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March 18, 2013

Supervisor Sausville and Town Board Members
Town of Malta
2540 Route 9
Malta, NY 12020

Re: *GLOBALFOUNDRIES FAB 8.2
2013 PDD Amendments & Second Supplemental Draft Environmental Impact Statement
(SSDEIS) Review
Town of Malta, Saratoga County, New York
Chazen Project # 31301.03*

Dear Supervisor Sausville and Town Board Members:

The Chazen Companies (Chazen) has received the Planned Development District Amendment Application package for the above referenced project, and has been requested to provide a "technical" review of the same. The Second Supplemental Draft Environmental Impact Statement (SSDEIS) was previously reviewed for "completeness" in regard to SEQR, and was found to be complete by the Malta Town Board on March 7, 2013. This review letter includes technical comments previously provided to the Applicant during completeness review (as depicted in our Memorandum to the Malta Town Board dated February 26, 2013), that were not addressed, as well additional technical comments generated from a complete technical review of the application material. Please accept the following comments for your consideration:

A. Town of Malta Planned Development District Application

1. The application references easements and other restrictions on this property as being attached in Appendix A. Based upon a review of Appendix A there are several easements noted as existing and one easement, subject to definition. A copy of each recorded easement is requested and as well as a copy of the proposed access easement. If a map is available that further describes the location of the easements, a copy is requested.

B. Second Supplemental Draft Environmental Impact Statement (SSDEIS)

2. A review of Section 3.2.2 includes a representation of proposed principal buildings as well as ancillary building that would be included with Fab 8.2. It is noted that ancillary buildings included a Sulfuric Building, Compressor Building, Pyrophoric Bunker Building and Silane building. Later in Section 3.4 there is reference made to a Fire Pump House with Storage. Please clarify if this is intended to represent an additional ancillary structure which should

be added to the list in Section 3.2.2 or if it is intended to be situated within an existing building or structure.

3. Regarding Building Metrics, The SSDEIS should discuss how a larger cleanroom associated with FAB 8.2 will affect other impacts, such as increased chemical deliveries, use of gasses and the potential need for increased emergency response.
4. Regarding Building Metrics, The SSDEIS should discuss what potential impacts are associated with the elimination of the cleanroom threshold size within the PDD. For example, with no limits on cleanroom size, there may be no limits on the use of chemicals, gasses and other materials needed for cleanroom operations.
5. In Section 3.2.4 miscellaneous details include descriptions of construction related workforce. Provide a summary of the accumulated construction work force related to concurrent construction operations anticipated and related construction schedules.
6. General design criteria for Fab 8.2, as described in Section 3.4 suggest limited or no changes from the general design criteria established with prior SEQRA Findings Statements and PDD Legislation for LFTC. Of those elements noted in this section, noise mitigation is of most interest and related abatement measures beyond those employed for construction related impacts should be fully characterized. Certain additional design measures have been implemented and included with the TDC and were represented to be included in related structures for Fab 8.2. However, the Town of Malta has not received the proposed design, nor has it accepted or approved it for the TDC. Describe, in detail, the proposed noise mitigation measures to be employed for Fab 8.2.
7. What are the anticipated sound levels, by octave band, at the previously identified receptor locations? What are the anticipated sound levels, by octave band, at the nearest residence on Featherfoil Way? What are the anticipated sound levels, by octave band level, at the nearest residence in the Town of Stillwater?
8. In Section 3.5 storm water management practices are described. Implementation of current standards is represented. The ownership, operation and maintenance responsibilities of these measures should be clarified.
9. In Section 3.10 it is stated that an overhead 115kV power transmission system will be extended from the existing LFTC Substation to a high voltage (HV) electrical substation to provide a circuit to the CUB-ESB. A figure depicting the new overhead wire route should be provided in the SSDEIS for review.
10. Section 3.17 describes permits and approvals necessary to support this application. In review of supporting reports included under separate appendices, it is apparent that certain services to support the project will require certain improvements and related approvals/permits and or approvals to support service, such as the SCWA and the SCSD#1. Provide a summary of approvals and permits required by supporting authorities that are required to service the proposed action.

11. The SSEIS should discuss public safety impacts, particularly additional emergency response calls and coordination with local responders, as a result of the new Fab, based on experience with the existing Fab.
12. The Applicant will be using large areas of LFTC off their property for construction. How will this affect the potential to build out the rest of the campus? Applicant to clarify.
13. Regarding construction logistics, the development of FAB 8.2 will increase employment from 1,900 to 2,500 construction workers. Construction efforts indicate that large areas off the Applicant's property will be needed for parking, laydown areas, soil disturbance, the proposed batch plant, stormwater, electric and temporary roads. The SSDEIS does not provide an assessment of simultaneous construction of TDC and FAB 8.2 as it relates to these impacts. This assessment should be provided.
14. The Applicant shall document the statement on pages 16/17 that "...extensive hazmat training" for local providers is being provided.
15. Quantify increased demands on local emergency responders in light of the experience to date from Fab 8.1. Quantify the resultant cost implications.
16. Have local emergency responders been involved in the preparation of the Community Notification and Evacuation Plan, Hazard Analysis and the Integrated Contingency Plan (ICP). What is the status of these plans?
17. Based on experience to date, compare the risk of tractor trailer accidents on roadways from traffic associated with Fab 8.2 to that calculated in the original GEIS, or to that calculated from tractor trailer accident data from a source acceptable to the Town of Malta.
18. Discuss how changes in chemicals employed in Fab 8.2 affect the risk analysis as discussed in the GEIS.
19. Discuss the safety of the roundabout at the intersection of Rt. 9 and the Round Lake By-Pass. Specifically, discuss the design and safety of this roundabout in light of increased truck traffic as a result of Fab 8.2.
20. Identify and illustrate at the concept plan level the "complete streets" alternative to the proposed improvements at the Rt. 9/67 Dunning Street roundabout discussed in the GEIS. What are the pros and cons of this alternative? What are the costs?
21. If additional traffic from the project is not routed onto Dunning Street as assumed in the traffic analysis, assess the impacts to the rest of the transportation system.
22. Section 5.3 states that the total average water usage rate for the FAB 8 Campus (including FAB 8.2) is 10.7 MGD. The Applicant should also identify what the current existing demand is at the SCWA plant, and describe the specific proposed water system improvements required to serve Fab 8.2. Additionally, the Applicant shall describe the approval status of such improvements. Are the improvements consistent with those discussed in the GEIS and SGEIS? Will there be sufficient capacity to service the remainder of the LFTC park at full

build-out? Provide verification from the Saratoga County Water Corporation that service can be provided and the schedule for the same.

23. Regarding Section 5.4 – What is the current natural gas demand from the Global Foundries project and how does it compare to the estimates in the GEIS? Describe proposed natural gas system improvements by National Grid required to serve Fab 8.2. Describe the approval status of such improvements. Are the improvements consistent with those discussed in the GEIS and SGEIS? Provide verification from National Grid that natural gas service can be provided and the schedule for the same. Will there be sufficient capacity to service the remainder of the LFTC park at full build-out?
24. Section 5.5 states “The existing two (2) double circuit 115 Kv lines have the capability of providing a significant amount of electric power to the FAB 8 Campus.” The Applicant shall quantify the term “significant” used in the referenced sentence. What is the current electric demand from the Global Foundries project and how does it compare to the estimates in the GEIS? Further, the Applicant shall describe proposed electric system improvements by National Grid required to serve Fab 8.2. Describe the approval status of such improvements. Are the improvements consistent with those discussed in the GEIS and SGEIS? Will there be sufficient capacity to service the remainder of the LFTC park at full build-out? Provide verification from National Grid that electric service can be provided and the schedule for the same.
25. Regarding Section 5.6; the Applicant shall provide verification from SCSD#1 that sewer service can be provided to FAB 8.2. Will there be sufficient capacity to service the remainder of the LFTC park at full build-out?

Appendix A - Proposed PDD Amendments

26. The PDD amendments should include a modification that, should an offsite emergency occur from a product to be delivered to GF, that GF be required to immediately notify the Village and the Town, and that they also send appropriate personnel to the emergency scene so they can assist first responders to understand the nature of the material involved.

Appendix B - Part 1 of Full Environmental Assessment Form (EAF)

No Comments

Appendix C - Global Foundries Industry Requirements Report (IRR)

27. The Applicant should show a redlined version to reflect changes between 2008 and 2013 IRRs, as they relate to FAB 8.2 and submit the same for review by the Town.

Appendix D - Summary of Emission Point Modeling Using AEROM Software

28. Please refer to the attached comment letter prepared by Air Resources Group, LLC, dated February 14, 2013.
29. Regarding air dispersion modeling results; it is requested that the Applicant provide updated figures based on increasing the stack height by 5-, 10- and 15-feet respectively. Following compilation of the requested information, please compare this to the currently proposed stack height air dispersion modeling and provide an analysis of the statistical significance of each interval of increased stack height. This has been requested by the Town of Stillwater Planning Board.

Appendix E - Visual Impact Assessment

30. The Application indicates that the GIS viewshed analysis is based on a combination of USGS National Elevation Dataset (NED) 10 meter Digital Elevation Models (DEM). The Applicant should consider conducting an additional GIS viewshed analysis that is based on USGS DEM's only in order establish a visual baseline that does not include assumed vegetative heights.
31. The Applicant indicates that the control points for the GIS viewshed analysis were located near the center of the FAB 8.2 building envelope. Given the size of the proposed project, control points should be located at the four corners, and/or along the edge, of the building envelope (similar to the balloon visibility analysis) in order to determine its potential visibility within the five-mile study area.
32. It is noted in the GIS viewshed analysis that heights of 80 feet were applied to the National Land Cover Dataset's (NLCD) "Evergreen" and "Mixed Forest" land cover classifications and heights of 25 feet were applied to "Woody Wetland" and "Shrub/Scrub" land cover classifications. The Applicant should identify how they arrived at these estimated land cover heights. In addition, the NLCD includes additional land cover classifications that are not identified in the GIS viewshed analysis, including "Deciduous Forest," which is identified as one of the primary land covers in section 3.4.1, Vegetation. The Applicant should incorporate such land cover classification(s), along with the respective estimated heights, into the GIS viewshed analysis. Finally, the analysis should include a discussion regarding visibility conditions during leaf-on and leaf-off conditions. As an alternative, the Applicant may choose not to include "Deciduous Forest" land cover classifications if the intent is to demonstrate leaf-off conditions. If this is the Applicant's intention, then such a discussion should be included in the analysis.
33. Because visibility may decrease as distances increase, it would be helpful if the Applicant added concentric rings that identified one-mile increments from the center of FAB 8.2 to figure's 2A and 2D.
34. Given the size and location of the proposed building, along with the surrounding topography, it appears that the northern and eastern portions of the proposed building envelope have the greatest visibility potential within the study area. The Balloon visibility study indicates that balloon representing the northeast corner "could not be located close

to its intended position” due to overhead wiring. As such, the balloon visibility study should discuss how the inability to locate a balloon at the northeast corner may or may not have impacted the overall Visibility Study.

35. The balloon visibility analysis indicates that the field team was unable to find public access to the Round Lake Preserve on November 30, 2012. However, the Applicant indicates that the line-of-sight between FAB 8.2 and Round Lake Preserve was examined using three-dimensional modeling. The Applicant should indicate if this analysis is intended to supplement the balloon visibility analysis. If so, it would be helpful if the Application provided a more detailed account of how three-dimensional model was developed and used to evaluate potential visibility. Finally, traditional line-of-site analysis includes line-of-site profiles that depict distance and elevation. The application should consider included such a figure in this analysis.
36. The general direction of the proposed building should be identified in Figures 5A-5F, Existing Conditions Photos.
37. In order to evaluate relevant lighting and seasonal conditions, the date and time of the photographs that were used in the Photo/Simulations/Project Visualization should be identified.
38. The small, red labeling on Figures 7B and 8B is difficult to read due to font size and respective contrast with background images. These figures should be revised accordingly.
39. In Figures 7B and 7C and Figures 8B and 8C of the Photo Simulations/Project Visualization, it appears that the proposed building is a brown hue. However, the building appears to be white in the Fab 8.2 Architectural Renderings. The Applicant should verify the proposed building color and ensure that the photo simulations accurately reflect the proposed conditions.
40. The contrast on Figures 7A-8C appears dark, making it difficult to distinguish buildings, land forms/land cover, and distances. It appears that the photos may have been taken during poor weather conditions and/or during evening or early morning hours. As such, tethered balloons and photo simulations are difficult to discern. Because the proposed building may have greater illumination/reflectivity during better weather conditions, earlier times of day, and during different seasons, the Applicant should consider providing revised simulations that illustrate these varying light conditions.
41. Figures 7C and 8C illustrate hypothetical locations of rooftop equipment and stacks. The Applicant should indicate if these locations are based on any existing plans or concepts. Furthermore, the Applications should indicate what materials this equipment will be made of, its color, and weather it has any lighting.
42. In Figure 8C, Project Visualizations, when compared to the 110 foot line in Figure 8B, along with nearby vegetated horizon characteristics, it appears that the proposed building’s roofline is dissimilar. The Applicant should review these two figures and verify the accuracy of the photo simulation with respect to the proposed building height a vegetative horizon.

