

Nitric Acid N₂O Project Submittal Form

Instructions: Please complete all fields as thoroughly as possible. If the project in question is still in the planning/ development phase, all fields must be completed using best available data and estimates based on the proposed system design. This is an interactive Word form. Upon completion, please save this form as a PDF prior to uploading it to the Reserve. This will lock your answers and protect the document from any further changes. All fields must be completed, even if the answer is also provided elsewhere; if a field is not applicable insert N/A in the space provided.

Section 1: Project Contact Information

Project Name (as it appears in the Reserve software): El Dorado Nitrogen, LP - Nitrous Oxide Abatement Project

Account Holder (as it appears in the Reserve software): LSB Industries, Inc.

Is the Account Holder authorized to sign the "Attestation of Title" form? ☒ Yes ☐ No

Facility Owner: The facility is co-owned. El Dorado Nitrogen, LP (EDNLP), a wholly owned subsidiary of LSB Industries, Inc. is one of two owners and has sole operating responsibility.

Technical Consultants: ClimeCo America Corporation

Other Parties with a Material Interest: **N/A**

Date of Form Completion: April 21, 2010

Form Completed By (name, organization): Gordon Zavilla, LSB Industries, Inc.

Section 2: General Project Site Information

1. Name of nitric acid production facility and specify the plant (if there is more than one plant at the same facility): **El Dorado Nitrogen LP (EDNLP)**
2. Project Site Address (including county and country): **8490 West Bay Road, Baytown, TX - 77520-8607; Chambers County, U.S.A.**
3. Type of nitric acid plant (e.g. single pressure): **Dual Pressure**
4. Year plant was commissioned: **1999**



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5. If the plant is not yet commissioned, please estimate the commission start date: **N/A**
- a. Have permits for construction been received? **N/A**

Section 3: Project Description and Eligibility

6. Project Type: ☒ Secondary Catalyst or ☐ Tertiary Catalyst
7. Project Description (Please provide one to two paragraphs and submit a Project Diagram):
The project involves the installation of a catalyst below the oxidation gauzes (a secondary catalyst) whose sole purpose is the decomposition of N₂O. The catalyst does not consume electricity, steam, fuels or reducing agents to eliminate N₂O emissions, thus, operating costs are relatively low and the overall energy balance of the plant is not affected. Installation is relatively simple and does not require any new process units or redesign of existing ones. The reactor basket support grid and basket will require modifications to accommodate the catalyst. Installation can be done simultaneously with the primary gauze changeover. El Dorado Nitrogen LP has contracted with a secondary catalyst provider to supply and assist with the installation of its catalyst system.
8. What version of the Nitric Acid Production Project Protocol is the project based upon? **1.0**
9. Project Start Date (Date project became or is expected to become operational MM/DD/YYYY): **06/25/2010**
10. Project Reporting Start Date (First date for which reductions will be reported on the Reserve; format: MM/DD/YYYY): **06/25/2010**
11. Has the project ever been submitted for listing with the Reserve as a different Nitric Acid N₂O Project Type (i.e., secondary catalyst or tertiary catalyst)? **No**
12. Have any vintage reduction tonnes from the project ever been registered with or claimed by another registry or program, or sold to another third party prior to registering with the Reserve? **No**



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If the answer is yes, you must complete and return a "Project Transfer" form.

13. Description and citation of all local and state air and water quality, explosive gas, or other regulations pertinent to the project: **This project does not trigger local, state or federal permitting requirements. The secondary abatement catalyst oxidizes N₂O and forms nitrogen and oxygen. The catalyst does not create any contamination that requires permitting. The installation of the CEM systems will adhere to the applicable sections in 40 CFR Part 60 and Part 75.**

14. Is this project being implemented and maintained as the result of any law, statute, regulation, court order, or other preexisting legally binding mandate?

☐ Yes ☒ No

If yes, please explain.

15. Is NO_x being (or has NO_x ever been) abated at the plant? ☒ Yes ☐ No

If yes: **The plant currently has an SCR unit for the abatement of NO_x**

a. Is NSCR currently being used or ever been used since December 2, 2007?

☐ Yes ☒ No

b. If there is no NSCR, what is the existing NO_x abatement technology (and its date of commissioning) and describe any previous NO_x abatement technology used: The plant currently has an SCR unit for the abatement of NO_x. This was commissioned with the plant in 1999.

16. Was the plant relocated to its current location at any time since December 2, 2007? ☐ YES
☒ NO

If yes: What date was this plant operational after the relocation (MM/DD/YYYY):

17. Was the plant upgraded (i.e. modified in any way to increase production capacity) at any time after December 2, 2007?



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☐ YES ☒ NO

If yes: What date was this plant operational after the upgrade (MM/DD/YYYY):

18. Are there plans to upgrade the plant during the project crediting period? (Please describe.)

No

19. Has the plant been idle at any time since December 2, 2007? ☐ YES ☒ NO

If yes: What were the start and end dates for the idle period(s) (MM/DD/YYYY):

Section 4: Pre-project Information and monitoring

20. Is a continuous emission monitoring system (CEMS) for monitoring N₂O installed for the project? ☒ YES ☐ NO

21. The date CEMS started or is expected to start recording project data (MM/DD/YYYY) is
11/01/2009

22. How long will the project baseline sampling period be (minimum of 10 weeks after the start of a campaign): **Approximately 7 1/2 months**

23. Has a detailed monitoring plan been developed for this project? If not, what date will a monitoring plan be in place? **Yes**

29. Additional information: