

April 20, 2023

Michael Krause
Assistant Deputy Executive Officer
South Coast Air Quality Management District
21865 Copley Dr.
Diamond Bar, CA 91765

Re: Snak-King Comments on SCAQMD Proposed Amended Rule 1153.1 (Emissions of Oxides of Nitrogen from Commercial Food Ovens)

Dear Mr. Krause:

Snak-King LLC manufactures a portfolio of both private label and branded snack food products from our corporate headquarters in City of Industry, CA. The City of Industry manufacturing facility operates under a South Coast Quality Management District (SCAQMD or District) permit to operate (ID# 119596) and we operate a number commercial food ovens which would impacted by Proposed Amended Rule (PAR) 1153.1.¹

At the City of Industry facility, Snak-King employs 405 team members and produces over 900 different SKUs which are distributed to consumers across southern California and beyond. Our team not only produces and invents snack products based in the latest consumer trends, but we also actively explore ways to leverage manufacturing technology including new offerings for manufacturing equipment. Snak-King is very concerned that the District's latest proposal for PAR 1153.1 has been rushed along and does not reflect the current market condition for commercial food ovens.

All-electric tortilla (chip) ovens are not commercially available at this time. As Snak-King previously communicated to District staff, tortilla chip manufacturing requires an oven to produce certain unique product features (e.g., texture, crisp, etc.) which at this time have not been demonstrated to be achievable with an all-electric design. Snak King has active relationships with the original equipment manufacturers (OEMs) for this category of commercial food oven and we are unaware of any proprietary research that would suggest an all-electric tortilla chip oven will be commercially available in the reasonably foreseeable term. If an OEM were to engage in development of an electric tortilla chip oven design, Snak-King expects that reaching commercialization would require a minimum of two years after completion of the R&D stage. Given that reality, and the additional time we would need to engineer, permit and construct such a project, we cannot see a scenario where an electric tortilla chip oven product could be available and operational on the timetable presented in the current draft rule (i.e., as soon as 2030).

Snak-King also believes that the District has misunderstood the infrastructure and energy requirements of an all-electric oven mandate. Our current electricity demand for the entire facility totals about 1 megawatt (MW). Our engineering team estimates that electrification of our tortilla chip ovens alone (which as noted, is not technically feasible at this time) would increase

¹ SCAQMD PAR 1153.1 Rulemaking Schedule and Documents. Available at:

<http://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/proposed-rules/rule-1153-1>.

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the raw power demand to about 5 MW; a 400% increase. Such an increase in electricity demand would necessitate significant changes to our physical infrastructure within the facility, including:

- New and expanded transformers;
- New and expanded switch gear;
- New implementation of peak shaving or regenerative power capabilities;
- Adding a significant amount of new equipment cooling capacity to service the new switch gear; and
- Hiring additional top-tier electricians to our employment base.

The amount of investment and time to deliver this supportive infrastructure would be significant and does not appear to have been considered by the District. Our initial cost estimate for these items is (roughly) \$7 million on top of the costs for the electric oven equipment (which are unknown at this time) and production line reconfigurations.

Snak-King also has concerns with regards to the existing electric utility transmission and distribution lines (T&D) serving the City of Industry facility and their capacity to support a 400% demand increase. We are presently unable to get preliminary utility cost estimates for T&D infrastructure since we lack project-specific engineering design details and lack a commercially available project on which to base such a design. But any reasonable guess would suggest the additional direct costs for a demand increase of that scale will total in the millions of dollars. Snak-King would be required to cover much or all of such costs under electric utility rules.²

Snak-King understands that the District is required to demonstrate that a Best Available Retrofit Control Technology (BARCT) proposal is both technically feasible and cost effective.^{3,4} Snak-King has examined the evaluation presented in the Draft Staff Report for PAR 1153.1.⁵ Based on our review, **no such evaluation of cost effectiveness** was presented for Phase III endpoints for the tortilla oven category.