43. The Applicant indicates in the Summary and Conclusion section that “no identified sensitive visual resources within the 5-mile study area will be adversely impacted.” The Applicant should provide a brief description or comment, for any of the sensitive visual resources that the project may be visible from, that identifies how the existing and proposed conditions will mitigate any potential visual impacts.
44. The photo simulations and the summary and conclusions indicate that portions of the proposed building may be visible, particularly through the “intervening vegetation” and above the “vegetated horizon,” and that anything over the vegetated horizon may introduce elements that are visually contrasting with “the natural landscape of Saratoga Lake.” Because it anticipated that the proposed building will be visible from Saratoga Lake (on the water), which is a local and regionally significant natural and recreational resource, without additional mitigation measures, it may not be “reasonable to conclude that simple visibility of the proposed rooftop appurtenances at or slightly above the tree line will not result in a detrimental effect on the perceived beauty of Saratoga Lake.”

Appendix F - Preliminary Water and Wastewater Plan

45. Section 2.0 states that peak water usages is estimated as 125% of the average day flows based on GLOBALFOUNDRIES operation experience. While noted, it is requested that the Applicant provide documentation (meter readings, etc.) demonstrating the same. Also, based on the projected wastewater flows, it appears that the Applicant is indicating that approximately 3.4% of water used at the plant is not discharged to the wastewater system. More information regarding this “loss” of water is requested. It is noted that correctly identifying the anticipated water and wastewater rates is especially important as it relates to the capacity of the existing 30” sewer line (installed between LFTC and the SCSD#1 trunk sewer). The proposed average daily flow of the FAB 8 campus has been noted to be 9.5 MGD, and the capacity of the existing 30” sewer is 10 MGD. The Applicant has appropriately recognized this, by stating that “Once FAB 8.2 is at full capacity, the 30-inch sewer would be at 95% of its design flow...” Given the fact that the Applicant intends to utilized 95% of the capacity of the 30” sewer owned and operated by SCSD#1, it appears prudent that the Applicant provide a letter of service and consent by the SCSD#1 that they do not require improvements to this sewer, or any other portion of their system.
46. Section 4.2 states that due to the anticipated water supply demands (10.7 MGD) of the FAB 8 campus (inc. FAB 8.2), Phase II improvements will be needed at the SCWA plant. It is also noted that in Section 4.1 states that Phase II improvements at the SCWA plant would increase its capacity to 12 MGD. This section should discuss what the existing demands are at the SCWA plant, as the proposed addition of FAB 8.2 could promulgate demands greater than 12MGD, demanding on existing demands, thus requiring Phase III improvements to be made. Applicant to clarify.
47. Section 4.2 discusses that Phase II upgrades will be needed at the SCWA plant, however, there is no discussion regarding the potential additional water storage that may be needed in the SCWA system. Additional storage may be required by either the SCWA or NYSDOH to support the additional water supply demands sought by the Applicant. As such, the

Applicant should discuss whether or not additional storage will be required and where this may be sited.

Appendix G - Traffic Impact Analysis

48. Regarding Chapter I, Study Area and Methodology: The intersections along the access roadways of Luther Forest Boulevard, Stonebreak Road, and Hermes Road should be included in the study. All existing and future site traffic use/will use these intersections.
49. Regarding Chapter II, Existing Volumes: The 2012 counts were only conducted for one hour periods. The basis for this should be presented.
50. Regarding Chapter II, Existing Volumes: Table 2.2 appears to be mistitled.
51. Regarding Chapter II, Existing Conditions: Discussion of the construction worker travel demand management techniques should be quantified as to the extent that the techniques are currently being used and if the techniques such as shuttle buses, ride-sharing and expansion of security checkpoints are practical and realistic.
52. Regarding Chapter II.D, Accident History: The Route 9/Route 67/Dunning Street roundabout is a critical location. NYS DOT modified lane assignments at this intersection in 2009 to eliminate the eastbound and westbound inside lanes from proceeding straight through to Dunning Street and Route 67 due to safety concerns.

Provide collision diagrams and data summaries to enable a review of the crashes. Obtain the actual police reports for the significant number of non-reportable crashes at the Route 9/Route 67/Dunning Street roundabout and include them in the diagrams and summaries. Calculate the crash rates and compare to statewide averages.

Provide the crash history, diagrams, and summaries for the crash history of the Route 9/Route 67/Dunning Street roundabout prior to the change in lane usage on the eastbound and westbound approaches.

Identify the "safety concerns" about the Curry Road/Round Lake Road Bypass intersection and whether the data justifies those concerns. Provide a review of the design plans/as-built plans to verify that the roundabout meets the standards to accommodate the level of trucks using the intersection.

The concluding statements at the end of this section cannot be evaluated at this point without the additional information requested above. Identify the increase in crashes, if any, which may occur as a result of re-installing the original lane usage at the Route 9/Route 67/Dunning Street roundabout. Provide crash reduction factors and calculations to support anticipated, if any, crash reductions.

53. Regarding Chapter III, Build Year: A build year of 2022 was selected. While the footnote provides some rationale for a 2022 build year, the past history of project progress seems to indicate that this is a very conservative build year, bringing with it a conservative analysis,

via higher background growth. A more accurate picture may have been developed by using a more realistic build year, or analyzing for an interim build year such as 2018.

54. Regarding Chapter III, No Build Volumes: In addition to a background growth factor, estimates trips from specific other projects are included in the compilation of the No Build volumes. Appendix B provides background data on these trips. However, the revised TIS present figures indicating the Existing volumes and then goes directly to figures presenting the No Build volumes. Figures showing the total volumes associated with the specific other projects should be provided.
55. Regarding Chapter III, Site Volumes: The data collected at the security booths should be presented in tabular format.
56. Regarding Chapter III, Trip Distribution: Trip distribution is noted as taking into account existing travel patterns, a review of previous distribution used in the original TIS, and a review of roadway/intersection improvements in the study area. A more detailed discussion should be presented indicating differences in trip distribution between the original study and the 2013 study and the reasons for any differences. Have the distributions been verified by CDTC as in the original study? If a zip code analysis was conducted, the data should be presented. Why is more traffic from I-87 north expected to use Exit 11 instead of Exit 12? Are there significant travel time savings in using Exit 11?
57. Regarding Chapter III. B, Trip Generation: Provide rational for using original trip generation assumption of the 80% factor versus calculating new trips using the current rate of trips per employee based on data collected at the security booths.
58. Regarding Chapter IV, Capacity/Level of Service: It is noted that the Capacity/Level of Service Analysis was conducted using software that automates the procedures contained in the 2000 Highway Capacity Manual (HCM). A later version HCM (2010) is available and the latest resources should be utilized in the analysis. Although NYSDOT has not officially endorsed the HCM 2010, they are considering the procedures and Synchro 8 software acceptable. Further, the NYSDOT Highway Design Manual states that capacity analyses are to be consistent with the most recent version of the HCM.

The HCM 2010 has been in use entering its third year. At a minimum, the build conditions for signalized intersections should be re-evaluated using the HCM 2010 procedures, and additional mitigation should be provided where necessary. The procedures affect how multiple lane approaches are handled and they have reduced the base saturation flow rate. As an example, for the PM Build condition at Route 9/Malta Avenue, the average intersection delay increases over 100 seconds/vehicle from 100 seconds/vehicle to over 200 seconds/vehicle when using the HCM 2010.

Include volume-to-capacity ratios with the level of service results. The volume of circulating traffic per lane, and entering traffic for approaches at roundabouts should be presented. This information in schematic format will facilitate review for the agencies and the public.

Provide complete printouts, not just summary sheets, that show all inputs and outputs, of the signalized and roundabout analyses of the critical intersections.

59. Regarding Chapter IV, Capacity/Level of Service: Quantify the traffic volumes expected to use the series of connector roads that may reduce the congestion at Route 9/Route 67/Dunning Street as the alternative mitigation plan in lieu of major reconstruction. It is noted that one of the connector roads is already a basis of their analysis – i.e the western leg at Route 9 at Stonebreak Road – and therefore cannot be considered as alternative mitigation. Using the Town’s connector road design guidelines that show narrow streets with parking on both sides, is it realistic to consider 15-25% of the turning movement counts diverting to the connectors?

Regarding the concept plan for the mitigation measures at the Route 9/Route 67/Dunning Street intersection, explain the traffic control for the northbound and westbound bypass lanes. Identify the assumptions for the merging distances east of the roundabout for taking three lanes down to one. Explain why an hourglass concept is preferred for the westbound lanes west of the roundabout.

Additional safety analysis is also requested as stated in earlier comments.

60. Regarding Chapter IV, Capacity/Level of Service: Identify ITS components or other mitigation to be implemented that will alert drivers to divert to Exit 11 if unacceptable congestion occurs at Route 9/Route 67/Dunning Street. Include a travel time analysis of using the connector roads and Exit 11 versus using the Route 9/Route 67/Dunning Street intersection.

The discussion also indicates that traffic may divert to Exit 11 if heavy congestion is experienced. While this may help the Route 9/Route 67/Dunning Street intersection, it would add traffic to Exit 11 intersections above that analyzed. What impact would this additional traffic have?

61. Regarding Chapter IV, Capacity/Level of Service: Provide a LOS and delay analysis of the impacts on the proposed road network in the 2022 design year assuming build-out of 500,000, 1,000,000, 1,500,000 and 2,000,000 square feet of additional manufacturing/office space in the LFTC, as was included in the original GEIS.
62. Regarding Chapter IV, Capacity/Level of Service, Appendix E Exit 11A Sensitivity Analysis: Provide a comparative analysis of the LOS/delay impacts on critical – i.e. mitigated - intersections using the same assumptions as the SSDEIS traffic study, but including Exit 11a instead of the alternative mitigation. The analysis should be consistent in terms of trips, trip distribution, and roadway conditions. Also perform the analysis with the same assumptions about LFTC traffic as in the comment above.
63. Regarding Chapter V, Mitigation Phasing and Costs: For the Exit 11 ramps, identify the biggest challenge to coordinating the signals. If they can’t be coordinated, what other mitigation is needed? For intersections 3, 4, and 5 identify if the required right-of-way is obtainable, and therefore, if the mitigation is practical and achievable.

Conclusion and Recommendations

Based upon the review completed, we recommend that the Applicant address these comments and provide updated information in subsequent submissions.

If you have any questions regarding the above, please do not hesitate to me at (518) 824-1926.

Sincerely,



Sean M. Doty, P.E., LEED AP
Senior Project Engineer
Municipal Engineering

For: Joseph M. Lanaro, PE, M.ASCE
Principle, Vice President of Engineering

cc: Town of Stillwater Planning Board (via email only)
Town of Stillwater Town Board (via email only)
Town of Malta Planning Board (via email only)
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Chad Cooke, Executive Director, Saratoga County Sewer District #1
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Mark Kennedy, Traffic Engineer, NYSDOT, Region One
Kevin Novak, NYSDOT, Traffic, Region One



Electronically submitted:
sdoty@chazencompanies.com

February 14, 2013

Re: GLOBALFOUNDRIES (GF) Proposed Fab 8.2
Air Modeling Summary (revised January 30, 2013)

Sean Doty
The Chazen Companies
100 Glen Street, Suite 3B
Glens Falls, New York 12801

Dear Mr. Doty:

At your request on behalf of the Town of Malta (NY), ARG reviewed Appendix D (Preliminary Summary of Emission Point Modeling Using AERMOD Software) from the *January 31, 2013 Environmental Impact Statement (SSDEIS)/Fab 8 Campus at LFTC-Proposed Fab 8.2*. Our comments are attached and items highlighted in blue invite clarification.

Very truly yours,

electronic submission

Sander Bonvell

**COMMENTS TO:
FAB 8.2 AIR MODELING SUMMARY
Appendix D
Summary of Emission Point Modeling Using AERMOD Software
from
Second Supplemental
Draft Environmental Impact Statement
Fab 8 Campus at LFTC Proposed Fab 8.2
(C.T. Male revision January 31, 2013)**

Completeness for Environmental Impact Statement

Most of the air section written description remains generically the same as previous versions. The POU control vents and other stack types, sizes and air flows of the Fab 8.2 are consistent with those previously modeled. The Fab 8.2 *SSDEIS* proposes stacks to have a height up to 125 feet, corresponding to a 15-foot height increase from other on-site stacks and ought to have a positive effect on air dispersion.

Hourly emission rates for the Fab 8 Campus manufacturing processes represent post-control emissions allocated to different types of stacks (e.g., acid scrubbers, caustic scrubbers, oxidizers) and weighted by their stack flow rates. The following contribute to yearly (8760 hours) campus air combustion emissions:

- Natural gas fired boilers at 65% load, 8,760 hours.
- Dual fuel fired boilers at 65% load on natural gas for 8,748 hours
- Dual fuel fired boilers at 100% load on fuel oil for 12 hours per year
- Point of use abatement devices at 50% maximum firing rate for 8,760 hours
- Oxidizers at maximum capacity for 8,760 hours
- Backup emergency power generators for 38 hours

There are numerous manufacturing process substances (i.e., non-combustion) from many sources that contribute to the campus air emissions. Estimating these emissions is based on operations at similar GF facilities and the continually changing technology market. Over the past few years the facility has modeled different operating scenarios, and emission rates and concentrations, air flows, etc. have gone up or down relative to these iterations; it is more important to understand that emissions are consistently low compared to their NAAQS, AGC or SGC standards.

The air modeling summary report states that the amount and types of air emissions for Fab 8.2 are not significantly different than previously presented in the prior SEQRA Findings Statement and PDD legislation which evaluated cumulative air emission impacts from three phases of Fab development. In terms of modeled air quality this is true, since adding more emissions ‘chemistry’ is accompanied by adding more corresponding carrier air so increases in mass are offset by increases in volume, and (mass to volume) concentrations remain in the same ballpark. The following table of primary NAAQS (and HF) shows no exceedance of regulatory limits and air modeling guidance values (expressed as mass per volume, concentration), though PM and HF increase substantially with Fab 8.2:

Pollutant	Time Period Standard or Guidance	% of Regulatory Standard Previous w TDC	% of Regulatory Standard Including Fab 8.2
CO	1-hour	4	4
CO	8-hour	12	12
PM2.5	24-hour	76	82
PM2.5	Annual hourly	63	71 [^] (89 ⁺)
SO2	1-hour	3	3
SO2	3-hour (Secondary)	3	3
NO2	1-hour	88	88
NO2	Annual hourly	19	20
HF [#]	12-hour	26	66
HF [#]	24-hour	31	64
HF [#]	1-month	36	96

[^] Reported vs. old standard

⁺ Corrected to new standard effective January 15, 2013

[#] Because simpler air dispersion modeling programs are not capable of generating averaging periods to handle DEC's ambient *fluoride* air quality standards for 12-hour, 24-hour, 1-week, and 1-month, DEC converted the standards into "equivalent" 1-hour SGC and annual AGC values (guidance concentrations), which serve only as screening surrogates for assessing compliance. When a screening impact exceeds an equivalent standard, compliance is to be reassessed using more refined modeling. The modeling summary states that refined modeling was followed relative to select fluoride emissions (i.e., hydrogen fluoride [HF] and nitrogen trifluoride [NF3]), and indicated conformance with the 6NYCRR Part 257-8 standard. Appendix B of "Appendix D" contains USEPA Memoranda for refined modeling of NOx and SO2, but not for the halogens so I'd like to clarify what modeling refinement was performed for HF or other halogens in particular.

Absent from the modeling summary tables produced for the TDC (October 2012) but in data tables I have from July 2008 and April 2010, the Fab 8.2 report contains a Multi-Chemical Analysis Model Run (for non-HAPs and HAPs at insignificant levels) showing modeled concentrations relative to their AGCs and SGCs, as well as rate in tons per year, for a host of parameters. The 'largest' emission of a single process parameter is nitrous oxide (> 1200 tpy), with one of the highest pound per hour discharge rates, and is only 28% of its AGC. **The high numbers should be verified by C.T. Male.** Cl2, HCl and HF are emitted from about two dozen acid scrubbers, and another five dozen emission points generate chemicals modeled for comparison to a few dozen AGC and SGC. Of all these only three compounds (from the Model Run #1 / file), show an increase exceeding 50% (my random choice for evaluation) of their NYSDEC Annual Guidance (AGC) concentration guidelines: sulfur hexafluoride, 58%; silicon tetrafluoride, 64%; and tungsten hexafluoride, 63%.

NYSDEC Policy CP-33, Assessing and Mitigating Impacts of Fine Particulate Matter Emissions (<http://www.dec.ny.gov/chemical/8912.html>) has a de minimus threshold that if PM10 emissions from a project do not exceed 15 tpy, then PM2.5 impacts are deemed insignificant. The **Fab** Title V permit application estimated total PM at 12 tpy, and the TDC modeling summary showed over 14 tpy (assume total PM).

EPA just recently (January 2013) lowered the NAAQS annual PM2.5 standard from 15 to 12 micrograms per cubic meter. Since modeling is performed as PM2.5 and I've seen no PM10 information, it is appropriate to [inquire about the correlation](#) between site generated PM, PM10 and PM2.5, since at least total PM will exceed 15 tpy with Fab 8.2. If PM10/PM2.5 policy criteria are met, including direct emissions and/or secondary formation in the atmosphere, then further addressing under SEQRA may be warranted. **GF should address this.**

Issues Not Directly Related to the Environmental Impact Statement

	Fab 8.1 + Extension*	TDC*	Total Facility as of Fab 8.2 (File MC01)
NOx	45.24	13.49	
SO2	2.18	1.35	
PM	9	5.13	
HF	2.54	0.54	6.67
HCl	4.62	0.99	13.48
Cl2	2.73	0.92	2.43
Total HAP	9.89	2.45	

Units in tpy

* Air Modeling Summary, October 19, 2012; no equivalent table for January 2013 update.

The data in the table to the left showing tons per year emissions came from the modeling summary for the TDC. Neither the January 31, 2013 Second Supplemental DEIS nor its (“Appendix D”) Fab 8.2 modeling summary reports total facility or Fab 8.2 anticipated tpy increases for NAAQS.

The April 2012 Title V permit application shows that NOx (and SO2, but not important) has a potential to emit (PTE) defined as maximum emissions based on 8760 hours/year which exceeds the ASF permit NOx cap of 90 tpy. Even with the TDC, anticipated ‘actual’ emissions were below the cap. Fab 8.2’s similar if not greater

emissions could exceed the cap, although such a cap will not exist in the Title V permit (unless restricted voluntarily or otherwise), the new limit being set by the PTE, which is by the way not necessarily always ‘maximum’. [It would be supportive of our understanding of the Fab Campus emissions and air quality to know the NAAQS increases \(or otherwise changes\) for the Fab 8.2 addition and for the total facility.](#)

The table to the right shows emissions in tons per year (from Multi-Chemical Analysis - Model Run #1 File Name: MC01) that were estimated at the time of the TDC and now for the Fab 8.2; column headings indicate the associated modeling summary report and row headings indicate the specific FAB building from which the emissions arise. Note the shifting but also the general increases.

Source	Cl2		HCl		HF	
	TDC	Fab 8.2	TDC	Fab 8.2	TDC	Fab 8.2
Fab 8.1	1.55	0.13	3.35	2.65	1.84	1.61
8.1 Ext.	1.18	0.35	1.27	3.96	0.7	1.6
TDC	0.918	0.049	0.99	1.37	0.54	0.77
Fab 8.2	---	1.90	---	5.50	---	2.69
Total	3.65	2.43	5.61	13.48	3.08	6.67

Modeling for air quality is based on standards of air concentrations (mass/volume = ug/M³) and not rates, as in tons per year or pounds per hour, which contribute to modeling but do not drive the compliance; however, they do contribute to the basis for permit conditions, such as the need for the facility having to go to Title V initially due to greenhouse gas reporting. [It would be useful to know all circumstances that contribute to the need for, or result from, transitioning from an ASF to a Title V permit.](#)

Notes for correction/update

- EPA just recently (January 15, 2013) lowered the NAAQS annual PM2.5 standard from 15 to 12 micrograms per cubic meter. Thus Particulate Matter (PM2.5) Model Run #2 which reported a concentration **70.88%** of the standard (15ug/M³) is actually **88.6%** of the new standard, up from 63% after the TDC was added. File PM02 (PDF Page 48; table on page 28 of 30).

- In *Summary of Air Modeling Results* (Table page 1 of 30) the SO₂ Run #01 did not total correctly from the ‘maximum’ and ‘background’; the correct total should be 46.41ug/M³.
- The *Draft PDD Amendment, Air Pollution Control*, states that “...*The first phase of development will be below Title V thresholds (i.e., not a Major Source of air pollutants) and will be permitted under a NYSDEC State Facility Permit.*” This is old language; verb tenses need updating to better reflect that the facility will now be operating with a Title V air permit.

End

COMMUNITY RESPONSE BOARD MEETING
Wednesday, March 13, 2013
Meager Community Center

<u>In Attendance:</u>	<u>Yes</u>	<u>No</u>
Carol Henry, Chairwoman	x	
Chris Clark, Malta Ambulance		x
Phil Dobie, Union Rep.		x
Tim Dunn, Citizen		x
Pat Gratton, LF Homeowners		x
Patty Heidelberg, LF Homeowners	x	
Ann Klotz, Citizen	x	
Ray Patterson, MPBA	x	
Roy Muermann, Citizen	x	
Pete Shaw MRVFD		x
Donna Gizzi, Citizen		x

Draft Supplemental Environmental Impact Study

Town deemed the updated report as complete, and review is under way by planning department and planning board. Tentative public hearing scheduled for March 25. CRB is issuing its notes to Town board and planning department and will consolidate its concerns into formal letter to present at the public hearing.

Traffic Analysis

GF expanded original traffic analysis to include all original intersections reviewed under the first EIS and used current traffic counts from 2010-2012. General questions on the data collected include:

- How did they determine peak AM and PM hours? Peak PM should run for a longer period since end time does not accurately reflect commuters from Albany/Schenectady areas.
- Do data counters have a time stamp or just total count with specified time period?
- How were percentages calculated for trip distribution? The rate of use at Hermes Road appears to be higher than what is stated.
- Can shifts at the different buildings be staggered to alleviate some of the stacking at various intersections at both peak and off peak times?

The report defines Hermes Road as one of the key entrances into the facility. Local residents have long fought to exclude this road as a main entrance to the tech campus. During the initial EIS, there was discussion about keeping this entrance for emergency access only. While CRB acknowledges that access is needed for facilities along Hermes Road, it is suggested that access be better controlled between GF and rest of the

campus through the use of security gate or some other measure such as an emergency barrier. During initial discussions for LFTC, it was proposed that permanent barriers be installed with access only for emergency vehicles, and we would ask that the Town again consider this option. This would prevent commuter traffic. CRB acknowledges that development around the area has had a large impact on traffic on Dunning/Plains Roads, but there needs to be consideration for protection of the existing neighborhoods.

Mitigation measures are needed to steer traffic to Stone Break and Route 67 entrances and away from Hermes Road. Neighbors have difficulty exiting local neighborhoods onto Dunning and Plains, particularly in the evening hours.

GF is suggesting mitigation at various roundabouts and street intersections to improve traffic flow. Who would pay for these improvements and who would be responsible for maintenance? While the mitigation measures would speed traffic through the intersections, they appear to defeat the intentions of the recent downtown district for a more walkable town.

The DDSEIS is light on mass transit options. CDTA offered bus service in 2011, but many feel that the line was installed too soon. Targeted mass transit should be studied further. Has a study been done to see where workers live? This type of study could be used to develop targeted mass transit systems. It was pointed out that a many of the residents of Chapel Hill (East Line Road in Ballston) work in LFTC. If a shuttle service were set up from Malta Mall, it would decrease the number of vehicles along Round Lake Road. This section of Malta has experienced tremendous growth and increased traffic pressures because of developed in the town and outlying towns.

The study reinforces the need for Exit 11A since many of the town's intersections are reaching failing grades by DOT standards. Exit 11A will provide a more direct and faster route into the campus and take pressure off of the secondary roadways. The process needs to start now. There is concern that if the Exit 11A trigger is removed from the EIS, there will be little political and economic pressure to develop the exchange. Mitigation of the roundabouts takes away the incentive.

Has there been a review of the facility emergency plan for evacuation of LFTC personnel? Are vehicles directed away from residential areas (LF) in order to allow safe evacuation of the surrounding neighborhoods?

Visual Impact

The revised visual impact study better illustrates the impacted view from the lake and Stillwater neighborhoods. Does the law allow for mitigation fees to be imposed and for money to be used to improve other view sheds in Malta?

The committee will finalize its review of the SSEIS to determine if additional meetings are needed. The next meeting has been tentatively scheduled for March 20 at 6:30 PM if required.

Reported by,

Carol Henry
LFTC Community Response Board

Post Meeting Notes on other sections of the documents.

- A) Will new utility lines be above ground or underground?
- B) Will the construction of upgrades to power and gas impact Dunning Street traffic?
- C) Appendix H page 103 mentions an alternative access to NYSERDA from route 9 such that the Dunning Street access is no longer used. I would like to see that alternative explored.
- D) Sales tax relief is requested. What is the impact on the finances of the town? the county? What is the financial impact of additional commuters and trucks on town and county roads? other services-ambulance, fire, --Might financial impacts be studied regionally?
- E) The tables of modeling data on fluoride, chloride and hydrochloric acid data discharges are very hard to read. I would like to see a simple table with annual discharges -current model, full build model and DEC limits. What I think I read is that chlorine discharge will be 95% of allowable. That is very close to the limit. I would like the PDD to list where DEC is taking measurements and at what frequency. I don't think chlorine is monitored locally.
- F) The traffic section page 15 includes consideration of check points to distribute construction traffic. Might check points be used to distribute worker traffic?
- G) On noise-I think there needs to be better definition of undesirable sounds and triggers that require remediation. If remediation is required, then homeowners effected might be financially compensated until the remediation is complete. Was consideration given to putting the additional new units underground? Have homes effected lost value? Might the CRB recommend financial compensation for homeowners were the value of their homes is reduced because of any new noise from the new units?

"The above information is provided as courtesy notes and do not function as official minutes"

4137 Silver Beach Road
Malta, NY 12020
March 26, 2013

To the Malta Town Board & Malta Planning Board:

I want to strongly express to the Board my personal belief that Global Foundries (GF) should be held to their original PDD approval requirements and have an Exit 11A constructed prior to being granted a certificate of occupancy on a new Fab 8.2. GF's basis for contesting this requirement, that traffic has never increased to the extent originally envisioned, is very lame at best. While GF may state that traffic in and out of LFTC has not materialized to the degree which would require the need to construct Exit 11A, that, however, is certainly not the total traffic picture in Malta.

I believe it is very short sighted to exclude the significant increase in traffic that has already taken place as a result of projects such as Ellsworth Commons, and the many other projects still in the works, that will bring the number of additional vehicles going through Malta into the thousands per day, exclusive of the increase related to the creation of the new Fab 8.2.

I have been told by one Board member that GF shouldn't be responsible for having to create an Exit 11A due to growth in the downtown area. I have to totally disagree. The big argument that has always been given to the public since AMD/Global Foundries first came to the forefront, was the economic boom it would bring to the area. This included the growth resulting from the need for many more homes/apartments for the new workers, as well as other supporting businesses needed by GF for their operations. To say that GF is not responsible for the significant increase in traffic created due to this projected growth in the downtown area would be like having your cake and eating it too. If the pro side of this project is the growth in jobs within Malta as well as the surrounding area, which obviously generates much more traffic, than the con side relating to the serious increase in traffic when this does occur cannot be ignored. This must be attributed to GF and therefore, they should be held responsible for mediating the impact.

GF's alternative to the Exit 11A requirement is extremely lame and will accomplish little if anything as it relates to the smooth flow of traffic throughout Malta. I find it shocking that all of a sudden, the intersection at Malta Avenue Extension and Route 9 is deemed to be problematic, when only this past January, the Planning Board said the exact opposite when questioned about the increase in volume and the safety problems at that intersection as it relates to the recent site plan approval extension of the Hearn Road medical project. GF is now going to be the "big fix" for this intersection by creating a right turn lane? This is only going to increase the danger for people exiting onto Route 9 South from Hearn Road as they depart the Hearn Road medical project. As a reminder, the Hearn Road medical project is supposed to generate at least 300 cars per day during the week when fully operational. This is an obvious misstep by the Planning Board and Town Board. As for the so called "fixes" to the other intersections proposed by GF, I believe this will in no way be adequate enough to support the increased traffic relating not only to the new traffic created by the operation of Fab 8.2, but also the dramatic increase in growth in the area specifically resulting from this project.

I am certain that virtually every political supporter of GF is going to credit them with the significant increase in housing projects and other developments in Malta and therefore, it is imperative that the flip side of that also be laid at the door of GF, and that is the increased traffic DIRECTLY RELATED to GF. The fact that the creation of an Exit 11A would delay the construction of the new Fab 8.2 should be irrelevant! This is strictly a business decision on GF's part and has no place in the decision making process of the Town Board or Planning Board. New York State and the local communities have given GF virtually everything they have asked for on a silver platter, including the most recent waiver of millions of dollars of sales tax revenues that the local county and state desperately need. How were we rewarded? By the very first tax assessment being challenged by GF, thus costing taxpayers much needed money to defend ourselves. This is totally shameful in my opinion. Therefore, I am emphatically stating my opposition to the Town removing from the existing PDD, the requirement for an Exit 11A to be created. Not only should GF be held to their original agreement, but they should have to fully fund the construction of Exit 11A so as to remove any burden from local, state or federal taxpayers. We have given enough of our valuable resources to this company. It is time for them to live up to the agreement they made IN GOOD FAITH with the Town of Malta and its residents. To do anything less would be a huge disservice to the residents of Malta. Thank you for your consideration.

Sincerely,



Lynda Bablin

Buck Land Cattle Company

WC#5

From: Carol Marotta [cvonmarot@aol.com]
Sent: Saturday, April 06, 2013 2:21 PM
To: planning@stillwatery.org; ekinowski@stillwatery.org; KPetronis@stillwatery.org; lbruno@stillwatery.org; ABaker@stillwatery.org
Subject: Info for GF PH
Attachments: AIR_IS_FLUORIDATED.docx; Fluoride.docx; Comments_PB_Malta_PDD_Amend_&_Construction.docx; Comments_for_Malta_SSDEIS.docx

In preparation for Public Hearing, I reviewed previous documents in Planning Office including the original DEIS for LFTC (1/16/03) and the SFEIS for LFTC AMD Development Area #1 (6/13/08), and compared to current submission SSDEIS revised 3/1/13.

Of interest to Stillwater, based on Proposed Amendments to PDD and the SSDEIS:

- **Traffic Analysis of Cold Springs Road/Lake Road & Lake Road/9P Intersections:**

According to the documents submitted, there is minimal impact to Stillwater roads. However, Cold Spring will be a main access road for the estimated 2,500 Construction Workers and the shuttles, and there has been no detailed analysis provided.

The Cold Spring Rd/Lake Rd intersection is awkward due to angle of intersection and curves and hills on both roads. Common sense points toward need to address this intersection.

In the 2003 Transportation Analysis Level of Service based on the previous 4 Phase build-out, **added a signal to Lake Rd/9P** in Phase 3, and then a **signal to Lake/Cold Spring** in Phase 4 (p. 175 in section 4.5 Transportation Volume 1 DEIS LFTC). Now that 4 Phases/Fabs are 3 Fabs for full build-out, these intersections definitely need further consideration.

Phase 3 in 2003 was "defined as development that generates 1,800 during the 'AM peak hour' of adjacent street traffic and 1,875 during the 'PM peak hour' (p. 177, 2003). Current traffic projections using the "factor of 0.8", show 2,034 AM and 1,974 trips for PM (p. 26 SSDEIS Appendix G Traffic Impact Analysis, 3/1/13). Current figures are in excess of the Phase 3 thresholds.

Then if eliminate the 0.8 factor, traffic projections increase to 963 current employees AM plus the proposed 1,580 = 2,543 & in PM, 935 plus 1,533 = 2,468. These figures are now in excess of 2003 Phase 4 thresholds of 2,400 AM and 2,500 PM! There is no mass transit, most vehicles I've observed entering or leaving have only one occupant, and most people prefer the flexibility and control of traveling independently and alone.

I did not see "**applying a factor of 0.8** to account for fluctuations in schedules" (p. 26, 2013) of workers in the 2003 Analysis. Does this mean that 20% of the workforce is not at work? So, employees will be on vacation or otherwise off site 10 weeks/year? (52 weeks/yr x .2 = 10.4 weeks/yr). Hmm...

- **Air Emissions** - prevailing winds come from west and north, so Stillwater is downwind from factory. The levels of Chlorine, Fluorines, and particulates (both 2.5 and the even smaller 10) are pushing the maximum allowable. Why all the different time segments - maximum hourly, annual hourly, maximum 12-hr, 24-hr and 1-month! Then lbs and tons per year!

If hourly is maxed, shut down process so that the daily or annual average is reduced? Is this manipulation allowable and acceptable?!

In the 2008 SFEIS for 3 Fabs, the numbers are significantly less (Table 4, p. 15, Appendix E Air Permit Application), and there are actual Maximum Hourly Concentration Data for each contaminant based on the Receptor Grid with Topographic Data. This information is missing from current Appendix D, Summary of Emission Point Modeling.

Why such a dramatic increase of contaminants? Is there a remedy - more efficient scrubbers, oxidizers, stack dimensions, grade of chemical?

Applicant has provided an Appendix C to Appendix D, Fluoride Air Quality Standard from DEC. In section 257-8.3, Standards, there are regulations about how much fluorides in parts/million can be eaten

4/6/2013

by "grazing ruminants" - cows, horses, sheep, deer, etc. Stillwater has horse, dairy and small farms and an Agricultural District. This is a concern! Effects include damage to teeth and bone density which negatively affect animal health, vitality and longevity! attached two articles that I found that discuss some of this. One quite old before more stringent controls, but the effects remain the same.

- **Visual Impact** - in 2003 DEIS, Stillwater had 4 locations investigated - Snake Hill, Lake Road Condominiums (Saratoga Ridge), Grace Moore Road, and Yunch Road. This time, just Snake Hill and Grace Moore Road. What about Brown's Beach, Saratoga Lake Golf?

Stacks are definitely visible from Snake Hill and shore and ridge properties along lake. Factory view is usually not a positive for real estate value. It is important that the public be aware of this and acknowledge and accept the effect of the visual impact.

Could an Alternative location eliminate visual issues?

- **Water, Sewer, Natural Gas, Electric** - use of basically all capacity for the rest of LFTC and Stillwater along Cold Spring/Elmore Robinson corridor. Applicant proposes running another sewer line in ROW next to existing sewer line for 8. Will there be room for anything else? I agree with Bob Barsheid's comments in his e-mail of

Comments, Questions, and Suggestions on PDD Amendments Fab 8.2

Submitted by Carol Marotta, Stillwater Planning Board

Proposed Amendment to: R. 1. Maximum building height – “building roof top appurtenances not to exceed 125 feet above ground level in Development Area 1” is proposed amendment to increase allowable height from building height of 110 feet. These approximately 22 stacks appear as a solid mass when viewed from a distance.

The new proposed **Location of 8.2** is pushed right up against the buffer border and located so that the topography slopes away site. This will be a perfect conduit for the operational, as well as construction noise, to fall down the ravines to negatively affect Saratoga Glen, Saratoga Ridge, and other residents along Cold Spring and 9P. Also, the screening and buffering of this location is dependent on the adjoining landowners (Mackay and other individual lot owners) to not remove the trees on their property.

If 8.2 were relocated more like the fan design as originally proposed, that would site the Fab farther back. This would eliminate the visual impacts of higher stacks, and move the Fab away from edge and descending ravines to lessen noise impact. Figure 3, Balloon Location Map, in Appendix E, Visual Impact Analysis, distinctly shows how the ravines fall away from site and provide opening for both more visual and noise impact. By relocating the Fab to previous location, this may even provide room for an earthen berm to be constructed to further isolate the site from existing residents and the undeveloped R-R property across Cold Springs Rd from site.

Regarding the **Visual Impact**, the additional enlargements of visibility at Snake Hill and Riley Cove are eye-opening. I take issue with the statement that “visibility of rooftop appurtenances [factory emission stacks] ... will not have a detrimental effect on the perceived beauty of Saratoga Lake ... nor ... impair quality of the lake environs or cause the diminishment of public enjoyment or appreciation of the resource”. The view of a factory (not just stacks, but entire roof as illustrated on Figures 7D and 8D) definitely has “a detrimental effect on the perceived beauty of a place” (NYSDEC Visual Policy). No one asks for a factory view for a lakeside or lakeview home, nor do recreational boaters.

Additionally, I was driven along 9P heading south along the lake with the area of trees in my sight based on Figure 8B Project Visualizations at Snake Hill, in Appendix E, Visual Impact Assessment. The Fab will definitely be **visible** to property owners and lakeside residents along 9P from **Snake Hill to approximately Luther Road**. It is also very probable that it will also be visible from **Browns Beach and Make Your Own Way**. Additionally, views were only taken from lake level, while many homes are elevated above the lake on ridges, so that this increased height will definitely “impair” their viewshed and have a “detrimental effect” on their property values.

This amendment is directly tied to the SSDEIS comments on Alternative Designs (pp. 48-50) on why need proposed "rectilinear orientation" (all Fabs in a straight line) is "necessary". Moving the Fab more southerly (similar to original fan layout) would have "significant operational disadvantages and drive significant cost increases without benefit", so was "less desirable". Further states that the Alternative "would be no more protective of the environment than proposed".

However, the Alternative Design (slide south more to original location) would be *more protective* to environment:

- **eliminate Visual issues** by moving Fab away from edge and the descending landscape
- positively affect the noise issue by **minimizing sound**-travel down ravines
- provide area to build **berm to further protect visual and sound effects** from negatively affecting Stillwater residents. This was done with 8.1 in Malta, and Ed of CT Male actually said at a Stillwater PB meeting that he "wished they could build a berm".
- extra dirt used for berm **reduces the need for such built up elevation and massiveness of the Temporary Parking Lot**, eliminating visual issues on Cold Springs Rd.

I also wondered:

- how was Grace Moore Road chosen? At this location, there is a 10 foot rise across Lake Road (CR 76) topped with white pines that appear to be toward end of their life cycle (thinning out). Was the balloon seen between the trees?
- did analysts drive around looking for the balloons to be visible, or just chose spots?
- only 2 locations were selected in Stillwater? Malta has 12?
- will Fab be visible from Saratoga Lake Golf Course (club house sits up high)?
- visible in Saratoga Glen or Saratoga Ridge? - **Figure 3** (in Figures section) shows these neighborhoods, as well as lakeside properties along 9P, in the same visual plane as Fab 8.2.
- Will Fab be visible as drivers turn up Lake Rd from 9P to enter Stillwater?

The entire **Visual Analysis is based on the existing vegetation** (white pine, hemlock and birch) hiding the massive Fab. However, trees reach end of life and die, or property owner decides to remove for development. Then Fab is no longer hidden. This is forever. So -

Can requirements be included in Site Plan to to mandate maintenance and replacement of Official Buffer trees, and also those hiding the proposed Fab on adjoining lands?

A **Bare Earth Simulation** was done for Round Lake Preserve (part of the revisions to SSDEIS). This shows how the Fab would appear with none of the existing vegetation. I would suggest that this same simulation be done from **Snake Hill** (a unique and historic geographic feature) which would also illustrate the effect on rest of Stillwater shoreline. Additionally, **9P/Lake Road intersection** may be a possible location as well; what view do we want to greet people entering Stillwater? Saratoga Lake is classified by the DEC as a Class A waterway, while Round Lake is Class C. Doesn't Saratoga Lake rate this analysis?

This would let residents and Town leaders see how it could definitely appear when trees die or are removed for future development of non-Fab properties that are currently the buffers.

Proposed Amendment to section W. Mitigation b. Additional Off-Site Mitigation:

Applicant proposes to delete Exit 11a and replace with proposed off-site modifications to existing intersections and roundabouts.

Exit 11a should remain as the goal. It was part of original plan for its ability to take traffic directly from I-87 to the Campus without negatively impacting local roads. Proposed modifications max out intersections and are not effective longterm solutions.

Routes 9/67/Dunning Street Roundabout – this is a vital intersection for residents to reach their homes and services. Additional new-built lanes for right turns onto and from Dunning St from and onto Route 9 north are proposed. However, they both require property from existing businesses whose properties would be significantly impacted. So, this probably is not realistic, and will not happen.

So then there is the talk of using Hemphill Place and the future connection to CVS as substitutes. If this is being considered, then these intersections need to be analyzed. Hemphill is already used to avoid the roundabout. Will there be another roundabout here to facilitate traffic being able to get onto Dunning?

Again, this proposed Amendment is directly related to the SSDEIS as the proposed traffic mitigation is discussed in Appendix G of the document.

The Revised Appendix G, **Traffic Impact Analysis**, describes Construction Worker, and then Fab employee, Traffic on Cold Springs Road. The **9P/Lake Rd/Cold Springs Rd intersection** is not conducive to high volumes of traffic due to hill with speeds in excess of what posted, angled intersection, and then very close together intersections (including Stewarts) negatively impacting stacking and ability to make turns. It doesn't matter what time it is, it is awkward and therefore not safe as currently configured. What is the Summary of Accidents for this intersection?

Trip Distribution Figure 3.3 projects that 8% of Fab 8.2 will use this Cold Springs Rd intersection. So during AM peak (7-8 am), 8% of the 2,034 trips equal 163 vehicles, or approximately 3 vehicles/minute! PM peak (4:30-5:30 pm) would be 158 vehicles, or approximately 2 ½ vehicles/minute. However, Figure 3.4 only shows 90 vehicles AM Peak and 80 vehicles PM Peak. **Why the discrepancy?**

However, there are also the "shift and non-traditional workers" who will work 6 am to 6 pm, so these people will be arriving and leaving during the same time frame. So with "1,674 trips (837 entering, 837 exiting)" (p. 28) at both 6 am and 6 pm, 8% of this is 134 vehicles. ½ traveling to and ½ from the site, so that there will be conflicts due to intersection configuration.

So, in reality, based on human nature and the demands of the workplace, it is **highly likely that all of the traffic will actually be occurring at roughly the same time.** Regular workers arrive earlier or stay later which overlaps with shift workers. Then shift workers are running late, work overtime, or leave late due to a variety of situations.

PDD Amendments can only be discussed, and then legislated, in tandem with SSDEIS.

Comments, Questions, and Suggestions on Fab 8.2

Construction Logistics Site Plan Amendment Application

Batch Plant needs to be required. SSDEIS states, "A batch plant is also proposed for Fab 8.2." (p. 22). However, in the Narrative for Construction Logistics Site Plan Amendment Application, it states, "option to use a concrete batch plant" (p. 1). Having Batch Plant on site, keeps concrete trucks off the roads and out of traffic. It was used for 8.1, and should be for 8.2. Even with precast concrete (also used in Fab 8.1), there will be the need for concrete for footings and floors.

Stillwater Planning Board is concerned with huge new Contractor Parking lot, and has requested from applicant view analysis from Cold Spring Road. They are also concerned with the size, height and amount of dirt being moved there. Also, there is another cut onto Cold Springs Road – so now 4 entrances to LFTC and Global site.

"AIR IS FLUORIDATED"

SOURCE: The Peninsula Observer | Jan. 27-Feb. 3, 1969 | By Ned Groth



* * * * *

(The author, Edward (Ned) Groth III, went on to serve as Director of Technical Policy and Public Service at Consumers Union, the publisher of Consumer Reports magazine)

WHEN THE TOPIC of fluoridation comes up, most people laugh at the poor unfortunate people who still think fluoridation is harmful. But most people don't know about the seriousness of fluoride air pollution. In places like the Bay Area (San Francisco), where the air we breathe is fluoridated, it may not be a good idea to add fluoride to the water supply.

Fluoride is an extremely toxic ion; near sources of fluoride air pollution, vegetation is destroyed, animals get sick and die, and people suffer eye irritation, respiratory problems, or more serious symptoms of fluoride poisoning. But fluoride can be dangerous even in very tiny amounts, because many plants and animals accumulate the ion in their tissues. Over several months or years, even the faintest measurable traces of fluoride can add up and cause harmful effects.

As a pollutant, fluoride has sufficiently severe effects, and is widespread enough, that the American Association for the Advancement of Science named fluoride the third most serious air pollutant in the country, (after SO₂ and ozone) in December 1966. More than fifty kinds of industries – including those producing aluminum, steel, phosphate, oil, brick, and glass – use raw materials containing fluorides or add fluorides to their products during processing. Coal, which is burned in massive amounts to provide electric power and heat, contains many fluoride impurities that are released to the atmosphere by burning.

In spite of its serious nature, fluoride pollution has received very little attention in the mass media, although the public has heard a lot about SO₂ and car exhaust.

Records of fluoride air pollution go all the way back to 1100 A.D., when a volcanic eruption in Iceland caused a crippling disease in sheep. The disease, which appeared every time the volcano erupted, was identified more than 800 years later as fluorosis, or fluoride poisoning, and traced to high levels of fluorides in volcanic gases.

The sheep got an overdose of fluoride in several ways; fluoride entered the bloodstream through the lungs, was absorbed and concentrated in the grass the sheep grazed on, and was present in the water as a result of the volcanic activity.

The teeth of fluoride-poisoned sheep became discolored and brittle, and their bones developed out-growths and deformations that made movement painful or impossible. Unable to eat or move around, most of the sheep died of starvation or thirst.

Industrial smokestacks, the manmade equivalents of volcanoes, have been held responsible for fluoride damage repeatedly since the early 1900's. The aluminum industry, which uses about 65 pounds of fluoride to produce a ton of metal, is a repeated offender.

Aluminum and Fertilizer Industries Offend

In Troutdale, Oregon, Reynolds Metals Co. has been successfully sued for damages to crops, cattle, and human beings. In the course of one such trial, it was revealed that the plant passed nearly two tons of fluorides into the air each day. Seven other aluminum companies joined with Reynolds in an attempt to overturn the court's decision, arguing that it was impossible to produce aluminum without emitting quantities of fluorides into the air. The companies lost their suit in the Ninth District Court of Appeals.

Another major source of fluoride pollution is the phosphate industry. Phosphate rock, which is the major source of phosphorus, phosphoric acid, and phosphate fertilizer, is three to five per cent fluoride. In Florida's Polk and Hillsborough Counties, seventeen plants are clustered around rich deposits of phosphate rock. Fumes from these plants have destroyed 25,000 acres of citrus trees, and damaged vegetation for fifty miles in all directions. Cattle in Polk County have suffered from fluorosis and died, and people have been afflicted with sore throats, burning eyes, nosebleeds and respiratory problems. Millions of dollars in damage suits have been filed against phosphate plants.

Fluoride has been implicated in several major smog disasters, such as the one that claimed twenty lives in Donora, Pa., in 1948. The town of Donora hired an investigator to determine the cause; he found evidence of acute fluorosis in all the deceased. Many herbivorous animals and most of the residents of the valley showed signs of chronic fluoride poisoning, including discolored teeth. Crops and inanimate objects also appeared to have been damaged by extreme levels of fluoride.

In the Bay Area too, fluoride air pollution is a problem. In 1962, two Contra Costa County cattle ranchers sued four chemical plants for damages to their herds. That same year, a report titled "Survey of Fluoride Sources in the Bay Area Pollution Control District" named 25 major plants with potential fluoride pollution problems, and termed San Jose "a city with known fluoride problem areas." The BAPCD's 1968 booklet, Air Pollution and the San Francisco Bay Area, takes special note of fluorides, "which pose a threat to both plants and animals."

The industries named as potential fluoride sources include several brick, ceramic, and tile factories, cement plants, the Standard Oil of California refinery in Richmond, the FMC phosphate plant across the Dumbarton Bridge in Newark, Pacific States Steel in Union City, Owens-Illinois Glass in Hayward, and Owens-Corning Fiberglas in Santa Clara.

Several plants that were not important in 1962 are of special interest today. The General Electric Atomic Power Equipment Plant at San Jose converts uranium hexafluoride into nuclear fuel for the AEC by driving off the six fluoride atoms. The Lockheed Missiles Space Co. in Sunnyvale operates a beryllium refinery, which is a potential fluoride source; Lockheed also has a rocket-testing center in the Santa Cruz mountains where liquid fluorine is burned with liquid hydrogen in experiments to develop a fuel to propel men to the moon. A more down-to-earth result of this combustion is the release of huge quantities of hydrogen fluoride, a very powerful acid, into the air.

Milton Feldstein, head of the BAPCD Technical Division, assured the Observer that there is no problem with fluoride pollution in the Bay Area, although he could not name any specific steps that had been taken to remedy the problems that had existed in 1962. He reported an extremely low level of airborne fluoride in San Jose, but admitted that the single air-sampling station in the city is upwind of potential fluoride sources. Feldstein agreed that even at the low concentration he reported, plants could accumulate enough fluorides to give potentially harmful doses to animals or people that ate a lot of them.

I asked Feldstein if any particular local industries, such as the glass industry, emitted significant amounts of fluorides. He hastily informed me that Owens-Corning Fiberglas is known not to be emitting fluorides.

Owens-Corning Fiberglas is being sued for \$1 million for polluting the air: the BAPCD has refused to release information on the contents of the plant's emissions, on the grounds that it might "infringe upon the company's patent rights."

Censorship of Fluoride Pollution News

Like the BAPCD, the news media have been very reluctant to embarrass industries by discussing fluoride pollution, both locally and nationally. For example, the town of Garrison, Montana, struggled for years to stop the Rocky Mountain Phosphate Co. from pouring huge volumes of fluorides into the air. Vegetation was wiped out for miles around the town, cattle were crippled and killed, and people were made so ill that many were literally driven out of their homes. Although many papers carried accounts of the town's problems, very few named the pollutant that was the scourge of Garrison.

After the smog disaster in Donora, Pa., a report blaming the deaths on fluoride appeared in *Chemical and Engineering News*, a trade publication of the chemical industry. But U.S. Steel protested loudly that their Donora plant was not emitting excessive amounts of fluoride, and asked the U.S. Public Health Service to reopen the investigation. Two months later, the PHS published an "official" report, stating only that a mixture of gases had been responsible for the deaths.

Shortly after it began promoting the fluoridation of water supplies, the USPHS stopped reporting levels of airborne fluorides. This silence continued until 1968, when pressure from a congressman (Rep. Ottinger of N.Y.) persuaded the USPHS to resume reports on fluorides.

From 1953 to 1957, the National Air Sampling Network reported on 31 major pollutants, including fluoride. From 1957 to 1968, only 20 were reported; fluoride was one of the omissions, in spite of the fact that during that period fluoride was responsible for more damage claims against industry than all twenty of the others combined.

Most Expensive Pollutant

Why has one of the most serious of all air pollutants been so conspicuously absent from most public information on smog that few people are even aware that fluoride pollution exists? Perhaps the answer lies in the fact that fluoride is potentially the most expensive pollutant industry has to deal with.

The industries with major fluoride pollution problems represent some of the most powerful interest groups in the country. Few competitive newspapers and magazines can afford to risk the loss of advertising revenue that might occur if such publications were to embarrass major industries with alarming stories about pollution; such stories might induce people to sue for damages, or result in pressures for tougher anti-pollution laws.

When the Harvey Aluminum Co., in The Dalles, Oregon, was sued for \$2.2 million by local fruit growers, the plant was served with a court order to control its pollution. The company appealed the order, arguing that it would cost \$15 million for effective fluoride pollution control equipment, and 100 new employees would be needed to keep the equipment functioning. Multiply an average cost of several million dollars by the huge number of plants emitting fluorides, and it is apparent that it would cost industry several billion dollars to eliminate fluoride pollution. The amounts paid out in damages each year are just peanuts compared to that cost.

