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Background Report Reference

AP-42 Section Number: 9.10.2

Background Chapter: 4

Reference Number: 6

Title: Field Data Source Test, Mid-state
Manufacturing

Chemecology

Chemecology

October 1981

AP-42 Section 9.10.2
Reference
Report Sect. 4
Reference 6



CHEMECOLOGY
CORPORATION

690-B Garcia Avenue, Pittsburg, CA 94565 / 415-439-5766

FIELD DATA SOURCE TEST

PREPARED FOR MID-STATE MANUFACTURING
600 HIGHWAY 99 FRONTAGE
RIPON, CA 95366

ATTENTION RICH MALIEPAARD

REGARDING PARTICULATE EMISSIONS
Langue Plant

REGULATORY AGENCY SAN JOAQUIN APCD

PURPOSE COMPLIANCE

TEST DATE OCTOBER 20, 1981

UNIT TESTED PRE-CLEANER, DE-STONER, 48" HULLER CYCLONE &
60" HULLER CYCLONE

ASSOCIATED REPORT NUMBERS N/A

REPORT NUMBER A-1266

PREPARED BY LESLIE JOHNSON

REVIEWED BY Leslie A Johnson

RECEIVED OCT 27 1981

ABSTRACT

On October 20, 1981 Chemecology Corporation, under the supervision of Leslie Johnson, tested Mid-State's Pre-Cleaner Cyclone Bag, De-Stoner Cyclone, 48" Huller Cyclone and 60" Huller Cyclone for particulate emissions. EPA Method 5 was utilized in determining particulate emission at all sites.

The Escalon site has a total of 12 cyclones. Chemecology tested one cyclone out of each grouping of units. A breakdown of grain loading and emission rates at each site is given along with extrapolated data for each grouping of cyclones.

SELECTED RESULTS

CLIENT: Mid-State Manufacturing
 DATE: October 20, 1981
 SITE: Pre-Cleaner Cyclone Bag De-Stoner Cyclone 48" Huller Cyclone 60" Huller Cyclone
 TIME: 1044- 1251- 1043- 1253- 1541- 1739- 1540- 1736-
 1201 1421 1153 1414 1706 1851 1707 1848

PROCESS CONDITIONS:
 ACFM: 430 590 9,560 10,130 6,640 6,400 7,510 6,610
 SDCFM: 420 550 9,240 9,610 6,230 6,070 7,140 6,260
 ZH2O: 0.6 1.1 0.8 0.8 1.2 1.1 0.6 0.9
 Emission Factor (E.f.): 1/ 16 2 2 2 2 2 2
 2152 ft/min 3260 ft/min 2259 ft/min

PARTICULATE EMISSIONS:

Co, grns/SDCF: 0.001 0.007 0.075 0.048 0.032 0.030 0.009 0.013
 ER, lbs/hr: 0.003 0.03 5.98 3.98 1.70 1.58 0.56 0.67
 ER, lbs/hr: 2/ 0.26 9.96 3.28 3.69

TEST CONDITIONS:

Duration (min): 72 80 64 66 64 68 64 68
 Sample Volume (SDCF): 21.96 37.95 33.26 36.84 27.96 26.88 25.45 23.55
 Isokinetic Rate (%): 106.9 98.4 103.5 106.6 104.2 96.8 102.2 101.5

1. See Attached Cyclone Information Sheet.
2. Lbs/hr emitted from each grouping of abatement units (Ef * Ave. lbs/hr).

CYCLONE INFORMATION

CLIENT: Mid-State Manufacturing

LOCATION: Langero Farming Ent. Escalon, CA

DATE: October 20, 1981

<u>TYPE OF UNIT:</u>	<u>Pre-Cleaner Cyclone Bag</u>	<u>De-Stoner Cyclone</u>	<u>43" Huller Cyclone</u>	<u>60" Huller Cyclone</u>
Number of units(u):	2	2	2	6
Number of exit ducts per unit(e):	8	1	1	1
Emission Factor (Ef):	16	2	2	6

(Ef = u * c)