Based on calculations by our technical consultant, we do not believe that the Phase II/III mandates are anywhere near cost effective. Ramboll analyzed Phase II/III cost effectiveness for the Snak-King ovens subject to PAR 1153.1 using cost information from our engineering team in combination with cost information presented in the Draft Staff Report.

1. Cost Estimates for Electric Ovens: Snak-King does not have actual purchase cost data for replacement of its existing commercial food ovens with all-electric ovens. As noted above, there are no commercially available all-electric products for tortilla chips, so this is the best estimate available for such equipment at this time. For this reason, Ramboll derived estimates based on the cost model presented in the Draft Staff Report.
2. Costs for Facility-Owned Electric Infrastructure Upgrades: As noted above, Snak-King estimates that infrastructure upgrades (within our facility) to support a 400% increase in

² See SCE Rule 16 (Service Extensions), Section E (Allowances and Payments by Applicant)

³ California Health & Safety Code §40440. Available at: https://leginfo.ca.gov/faces/codes_displayText.xhtml?lawCode=HSC&division=26.&title=&part=3.&chapter=5.5.&article=4.

⁴ California Health & Safety Code §40406. Available at: https://leginfo.ca.gov/faces/codes_displaySection.xhtml?sectionNum=40406.&lawCode=HSC#:~:text=40406, class%20or%20category%20of%20source.

⁵ SCAQMD PDSR. Available at: <http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1153-1/preliminary-draft-staff-report-par-1153-1---march-2023.pdf?sfvrsn=6>.

electric power demand would cost on the order of \$7 million. Ramboll applied these costs to the food ovens on a pro rata basis using nameplate rating.

3. Power Demand and Energy Usage: Snak-King estimated power demand and energy usage associated with all-electric ovens (if such a product were commercially available).
4. Electricity Costs: Snak-King provided Ramboll an estimate of annual electricity costs for the increased energy usage associated with Phase II/III. These were based on the average electricity rate paid by Snak-King and were not adjusted for future inflation.
5. Natural Gas Cost Savings: Cost savings (i.e., offsets) for eliminated natural gas usage were also provided by Snak-King based on actual baseline natural gas consumption and average natural gas prices. Similar to electricity, this pricing was not adjusted for future inflation.
6. Utility Infrastructure Costs: As noted, Snak-King does not have an estimate of these costs. Ramboll did not include a figure for these, even though we expect them to be considerable (i.e., millions of dollars) given the scale of the demand increase.

Ramboll next estimated the cost effectiveness for the Phase II/III endpoints using SCAQMD's discounted cash flow method. Results of that analysis are presented in Table 1:

Table 1: Cost-Effectiveness Results

PAR 1153.1 Category	Costs at 0 ppm Endpoint (PWV \$)	Emissions Reduction (tpy)	Cost-Effectiveness (\$/ton NOx removed)
Tortilla Ovens	\$58,400,000	2.2	\$1,079,000
Drying Oven	\$3,600,000	0.2	\$696,000

Converting our tortilla chip ovens from direct-fired gas to electric heat would be a very capital-intensive endeavor with relatively marginal air quality benefits. And as shown here, it is not cost-effective even with an incomplete cost assessment.

If the March version of PAR 1153.1 were to be adopted by your Governing Board, it will result in significant product price increases that will negatively impact our ability to compete with companies not subject to this mandate. Ultimately, consumers will experience accelerated inflation.

The District has not demonstrated that the current PAR 1153.1 proposal is technically feasible and/or cost effective for each class and category which is the California Health & Safety Code requirement. For this reason, Snak-King respectfully requests that District staff return this matter to the working group and complete the additional study to resolve these informational and technical gaps. Snak-King appreciates the District's consideration of these comments.

Please call Mark Schieldge at (626) 363-7706 if you have questions.

Very truly yours,

A handwritten signature in black ink, appearing to read "Mark Schieldge". The signature is fluid and cursive, with a long horizontal stroke at the end.

Mark Schieldge
Chief Operating Officer

cc: Scott Weaver, Ramboll US Consulting, Inc.
Yasmine Stutz, Ramboll US Consulting, Inc.