Pollution hurts industry in other ways too; the government of Middlesex County, N.J., refused to approve the application of an aluminum reduction plant that wanted to locate there. Why? The government was not convinced that the plant could control its fluoride emission, which would have further poisoned the air of an already heavily industrialized area.

In a highly competitive economic system, many companies will fight for their very lives to avoid spending large amounts of money to control pollution. When plants are required to keep fluoride out of the air, they take the next cheapest route and dump it into the water. For example, at the G.E. Atomic Power Equipment Plant in San Jose, gaseous fluoride is passed through "scrubbers," which trap most of the fluorides in liquid solutions; these liquid wastes are then released into a sewer.

If neither the air nor the water could be used for fluoride disposal, what would industry do with its fluoride wastes? They might have to be buried in the desert, like San Francisco garbage. Some pollutants, such as SO₂, can be reclaimed and sold at a profit; but, before fluoridation, there was no use at all for fluoride wastes. Even with half the country fluoridated, the demand for fluorides is infinitesimal compared with the supply.

The question of fluoridation should be carefully evaluated in reference to what is known about fluoride pollution. Fluoride is added to water supplies, in amounts far larger than concentrations which are known to be harmful in air, in order to reduce cavities in children's teeth.

Many people might be puzzled by this apparent contradiction: fluoride in the air is a dangerous pollutant, but much more fluoride in the water is a beneficial additive. (From a medical standpoint, one fluoride ion behaves exactly like any other fluoride ion; once it gets into your system, the source makes no difference at all.)

The Public Health Service and the dental and medical professions have been supporting fluoridation for 17 years, and all of them assure us that it is perfectly safe. Yet it is possible that when all the sources are added up, people in some parts of the country may be consuming harmful doses of fluoride. Fluoride from industrial

pollution is present in many foods and in the air we breathe, and these amounts of fluoride should be measured before more is added to our diets. According to Dr. Emmanuel Landau, Chief Statistical Advisor to the Federal Air Pollution Control Center, such a study on people's total exposure to fluoride has never been done.

Because of the virtual blackout on mention of fluoride as a pollutant, many medical experts and public health officials are unaware of the seriousness of fluoride pollution. Professor Lewis Aronow of the Dept. of Pharmacology, Stanford School of Medicine, who is an enthusiastic supporter of fluoridation, has carefully evaluated the medical evidence on potential hazards of fluoridation. Dr. Aronow told me that he has never heard of a single case of injury from fluoride pollution in this country. It is quite possible that many other supporters of fluoridation are equally uninformed.

In localities where fluoride pollution exists, some people may be consuming fluorides in doses large enough that adding fluoride to the drinking water would result in giving many people harmful doses. Until problems such as this have been thoroughly evaluated, it might be a good idea to find methods other than fluoridation to prevent cavities.



○ **Aluminum Industry & Fluoride "Science"**

Mamulative techniques in defense of technology are limitless. The aluminum industry has refined an ancient one: the lie. The liar can patch up a balky technology faster than an engineer.

○ **Recent Study on Fluoride & Elk Makes Headlines**

As some of you may know, a recent study on fluoride and elk has been attracting quite a bit of media attention recently. The study, published in the journal *Ecosystems* by scientists at Montana State University, looked at the effects of excess fluoride on the lifespan of elk in Yellowstone National Park.

• **RELATED STUDIES:**

○ **Fluorine recovery in the fertilizer industry - a review.**

The fluorine compounds liberated during the acidulation of phosphate rock in the manufacture of phosphoric acid and fertilizers are now rightly regarded as a nuisance, and the industry is now obliged to suppress emissions of fluorine-containing vapours to within very low limits in most parts of the world. As with any pollution control operation, it is highly desirable for the operator of the fluoride scrubbing operation to find a use or market for the recovered fluorine to help defray at least partially the cost of the operation.

○ **National Research Council of Canada (1977): Environmental Fluoride**

National Research Council of Canada NRC. Associate Committee on Scientific Criteria for Environmental Quality. Environmental Fluoride 1977 by Deyon Rose & John R. Marter. National Research Council of Canada (NRC), NO. 16081 ISSN 0516-9014 The Associate Committee on Scientific Criteria for Environmental Quality was established by the National Research Council of Canada in response to a mandate

○ **Clinico-hygiene assessment of the combined effect on the body of vibration and fluorine.**

In the X-ray examination of vibration disease patients in fluorine mines, we observed a greater frequency of deforming osteoarthroses (DOA) of the elbow joints and osteochondrosis and spondylitis of the cervical section and of the lumbar section of the spine. The terms of development of vibration disease under the conditions in the fluorine mines were significantly shorter than those in the iron ore mines.

• **RELATED MISCELLANEOUS CONTENT:**

○ **The Fluoride Deception (Seven Stories Press, May 2004)**

The Fluoride Deception by Christopher Bryson (with a foreword by Dr. Thmas Clarkson Seven Stories Press, May 2004 May 2006 - A paperback edition of the book has been released! The new edition features an introduction discussing the recent developments on fluoride and bone cancer. To order a copy, [click here](#) Video Interview To watch FAN's

○ **Air Pollution from Stauffer Chemical Phosphate Plant**

Report from U.S. government agency documenting history of fluoride air pollution problems from a phosphate plant in Florida.

○ **TRI 2008: Rank by State for Hydrogen Fluoride Releases**

The following data comes from EPA's Toxic Release Inventory (TRI) for Hydrogen fluoride and Fluorine releases in 2008. "Total releases" include both water and air pollution. It's important to note, however, that not all industries or sources that release fluoride into the environment are included in the TRI. Listed below are 48 states.



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Fluoride

Fluorides are discharged into the atmosphere from the combustion of coal; the production of brick, tile, enamel frit, ceramics, and glass; the manufacture of aluminium and steel; and the production of hydrofluoric acid, phosphate chemicals and fertilizers.

Fluorides absorbed by leaves are conducted towards the margins of broad leaves (grapes) and to the tips of monocotyledonous leaves (gladiolus). Little injury takes place at the site of absorption, whereas the margins or the tips of the leaves build up injurious concentrations. The injury (*Figure 3*) starts as a gray or light-green water-soaked lesion, which turns tan to reddish-brown. With continued exposure the necrotic areas increase in size, spreading inward to the midrib on broad leaves and downward on monocotyledonous leaves.



Figure 3. Fluoride injury to plum foliage. The fluoride enters the leaf through the stomata and is moved to the margins where it accumulates and causes tissue injury. Note, the characteristic dark band separating the healthy (green) and injured (brown) tissues of affected leaves.

Studies of susceptibility of plant species to fluorides show that apricot, barley (young), blueberry, peach (fruit), gladiolus, grape, plum, prune, sweet corn and tulip are most sensitive. Resistant plants include alfalfa, asparagus, bean (snap), cabbage, carrot, cauliflower, celery, cucumber, eggplant, pea, pear, pepper, potato, squash, tobacco and wheat.



WC#6

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375 Bay Road, Queensbury, NY 12804
P: (518) 812-0513 F: (518) 812-2205
www.chazencompanies.com

Hudson Valley Office (845) 454-3980
Capital District Office (518) 273-0055

April 1, 2013

Supervisor Sausville and Town Board Members
Town of Malta
2540 Route 9
Malta, NY 12020

Re: *GLOBALFOUNDRIES FAB 8.2
2013 PDD Amendments & Second Supplemental Draft Environmental Impact Statement
(SSDEIS) Review
Town of Malta, Saratoga County, New York
Chazen Project # 31301.03*

Dear Supervisor Sausville and Town Board Members:

This letter is intended to serve as a supplement to our March 18, 2013 review letter regarding the above referenced application. We offer the following additional comments on the SSDEIS for the Town's consideration.

1. Provide a map or figure showing anticipated ground level concentrations of pollutants from Fab 8.2 similar to that provided in the original GEIS.
2. Prepare a continuous 3D simulation of the view of Fab 8.2 along the shoreline of Saratoga Lake from limits to be determined in consultation with Chazen, and a continuous 3D visual simulation from Saratoga Lake from limits to be determined in consultation with Chazen.
3. Address how visibility of Fab 8.2 would be affected if some or all of the trees between the Global Foundries site and Saratoga Lake were cut down.
4. Assess the benefits, impacts and feasibility of constructing a new road or making improvements to the existing roadways in the area east of Round Lake Road in the vicinity of Ushers Road or as an alternative to the Exit 11A connection.

Based upon the review completed, we recommend that the Applicant address these comments and provide updated information in subsequent submissions.

If you have any questions regarding the above, please do not hesitate to me at (518) 266-7305

Sincerely,

A handwritten signature in black ink, appearing to read 'S M Doty', with a long horizontal line extending to the right.

Sean M. Doty, P.E., LEED AP
Senior Project Engineer
Municipal Engineering

For: Joseph M. Lanaro, PE, M.ASCE
Principle, Vice President of Engineering

cc: Town of Stillwater Planning Board (via email only)
Town of Stillwater Town Board (via email only)
Town of Malta Planning Board (via email only)
Lindsay Zepko, T. Stillwater, Planner (via email only)
Tony Tozzi, T. Malta Planning Director (via email only)
Nancy Vlahos, T. Malta Senior Planner (via email only)
Floria Lowin, T. Malta, Planning Administrative Assistant (via email only)
Joseph Lanaro, P.E. Chazen, Principal, VP of Engineering (via email only)
Mark Schachner, Esq, Miller, Mannix, Schachner & Hafner, LLC T. Malta Attorney (via email only)
Leah Everhart, Esq., Miller, Mannix, Schachner & Hafner, LLC T. Malta Attorney (via email only)
Tom Peterson, Esq., T. Malta Attorney (via email only)
Stuart Mesinger, AICP, Chazen, Vice President, Land Development (via email only)
Mike Hartman, PE, Chazen, Senior Transportation Engineer (via email only)
Chad Cooke, Executive Director, Saratoga County Sewer District #1
Ed Hernandez, Executive Director, Saratoga County Water Authority
Mark Kennedy, Traffic Engineer, NYSDOT, Region One
Kevin Novak, NYSDOT, Traffic, Region One

**REVIEW OF SECOND SUPPLEMENTAL DRAFT ENVIRONMENTAL
IMPACT STATEMENT**

GENERAL DISCUSSION

I have reviewed the subject document and have several comments and questions. First I'd like to point out that I have been very supportive of this project since its inception many years ago. I have worked to enable progress. However, the current Fab 8.2 proposal is large in scope and I want to be sure any potential impacts on the Town of Stillwater (at full operational level) are considered. Certainly traffic impacts can be an issue. However; my major long term concerns are relative to air contaminates. Stillwater is directly downwind from this facility and therefore the major recipient of potential air pollution-forever. **There is no "do over" when Fab 8.2 is built. All issues must be considered now - not later.**

Chip Manufacturing Plants by their very nature generate significant amounts of water and air contaminates. It appears to me that Global Foundries is doing their very best to minimize pollution by agreeing to use Best Available Technology for pollution control. That said I believe there should never be a trade off of economic growth for "significant" changes in environmental quality. Clean air is not negotiable.

I list below my specific comments, questions and concerns. (This is a complicated project and therefore there may be errors in some numbers I quote. If so I will stand corrected..)

NATURAL GAS ISSUES

The original estimated total site consumption (for the 3 FABs) was 312,000 CFH. The new total is 691,561 CFH (120 % increase).

- 1) Why such a significant increase?
- 2) Will the proposed consumption leave any National Grid capacity for other future projects outside the Tech Park?
- 3) Can a "stub" gas line be located on Cold Spring Road for future connection to the proposed Stillwater Business Park?

WATER ISSUE

Original estimated total site consumption was 9.3 MGD. The new is 10.7. (15 % increase)

- 1) Why the difference?

ELECTRIC ISSUES

The original estimated total consumption was 120 MW. The new is 266 MW. (122 % increase)

1) Why such a significant increase??

SEWER ISSUES

The original estimated sewage flow was 9 MGD. The new is 10.7 MGD

1) Won't this flow totally consume the existing sewer capacity running down Fitch Road leaving no capacity for any future customers at the Stillwater Business Park?? This should be addressed now.

AIR ISSUES

1) The stacks are proposed to be raised by 15 feet. Is this a direct result of air modeling indicating potential air quality compliance problems or another reason??

2) Appendix C Section 7.0 "Unavoidable Adverse Impacts". There is no mention or discussion of increased air pollution. It seems there should be.

3) There is a proposed Continuous Air Monitoring program but it appears this is at the stacks only. I suggest there be similar monitoring "on the ground" at numerous locations in the "landing areas" down wind in Stillwater. Ambient air pollutant concentrations are very important to determine air quality compliance. On the ground continuous monitoring is critical.

4) Appendix D "Air Emission Modeling". There is no map showing locations in the Town of Stillwater that corresponds to the 30 page data table of modeling results. There should be. Where are the concentrations of air contaminants the greatest-close to the plant or several miles away?

