pollutants (HAPs). Since LTR does not emit more than 10 tons annually of a listed HAP or more than 25 tons annually of a combination of HAPs, it is not subject to this requirement.

Rule 2005 – New Source Review for Reclaim, Amended May 6, 2005

2005(b): Not applicable. Lunday-Thagard South Gate refinery is an existing facility

2005(c): Not applicable. There are no increases in NOx or SOx emissions.

2005(d): Not applicable.

2005(e): Not applicable.

2005(f): Not applicable.

2005(g): Additional Federal Requirements for Major Stationary Sources.

The Lunday-Thagard South Gate facility is a major stationary source as defined in the Clean Air Act. However, there are no NOx or SOx emissions increases from this equipment.

2005(h): There is no increase in NOx or SOx emissions from incinerator C105, and hence, public notice pursuant to 212(g) is not required.

2005(i): See Rule 1401 section of evaluation. Compliance is met.

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REGULATION XXX – Title V permits

Lunday-Thagard Co. was issued a final Title V operating permit on October 29, 2009. This application is classified as a de minimus permit revision as defined in 3000(b)(7). De minimus permit revisions are exempt from public participation per 3006(b); however the proposed permit revision is required to be submitted to the EPA per 3003(j)(1)(B) and to the State per 3003(m)(1).

The proposed de minimus permit revision shall be submitted to the EPA and State.

STATE REGULATIONS

California Environmental Quality Act (CEQA)

The applicant indicates that CEQA document is not required.

FEDERAL REGULATIONS

NSPS for Petroleum Refinery – 40CFR60 Subpart J

§60.104: Standards for sulfur dioxide.

§60.104(a)(1): LTR will install a sulfur treatment system to replace the existing sulfur treatment system, on the line(s) venting to Incinerator C105 (the SulfaTreat that is part of this permit action) so that they will not burn any fuel gas in C105 that contains hydrogen sulfide (H₂S) in excess of 160 ppm. Compliance is expected.

§60.105: Monitoring of emissions and operations.

§60.105(a)(4): LTR has installed a CEMS for continuously measuring and monitoring the concentration of H₂S in the fuel gases before being burned incinerator C105. Compliance is expected.

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NSPS for Asphalt Processing – 40CFR60 Subpart UU

Incinerator C105 currently has condition A63.1 tagged with 40CFR 60, Subpart UU associated with it. However, since C105 is neither a saturator, mineral handling & storage facility, asphalt storage tank, or asphalt blowing still, 40CFR 60, Subpart UU is not applicable and this condition will be removed.

NSPS for Bulk Gasoline Terminals – 40CFR60 Subpart XX

Applicability: The naphtha loaded at D136 is LTR’s end product and not intended at this stage for use as a fuel for internal combustion engines as indicated in the gasoline definition in §60.501. This subpart does not apply.

NSPS for Petroleum Refinery Equipment VOC Leaks – 40CFR60 Subpart GGG/GGGa

Applicability: GGGa is not applicable because the addition of the sulfur treatment system to the control system serving the loading racks is not considered construction, reconstruction, or modification. Calculations provided by the facility show that the expenditure to add the sulfur treatment to the facility is well under the “capital expenditure” threshold as defined in Subpart VVa.

The existing loading racks and control equipment are subject to 40CFR60 Subpart GGG and are expected to continue to comply with GGG requirements.

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RECOMMENDATION:

It is recommended that Permits to Construct be issued in the Facility Permit Section H subject to the following conditions:

DEVICE ID.	COND. NO.	CONDITION						
Process 3, System 3	<u>S13.3 (new)</u>	<u>All devices under this system are subject to the applicable requirements of the following rules or regulations:</u>						
		<table border="1"> <thead> <tr> <th><u>Contaminant</u></th> <th><u>Rule</u></th> <th><u>Rule/Subpart</u></th> </tr> </thead> <tbody> <tr> <td><u>VOC</u></td> <td><u>District Rule</u></td> <td><u>462</u></td> </tr> </tbody> </table>	<u>Contaminant</u>	<u>Rule</u>	<u>Rule/Subpart</u>	<u>VOC</u>	<u>District Rule</u>	<u>462</u>
		<u>Contaminant</u>	<u>Rule</u>	<u>Rule/Subpart</u>				
		<u>VOC</u>	<u>District Rule</u>	<u>462</u>				
[Rule 462, 5-14,1999]								
[Systems subject to this condition: Process 3, System 3]								
Process 9, System 2	S54.1	<p>The operator shall comply with all the requirements of Order for Abatement (Case No. 2033-10A) issued on May 28, 2008, or any subsequent modification in accordance with the Order and Decision of the Hearing Board. The operator shall submit progress reports at least semi-annually, or more frequently if specified in the Order and Decision. The progress reports shall contain dates for achieving activities, milestones, or compliance required in the schedule of compliance and dates when such activities, milestones, or compliance were achieved, or will not be met, and any preventative or corrective measures adopted.</p> <p>[Rule 3004(a)(10)(C); 8-11-1995; Rule 3004(a)(10)(C); 12-12-1997]</p> <p>[Systems subject to this condition: Process 1, System 1, 2, 3; Process 2, System 1; Process 4, System 1; Process 9, System 1, 2, 3]</p> <p>The Order for Abatement has now expired, so this condition is no longer relevant.</p>						
C105	A63.1	The operator shall limit emissions as follows:						
		<table border="1"> <thead> <tr> <th><u>CONTAMINANT</u></th> <th><u>EMISSIONS LIMIT</u></th> </tr> </thead> <tbody> <tr> <td><u>Visible Emissions</u></td> <td><u>Less than or equal to 0 Percent opacity</u></td> </tr> </tbody> </table>	<u>CONTAMINANT</u>	<u>EMISSIONS LIMIT</u>	<u>Visible Emissions</u>	<u>Less than or equal to 0 Percent opacity</u>		
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DEVICE ID.	COND. NO.	CONDITION
		<p>[40CFR 60, Subpart UU, 8-5-1983]</p> <p>[Devices subject to this condition: C105]</p> <p>C105 is not subject to 40CFR 40, Subpart UU – this condition was previously added erroneously, this condition will be removed.</p>
D136	C1.5	<p>The operator shall limit the limit the loading rate to no more than 20000 gallon(s) per day.</p> <p>To comply with this conditions, the operator shall install and maintain a(n) measuring device to accurately indicate the throughput from the equipment.</p> <p>The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this section.</p> <p>[Rule 1303(b)(2)-Offset; 5-10-1996; Rule 1303(b)(2)-Offset; 12-6-2002; Rule 462, 5-14-1999]</p> <p>[Devices subject to this condition: D136]</p>
D136	<u>C1.33 (new)</u>	<p>The operator shall <u>limit the limit the loading rate to no more than 80000 gallon(s) per day.</u></p> <p><u>To comply with this conditions, the operator shall install and maintain a(n) measuring device to accurately indicate the throughput from the equipment.</u></p> <p><u>The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this section.</u></p> <p><u>[Rule 1303(b)(2)-Offset; 5-10-1996; Rule 1303(b)(2)-Offset; 12-6-2002]</u></p> <p>[Devices subject to this condition: D136]</p>

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DEVICE ID.	COND. NO.	CONDITION											
C105	C8.1	<p>The operator shall use this equipment in such a manner that the temperature being monitored, as indicated below, is not less than 1400 Deg F.</p> <p>To comply with this condition, the operator shall install and maintain a(n) temperature reading device to accurately indicate the temperature in the firebox or the ductwork immediately downstream from the firebox.</p> <p>The measuring device or gauge shall be accurate to within plus or minus 50 Deg F. It shall be calibrated once every 12 months.</p> <p>The operator shall also install and maintain a device to continuously record the parameter being measured.</p> <p>[Rule 1303(a)(1)-BACT, 5-10-1996; 1303(a)(1)-BACT, 12-6-2002, Rule 3004(a)(4)-Periodic Monitoring, 12-12-1997]</p> <p>[Devices subject to this condition: C105]</p>											
C105	D28.4	<p>The operator shall conduct source test(s) in accordance with the following specifications:</p> <p>The test shall be conducted every five years to determine the PM emissions at the outlet.</p> <p>[Rule 3004(a)(4)-Periodic Monitoring, 12-12-1997; Rule 404, 2-7-1986; Rule 407, 4-2-1982]</p> <p>[Devices subject to this condition: C105]</p>											
D136	<u>D29.4 (new)</u>	<p><u>The operator shall conduct source test(s) for the pollutant(s) identified below:</u></p> <table border="1"> <thead> <tr> <th><u>Pollutant(s) to be tested</u></th> <th><u>Required test method(s)</u></th> <th><u>Averaging Time</u></th> <th><u>Test Location</u></th> </tr> </thead> <tbody> <tr> <td><u>ROG Emissions</u></td> <td><u>Approved District Method</u></td> <td><u>District-Approved Averaging Time</u></td> <td><u>Inlet and Outlet of APC Equipment serving this equipment</u></td> </tr> </tbody> </table>				<u>Pollutant(s) to be tested</u>	<u>Required test method(s)</u>	<u>Averaging Time</u>	<u>Test Location</u>	<u>ROG Emissions</u>	<u>Approved District Method</u>	<u>District-Approved Averaging Time</u>	<u>Inlet and Outlet of APC Equipment serving this equipment</u>
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DEVICE ID.	COND. NO.	CONDITION
		<p><u>The test shall be conducted 60 days after achieving maximum production rate, but no later than 180 days after the construction/modification is complete.</u></p> <p><u>The test shall be conducted when the sources venting to this equipment are in operation and venting to this equipment.</u></p> <p><u>In addition to the source test requirements of Section E of this facility permit, the facility permit holder shall submit the protocol to the AQMD engineer no later than 45 days prior to the proposed test date, and notify the District of the date and time of the test at least 10 days prior to the test.</u></p> <p><u>The test shall be conducted to demonstrate compliance with Rules 1303(a)(1) – BACT and Rule 462.</u></p> <p><u>During the test, the naphtha loaded shall be monitored and recorded to determine compliance with Rule 1303(a)(1)-BACT and Rule 462 requirements.</u></p> <p><u>[Rule 1303(a)(1)-BACT, 5-10-1996; 1303(a)(1)-BACT, 12-6-2002; Rule 462, 5-14,1999]</u></p> <p><u>[Devices subject to this condition: D136]</u></p>
C105	D332.2	<p>The operator shall determine compliance with the CO emission limit(s) by conducting a test at least once every five years using a portable analyzer and AQMD approved test method, or if not available, a non-AQMD approved test method. The test shall be conducted when the equipment is operating under normal conditions to demonstrate compliance with Rule 407 concentration limit. The operator shall comply with all general testing, reporting, and recordkeeping requirements in Sections E and K of this permit.</p> <p>[Rule 3004(a)(4)-Periodic Monitoring, 12-12-1997; Rule 407, 4-2-1982]</p> <p><u>[Devices subject to this condition: C105]</u></p>

