Clean Air Engineering

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May 12, 2000

American Ref-Fuel Company
Ken Armellino
333 Earle Ovington Blvd.
Uniondale, New York 11553

RE: Proposal for Niagara DBA Corrosion Parameter Study - Revision 1, Revision 1

Dear Kenny:

Enclosed is the revised proposal to perform the Corrosion Parameter Study at the Niagara DBA boilers. This revision includes the options that were discussed during the May 10th meeting at Niagara.

Please feel free to contact me at (412) 787-9130 with any questions.

Respectfully submitted,
CLEAN AIR ENGINEERING

James E. Wright
Manager, Eastern Region

JEW/sd
Enc: Proposal

cc: Bill Gleason
Greg Gessell
Bill Walker
Tim Rodak
John Chapman

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Clean Air Engineering
Budgetary Proposal for
Corrosion Parameter Study

REVISION 1

Prepared for
American Ref-Fuel Company

Niagara Resource Recovery Facility
DBA Boilers 1 and 2

May 12, 2000

PROJECT SCOPE

This revision to the CAE proposal dated May 5, 2000 covers several testing options that were discussed in the corrosion meeting held at the Ref-Fuel Niagara facility on May 10, 2000. The new options are as follows:

Option 1: Perform FTIR measurements for HCl at the boiler front wall* location. Simultaneously, perform HCl continuous monitoring at the boiler exit* location using an infrared gas filter correlation (IR/GFC) analyzer.

Option 2: Perform HCl continuous monitoring using the IR/GFC analyzer. Measurements will be made first at the boiler exit location, then at the boiler front wall.

Option 3: Perform HCl continuous monitoring using the FTIR analyzer. Measurements will be made first at the boiler exit location, then at the boiler front wall.

Option 4: Perform FTIR measurements for HCl at the boiler front wall location. Periodically during the same time period, perform manual HCl sampling (EPA Method 26) at the boiler exit.

*The boiler front wall location is located on the 7th floor of the facility, while the boiler exit location is on the 11th floor.

TEST PARAMETERS

The FTIR measurements include quantification of HCl, CO and H_2O. The IR/GFC and manual sampling measurements include HCl only.

Measurements for SO_2, O_2, ash sampling, particulate loading, metals analyses and temperature monitoring that were included in the original proposal are no longer included in the proposed program.

SCHEDULE

For the sake of comparison, a common test duration of 10 days on Boiler 3 followed immediately by 5 days on Boiler 4 is proposed for each of the four options. It is recognized that waste availability, boiler availability and scheduled outages may result in longer or shorter test durations, or may require multiple test mobilizations.

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PROPOSED PRICE SCHEDULE

The budgetary price to conduct each test option is shown in Table 1. Each price listed includes all estimated equipment rental, mobilization and reporting charges to conduct 15 days of on-site testing in a single mobilization.

Table 1:
Budgetary Price Estimate

ITEM	DESCRIPTION	ESTIMATED PRICE*
OPTION 1	FTIR at Front Wall and IR/GFC at Boiler Exit.	$115,000
OPTION 2	IR/GFC at Boiler Exit followed by IR/GFC at Front Wall.	$75,000
OPTION 3	FTIR at Boiler Exit followed by FTIR at Front Wall.	$95,000
OPTION 4	FTIR at Front Wall and EPA Method 26 at Boiler Exit.	$105,000

* Prices are all-inclusive and do not include reduction for CAE Re-Investment Credit (estimated at $60,750).