5) Section 4.0 "Modeling Results". HF and Ntriflouride both exceeded air guidance concentrations (AGC) during initial modeling and needed "remodeling". To me this indicates a very thin margin for error. Specifically, page 1 of 30 shows Fluorides (1 month) at .79 micro grams per cubic meter or 96.32 % of allowed. It also shows the "allowed" level at .820 MG/CM. However the DEC regulations included in this Section (Subpart 257-8 Fluorides) lists the allowable Fluorides at.800 UG/CM (1 PPB). If the .800 is used in lieu of .820 the actual % of allowed level becomes 98.75 %. Close

enough that there is no room for any operational error which always occurs in the “real world”

SUMMARY REMARKS

For the Town of Stillwater views and traffic are important. However, air quality is critical. As noted in the report, final air modeling cannot be done until specific equipment is selected. However, the very nature of the air contaminants are some of the “worst offenders” from any manufacturing processes. Models are just that-models. When they show compliance very close to allowable limits a doubling of effort is warranted to “get it right”. Lastly, I believe “on the ground” continuous air monitoring in various downwind landing areas needs to be provided. Only this type of system would provide reliable data verifying compliance or noncompliance.

Robert Barshied, PE

Chairman Town of Stillwater Planning Board



SARATOGA COUNTY PLANNING BOARD

TOM L. LEWIS
CHAIRMAN

JASON KEMPER
DIRECTOR

March 26, 2013

Richard Butler
Town of Stillwater
PO Box 700
Stillwater, NY 12170

RE: SCPB Referral Review#13-24-PDD Zoning Amendment-Global Foundries
Amend the existing site plan approvals in Malta and Stillwater to allow implementation of the Fab 8 Construction Logistics Plan (e.g. concrete batch plan option, parking, site entrances.)
Stonebreak Road (Town of Malta and Stillwater)

Received from the Town of Stillwater Town Board on March 15, 2013.

Reviewed by the Saratoga County Planning Board on March 21, 2013.

Decision: Approve with Comment

Comment: The SCPB reviewed the additional information that was provided by the applicant subsequent to the last meeting. The board spent a considerable amount of time discussing the elimination of the proposed exit 11A for this phase of construction at LFTC. The board suggested that a possible alternative to Exit 11A, would be to construct a new road or make improvements to the existing roadways in the area to the East of Round Lake in the vicinity of Ushers Road. This would allow the traffic that is headed towards exit 11 and exit 12 to go southbound on I-87 to instead be diverted to the Exit 10 area thus alleviating congestion at Exits 11 and 12.

Handwritten signature of Jason Kemper.

Jason Kemper, Director of Planning
Authorized Agent for Saratoga County

DISCLAIMER: Recommendations made by the Saratoga County Planning Board on referrals and subdivisions are based upon the receipt and review of a "full statement of such proposed action" provided directly to SCPB by the municipal referring agency as stated under General Municipal Law section 239. A determination of action is rendered by the SCPB based upon the completeness and accuracy of information presented by its staff. The SCPB cannot be accountable for a decision rendered through incomplete or inaccurate information received as part of the complete statement.



SARATOGA COUNTY PLANNING BOARD

TOM L. LEWIS
CHAIRMAN

JASON KEMPER
DIRECTOR

March 26, 2013

Floria Lowin, Secretary
Town of Malta
2540 Route 9
Malta, NY 12020

RE: SCPB Referral Review#13-22-PDD Zoning Amendment-Global Foundries
Amend the existing site plan approvals in Malta and Stillwater to allow implementation of the Fab 8 Construction Logistics Plan (e.g. concrete batch plan option, parking, site entrances.)
Stonebreak Road (Town of Malta and Stillwater)

Received from the Town of Malta Town Board on March 15, 2013.

Reviewed by the Saratoga County Planning Board on March 21, 2013.

Decision: Approve with Comment

Comment: The SCPB reviewed the additional information that was provided by the applicant subsequent to the last meeting. The board spent a considerable amount of time discussing the elimination of the proposed exit 11A for this phase of construction at LFTC. The board suggested that a possible alternative to Exit 11A, would be to construct a new road or make improvements to the existing roadways in the area to the East of Round Lake in the vicinity of Ushers Road. This would allow the traffic that is headed towards exit 11 and exit 12 to go southbound on I-87 to instead be diverted to the Exit 10 area thus alleviating congestion at Exits 11 and 12.



Jason Kemper, Director of Planning
Authorized Agent for Saratoga County

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New York State Department of Environmental Conservation**Division of Environmental Permits, Region 5**

232 Golf Course Road, Warrensburg, New York 12885

Phone: (518) 623-1281 • FAX: (518) 623-3603

Website: www.dec.ny.govJoe Martens
CommissionerSent by e-mail - No hard copy to follow

April 16, 2013

Supervisor Sausville & Malta Town Board
Town of Malta
2540 Route 9
Malta, NY 12020**RE: Global Foundries, LLC Proposed Fab 8.2
Towns of Malta and Stillwater, Saratoga County
SEQR Lead Agency – Town of Malta Town Board
Second Supplemental Draft Environmental Impact Statement**

Dear Supervisor Sausville:

The Department of Environmental Conservation has reviewed the Second Supplemental Draft Environmental Impact Statement (SSDEIS) for the proposed Global Foundries Fab 8.2. We request that the following comments and changes be addressed in the Final SSEIS:

Air Emissions

The Summary of Model Inputs shows hydrogen chloride emissions of more than 13.49 tons per year. Emissions of over 10 tons per year will be subject to the Semiconductor MACT, which requires stricter controls on hydrogen chloride, hydrogen fluoride and chlorine emissions. It does not appear, in the SSDEIS that the modeling took Semiconductor MACT into account. Please revise the modeling to reflect inputs that are in compliance with the Semiconductor MACT.

Thank you for the opportunity to comment. After the Final SSEIS is accepted, please provide me with a copy.

Sincerely,

Marc S. Migliore
Deputy Regional Permit Administratorec: Tony Tozzi, Malta Planning Director
Mike Sundberg, NYSDEC DAR
John Munsey / C.T. Male Associates



SARATOGA COUNTY PLANNING BOARD

TOM L. LEWIS
CHAIRMAN

JASON KEMPER
DIRECTOR

March 6, 2013

Floria Lowin, Secretary
Town of Malta Planning Board
2540 Route 9
Malta, NY 12020

RE: SCPB Referral Review#13-22-PDD Zoning Amendment-Global Foundries
Legislation changes to the LFTC PDD #46 to enable the potential further build out of the Fab 8 campus to include Fab 8.2 in the Towns of Malta and Stillwater.
Stonebreak Road (Town of Malta and Stillwater)

Received from the Town of Malta Town Board on February 5, 2013.

Reviewed by the Saratoga County Planning Board on February 21, 2013.

Decision: Request Additional Information

The Saratoga County Planning Board has carefully reviewed the information submitted in relation to the PDD Zoning Amendment for Global Foundries.

There are two items being proposed in the PDD amendment that have inter community impacts as a result of the build out of Fab 8.2; the offsite traffic improvements and the extension of the smoke stacks above 15'. The Board requested that any information relating to the mitigation measures explored for mitigation of the height of the stacks be submitted to the SCPB for review.

A detailed traffic report was provided that identified 6 offsite improvements that need to be made if the Global Foundries project moves forward. There were several other intersections that were evaluated as part of the proposal. The SCPB is requesting that the applicant provide the before and after Levels of Service for those additional intersections that were studied as part of this project. The Board also recommends that addition intersections outside of the Town of Malta should be studied as there will be impacts to these intersections as a result of the construction of Fab 8.2.

A detailed traffic report was provided that identified six off-site improvements that need to be made if the GlobalFoundries project moves forward. The report also studied a total of 28 intersections and it included before and after Levels of Service for those additional intersections. The LOS information was updated as of March 1 following a review of that report by Chazen engineering. The County Planning Board is evaluating

and assessing the information pertaining to the additional intersections and our board will be providing further comment following our meeting of March 21, 2013.



Jason Kemper, Director of Planning
Authorized Agent for Saratoga County

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WC#11

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
REGION ONE
ALBANY, NY 12232
www.dot.ny.gov

SAM ZHOU, P.E.
ACTING REGIONAL DIRECTOR

JOAN McDONALD
COMMISSIONER

April 23, 2013

Mr. Anthony Tozzi
Building and Planning Department
Town of Malta
2540 Route 9
Malta, NY 12020

Re: Global Foundries – Fab 8.2
Town of Malta, Saratoga County

Dear Mr. Tozzi:

The New York State Department of Transportation (NYSDOT) has reviewed the February 27, 2013 Traffic Impact Study (TIS) completed by Creighton Manning Engineering. We have also reviewed the March 18, 2013 comments on the TIS in the technical review of the PDD Amendment & Second Supplemental Draft Environmental Impact Statement completed by The Chazen Companies. In addition, we have reviewed Creighton Manning's responses to comments to date.

We note and agree with The Chazen Companies technical comments in regards to the TIS with the addition/exception of the following:

- 1) We agree that a detailed review of accidents at the Route 9/Route 67/Dunning Street roundabout is necessary in light of the less than desirable performance to date. Recommendations for potential mitigation measures due to the anticipated increases in traffic while taking into consideration safety factors, including vehicular speeds and right-of-way needs, should be included in the analysis.

We note that the TIS considers alternative mitigation measures including the implementation of connector roadways around this major intersection. These connector roadways appear to be consistent with several recent Town of Malta planning documents. The Department sees the need for a more thorough "pro's & con's" evaluation of these roadway connections versus the proposed right-turn slip lanes at the Route 9/Route 67/Dunning Street intersection to be able to identify a preferred alternative.

Another traffic safety related element that needs to be considered to address speeds that will result from the proposed additional through-lanes eastbound and westbound at this intersection are the approach deflection angles into the roundabout.

- 2) Regarding the Curry Road/Round Lake Bypass intersection, the design of the roundabout is consistent with the design criteria in effect at the time and specifically accommodates tractor trailer trucks. Roundabouts as a form of traffic control at an intersection eliminate the potential for right angle accidents which are inherent at a conventional traffic signal controlled intersection.
- 3) We defer to the Town of Malta on the appropriate design build year and the methodology used for the trip generation estimate values.
- 4) We agree that the 2010 Highway Capacity Manual incorporates significant changes in the methodology for calculating delay and to date the Department has not issued an Engineering Bulletin requiring its use. We see a value in using the 2000 Highway Capacity Manual software on this specific project due to the many prior analysis completed for this and other projects in the Town of Malta. Keeping the highway capacity methodology consistent for this Supplemental Environmental Impact Statement will produce a clearer understanding of impacts resulting from the changes in the project and the transportation network operations since the original traffic impact studies.

Ultimately it is the responsibility of the SEQRA Lead Agency to approve the appropriate highway capacity methodology, and we have no objection to the Town of Malta approving the 2000 Highway Capacity Manual for use on this project. Any revisions or supplemental analysis to the Traffic Impact Analysis must be submitted to NYSDOT for review.

- 5) At this time the NYSDOT plan for ITS facilities does not include elements in the vicinity of Exits 11 and 12 of I-87, nor is it likely that real time monitoring of traffic flow at the Route 9 and 67 roundabout will be implemented in the near future due to our financial constraints.
- 6) In general, the Department concurs with the conclusions and recommendations of the TIS, including the six (6) identified mitigation measures. The NYSDOT also concurs, based on the analysis presented in the study, that the construction of I-87 Exit 11A is not warranted to accommodate the development proposed in the current PDD Amendment. The Department believes the ultimate need for Exit 11A is best evaluated as part of an amendment to Malta's Townwide GEIS. It would be through this mechanism that overall transportation needs in the area can be identified and compared to various improvement alternatives.

Appendix 8 (Interstate and Other Freeway Access Control and Modifications) of the NYSDOT Project Development Manual should be consulted on the access modification process as it would relate to the addition of an Exit 11A on I-87.

- 7) We have been provided a copy of the March 26, 2013 Saratoga County Planning Board Referral Review (GML Section 239 review) which raises a conceptual new road improvement in the vicinity of Ushers Road as an alternative to be considered in light of the proposed elimination of the I-87 Exit 11A for this phase of development of the LFTC. The Department concurs with the conclusion in the TIS that the impacts of the current proposal can be mitigated with alternative measures in lieu of Exit 11A; measures that do not appear to have as significant cost and environmental impact implications.

Perhaps the alternative suggested by the County has some merit for consideration as part of the broader evaluation of Exit 11A as part of an update to Malta's Townwide GEIS rather than as part of the current PDD Amendment.

- 8) One of the six identified mitigation measures is the proposed modification of the Route 9/Route 67/Round Lake Bypass intersection with the addition of an eastbound lane. We had raised a question of how this proposed capacity improvement relates to the envisioned future westbound lane configuration through this intersection. A review of the design approval documents from the timeframe of this intersection's design was conducted and findings summarized in Creighton Manning's response to comments and in Appendix F of the TIS. Our previous comment regarding this proposed improvement has been adequately addressed.
- 9) The Mitigation Phasing and Conceptual Costs section of the TIS includes some preliminary identification of anticipated right-of-way needs, however we believe a more complete summary of specific needs, including the anticipated acquisition mechanisms, will need to be developed as the proposed improvement designs are progressed.