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DEVICE ID.	FP COND. NO.	CONDITION									
C246, C247	E73.4 (new)	<p><u>Notwithstanding the requirements of Section E conditions, the operator shall not use this equipment unless:</u></p> <p><u>Nao-Vapor Disposal Incinerator (C105) is in full use and has a valid permit to receive all vent gases from this equipment.</u></p> <p>[Rule 1303(b)(2)-Offset; 5-10-1996; Rule 1303(b)(2)-Offset; 12-6-2002]</p> <p><u>[Devices subject to this condition: C246, C247]</u></p>									
C246, C247	E193.4	<p>The operator shall operate and maintain this equipment as follows:</p> <p>During media change-out operations, spent media shall:</p> <ol style="list-style-type: none"> 1) Be placed immediately into sealed containers after removal. 2) During breaks in media removal activities, all vessels and/or containers containing spent media shall be sealed and not exposed to the atmosphere. <p>[Rule 402, 5-7-1976]</p> <p><u>[Devices subject to this condition: C246, C247]</u></p>									
C246, C247	E193.6 (new)	<p><u>The operator shall operate and maintain this equipment as follows:</u></p> <p><u>Two vessels total, one operated singly or two in series.</u></p> <p>[Rule 1303(b)(2)-Offset; 5-10-1996; Rule 1303(b)(2)-Offset; 12-6-2002]</p> <p><u>[Devices subject to this condition: C246, C247]</u></p>									
D170, D172, D184	H23.8	<p>This equipment is subject to the applicable requirements of the following rules or regulations:</p> <table border="1"> <thead> <tr> <th>Contaminant</th> <th>Rule</th> <th>Rule/Subpart</th> </tr> </thead> <tbody> <tr> <td>VOC</td> <td>District Rule</td> <td>1173</td> </tr> <tr> <td>VOC</td> <td>40CFR60, Subpart</td> <td>GGG</td> </tr> </tbody> </table> <p>[Rule 1773, 5-13-1994; Rule 1173, 2-6-2009; 40CFR 60, Subpart GGG, 6-2-2008]</p> <p><u>[Devices subject to this condition: D170, D172, D184]</u></p>	Contaminant	Rule	Rule/Subpart	VOC	District Rule	1173	VOC	40CFR60, Subpart	GGG
Contaminant	Rule	Rule/Subpart									
VOC	District Rule	1173									
VOC	40CFR60, Subpart	GGG									

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D136	H23.9	This equipment is subject to the applicable requirements of the following rules or regulations:		
		Contaminant	Rule	Rule/Subpart
		VOC	District Rule	462
		<p>[Rule 462, 5-14-1999]</p> <p>[Devices subject to this condition: D136]</p>		
C105	H23.16	This equipment is subject to the applicable requirements of the following rules or regulations:		
		Contaminant	Rule	Rule/Subpart
		H2S	40CFR60, Subpart	J
		<p>[40CFR 60, Subpart J, 6-24-2008]</p> <p>[Devices subject to this condition: C105]</p>		
C105, D136, D142	II.1	<p>The operator shall comply with all the requirements of the conditions and compliance schedule as specified in the Order for Abatement Case No. 2033-10A, issued on May 28, 2008, or any subsequent modification in accordance with the Findings and Decisions of the Hearing Board or as subsequently modified by the Hearing Board. The operator shall submit progress reports at least semi-annually or more frequently if specified in the Findings and Decisions. The progress reports shall contain dates for achieving activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones, or compliance were achieved,; and an explanation of why any dates in the schedule of compliance were not, or will not be met, and any preventative or corrective measures adopted.</p> <p>The variance (or Order for Abatement) referenced in this condition does not affect federal or citizen enforceability of the underlying SIP approved rules for which the applicant is receiving the variance (or Order for Abatement).</p> <p>[Rule 3004(a)(10)(C); 12-12-1997]</p> <p>[Devices subject to this condition: C105, D136, D142]</p> <p>The Order for Abatement has now expired, so this condition is no longer relevant.</p>		

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List of Attachments:

- I: Pre- and Post-Modification Emission Calculations
- II: 1401 Analysis