Other than the above noted comments, our review of the TIS did not yield additional comments beyond the scope of the technical review comments given by The Chazen Companies.

Please be advised that our review of this material is strictly from a traffic impact related standpoint. There may be other environmental impacts to address germane to the project under the jurisdiction of the Town of Malta as the SEQRA Lead Agency.

If you have any questions or would like to discuss this further, please contact me or Kevin Novak at (518) 457-5283.

Sincerely,



Mark J. Kennedy *For*
Regional Traffic Engineer

cc: Robert Cherry, Transportation Planning, NYSDOT R1 Planning & Prog. Mgmt., 6th Floor
Paul Sausville, Supervisor, Town of Malta
Joe Lanaro, The Chazen Companies
Mike Hartman, The Chazen Companies
Tom Johnson, T.R. Johnson Engineering
Wendy Cimino Holsberger, Creighton Manning Engineering
John Munsey, CT Male

Town of Malta

Town of Stillwater

April 23, 2013

Dear Town Board Members,

My name is Terri Korb and I currently live in the Town of Saratoga. I also own property in the Town of Malta and travel through the many roundabouts day after day. I moved to the Malta area 27 years ago for its simplistic charm and ease and continue to live in the area for the peace and tranquility of the lake, trees and rolling hills. Realizing many changes are beginning to take shape in our area, I feel compelled to share my thoughts and concerns with you.

I will start with the amendments proposed by Global Foundaries. My first concern is with the proposed additional 15' height of 22 new smokestacks, of which I am opposed. The neighborhood in which I live can already see the current GF facility and its smokestacks. I have attached pictures taken from Brown Road, Stillwater, NY. The once beautiful view of the Helderberg Mts. and nearby trees has become tainted by a sprawling white mass. It's hard not to notice the GF facility and smokestack plume with every ride to work or drive to town. I am concerned about the white mass not only doubling in size horizontally, but now also growing vertically as well. I hope GF will consider the following solutions and the towns consider proposing them and enforcing them.

1. Perhaps the top 30' of all buildings and roofs be painted green in color or covered with a colored material to better blend with the trees.
2. Perhaps a study be done to compare the benefits of the 15' additional height in comparison to the current height, as it is my understanding no test was done (or specks given) for the stacks that were originally accepted. Is the additional height truly necessary? If the answer is yes, then...
3. Perhaps a written stipulation/contingency be added that if GF should close the facility or discontinue use of the stacks, GF must take the stacks down within a certain amount of time at GF expense.

My second concern is in regard to the traffic situation (aka 11A or not 11A). I am opposed to changing the roads/neighborhoods to accommodate more traffic to the Tech Park. I drive Dunning Road daily to and from work and altering the roundabouts *again* not only takes away from the current charm but also from the hours spent developing a specific code for a more “user friendly” Malta. Is it my understanding that a drawn plan for 11A does not exist? Should that not have occurred with the original proposal/acceptance? 11A is the only way to accommodate the needs of GF. My thoughts... begin the 11A process.

I will but list my other concerns, some of which I realize have been under consideration:

1. Safety/security concerns for a growing/developing town
2. Fire/emergency considerations for growth (even for higher GF smokestacks, whose \$\$)
3. Does GF have a time commitment to the area? My understanding is that there is a 7-12 year life for facilities such as GF. What happens to all the infrastructure should that occur? Should GF leave, what is the attraction to keep people in Malta? I understand a good number of workers are choosing not to live in Malta.
4. Should we continue to build more and more store fronts that may not be filled before we begin to fill the ones we have? Are the developers local? What is their commitment to Malta?

My final concern is that Malta may be moving too fast. Plan, yes, consider options, yes, but please slow down. I can't help but think of the Dr. Suess book, *The Lorax*. In fact, please watch the 2012 movie, *The Lorax*, for perspective if nothing else. GF is a multi-billion-dollar industry that currently has no written time commitment to Malta. How was Austin, Texas impacted when AMD moved out of their city? A great deal rides on speculation and trust and I can only hope GF doesn't let you down.

Thank you for your time and for your service to our community.

Terri Korb
17 Hill Rd.
Stillwater, NY 12170

From: Mike Hartman [<mailto:mhartman@chazencompanies.com>]
Sent: Sunday, April 14, 2013 6:08 AM
To: Wendy Holsberger
Cc: Anthony Tozzi <planningdir@malta-town.org> (planningdir@malta-town.org); 'Thomas R. Johnson, P.E., PTOE' (tomj@trjohnson-engineering.com)
Subject: FW: Global Foundries Status of Technical Comments

Wendy

I have gone thru the technical comments, CM's initial responses (4/03/13), our joint discussions of same, and CM's subsequent submissions of response materials. I have divided all comments into 3 categories: Response satisfies technical comment, Responses provided and are being reviewed, and Additional response or data is required.

I have also indicated any work required as a result of recent meetings, Town Board recommendations, or resulting from review of submitted data, etc.

Response satisfies technical comment

- #48 – internal traffic operation
- #49 – duration of peak hour counts at some locations
- #50 – Table 2.2 mistitled
- #51 – construction traffic
- #53 – build year
- #55 – booth count data
- #58 – HCM 2000 use, add v/c to LOS tables

Responses provided and are being reviewed

- #21 – provide background data and analysis for Hermes Road traffic diversion
- #52 – accident history
- #54 – summation of “other” trips
- #57 – 80% reduction factor
- #58 - full LOS analysis of mitigated intersections, roundabout entering and circulating volumes
- #59 – volumes using proposed connector roads
- #60 – LOS of full Exit 12 diversion to Exit 11

Additional response or data is required

- #17 – provide expected truck usage increase
- #19 – edit accident narrative
- #20 – develop phasing of mitigation in terms of trips
- #56 – edit narrative re “traffic directions”
- #61 – analysis of various build out stages of additional manufacturing/office space in LFTC
- #62 – chronology of steps necessary to progress Exit 11A – in layman's terms
- #63 – Required ROW for mitigations

Response required resulting from new comments/concerns

A – reconciliation of volumes between Fab 8.2 study and Round Lake Road Corridor study

B – impact on mitigation at Exit 11 of “A”

C – distribution of Fab 8.2 trips to Round lake Road intersections west of Exit 11

D – impact/mitigation resulting from “C”

E – traffic control required at intersections of connector roads with Rte 9 and Rte 67

F - did CM look at signal timing changes at 9/Malta Ave and at 67 East Line as mitigation (temporary or final)?

Based on our meeting with DOT on Friday, our recommendation to the Town regarding 9/67/Dunning will be the connector roads combined with lane designation changes and approaches changes at 9/67/Dunning. However we still need to have both alternatives vetted.

Please let me know if you feel I have mis-categorized any of the issues.

Wendy – I would like to get together on Tuesday to go over and close out any and all issues that we can. Also at least discuss, if not resolve, the RLR issues above.

Mike

Mike Hartman, PE

Senior Transportation Engineer

The Chazen Companies

547 River Street, Troy, NY 12180

518-266-7369

Fax: 518-273-8391

www.chazencompanies.com

From: Carol Marotta [cvonmarot@aol.com]
Sent: Sunday, April 07, 2013 11:48 AM
To: Anthony Tozzi
Cc: janaro@chazencompanies.com; Paul Sausville; Glenn Rockwood
Subject: Located Exit 11a Plans

I located Creighton Manning's plan for 11a in the 1/16/2003 DEIS for LFTC in Volume 1, section 4.5 Transportation pp. 167 - 177.

Figure 4.2 shows Step 1 (Initial Access for Phases 1 & 2) Improvement Scenario including the upgraded western entrance to Village of Round Lake, the By-Pass, "at grade intersection with Route 9 opposite Route 67", and then the main entrance to LFTC off 67 and connection to Stone Break Road. Phase 1 extensive improvements have been completed, as well as additional accommodations to the Village of Round Lake (upgraded eastern entrance), and hamlet of Maltville (dead end 67 to eliminate through traffic).

Figure 4.3 shows Step 2 (Final Access for Phases 3 & 4) Improvement Scenario. It includes 11a Interchange at the current most northwest location of By-Pass that then "**Four Lane Highway** between Exit 11a and LFTC site". This involved a "modified diamond interchange with Route 9, Route 67 and Access Road"; the intent was for the major 4-lane road to bring traffic directly into LFTC and was "expected to significantly reduce traffic volumes through Route 67/Exit 12/Dunning Street corridor" (p.173) and to get it off the local streets.

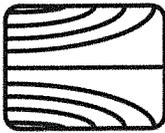
The multiple Roundabouts along Route 67 at Exit 12, including Dunning Street, were already in place for the above Scenarios. Level of Service at Routes 9/67/Dunning Street maintained A rating through Step 1 (Phases 1 & 2), with a Level C for PM Peak in Phase 2. After Step 2 Improvements (including 11a), Level of Service again was A for both peaks. This is significantly different from what is currently being proposed.

What is this 0.8 factor to reduce projected traffic in current SSDEIS explanation of traffic? It was not used in 2003. Global employees only work 80% of the time? They get 10 weeks off? Without that factor, the traffic is 20% higher - huge difference!

Please be courageous and advocate for what is needed.

Thank you -

Carol Marotta



CAPITAL DISTRICT TRANSPORTATION COMMITTEE

One Park Place, Main Floor · Albany, NY 12205-2676
www.cdtcmo.org e-mail:cdtc@cdtcmo.org

Phone: (518) 458-2161
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Mayor Scott T. Johnson

Executive Director
Michael V. Franchini

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Martin T. Reid

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Thomas C. Werner

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City of Troy
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Planning Commission
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Capital District
Transportation Authority
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New York State Dept. of
Transportation, Region 1
Sam Zhou

New York State
Thruway Authority
Michael Loftus

Non-Voting Members
Joan McDonald, NYSDOT
Brigid Hynes-Cherin, FTA
Jonathan McDade, FHWA

April 25, 2013

Mr. Paul Sausville, Supervisor
Town of Malta
2540 Route 9
Malta, NY 12020

Re: Global Foundries Fab 8 Traffic Impact Study
Comments

Dear Mr. Sausville:

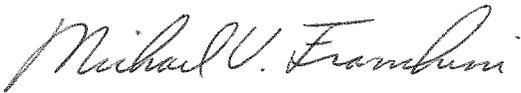
The Capital District Transportation Committee (CDTC) has partnered with the Town of Malta on several planning studies, most recently the Form Based Code which implements the Downtown Master Plan. Based on these recent planning initiatives, CDTC would like to offer the following comments on the Traffic Impact Study for the Fab 8 Campus of Global Foundries:

- The Traffic Impact Study included no discussion or specific alternatives related to pedestrians, bicyclists or transit riders. It is vital that Transportation Demand Management (TDM) initiatives (i.e. vanpools, carpools, local jitney or transit services, bicycle and pedestrian facilities, etc.) be a part of any mitigation package being considered by the Town. TDM initiatives have proven to be effective at reducing single occupant vehicle trips and motor vehicle emissions. They also support the Town's long term vision which includes offering residents and visitors multi-modal transportation options.
- The new Form Based Code and other town plans recommend a connector or new street network throughout the "downtown" area. As envisioned, this street network would integrate complete street, access management and traffic calming principles into its design. A major benefit of this network would be to provide alternative routes for travelers currently limited to using US Route 9 and the US Route 9/67 Dunning Street roundabout for every motor vehicle trip. The Town is encouraged to work with Global Foundries on the development of this street network as an alternative to adding capacity to US Route 9.

- With respect to US Route 9, several of the Town's planning studies call for the implementation of traffic calming on US Route 9 as the "downtown" area transitions from a strictly suburban, auto oriented environment to a more urban, multi-modal environment. The new Form Based Code specifically calls for the implementation of this vision in what is known as the Core area of US Route 9 or the segment from just north of Ellsworth Commons to Saratoga Village Boulevard. We encourage the Town to review the previously completed Linkage studies and other Town planning work as a means to evaluate implementation options for the Route 9 vision as they relate to the Global Foundries proposal. Traffic calming treatments considered in previous planning work include road narrowing, pedestrian refuge islands, speed reductions, high visibility crosswalks, on-street parking, etc. These ideas need more exploration before they can reach implementation stage.

We thank you for the opportunity to comment and look forward to working with the Town of Malta in the future.

Sincerely,



Michael V. Franchini
Executive Director

Cc: Anthony Tozzi, Town of Malta Building and Planning
Coordinator

From: Anthony Tozzi <planningdir@malta-town.org>
Date: May 7, 2013, 2:42:12 PM EDT
To: "'M. Elizabeth Coreno (LCoreno@saratogalaw.com)'" <LCoreno@saratogalaw.com>
Subject: FW: Balloon Viewing - Comments

FYI...

Anthony Tozzi

Director,
Building and Planning Department
Town of Malta
2540 Route 9
Malta, NY 12020
518.899.2685 office
518.461.2494 cell
518.899.4719 fax
www.malta-town.org

From: Roseanne Clavin
Sent: Tuesday, May 07, 2013 8:39 AM
To: Paul Sausville; Anthony Tozzi
Cc: Glenn Rockwood (grockwood@solutions2go.com); John Hartzell; Maggi Ruisi; Paul Sausville (engineer@nycap.rr.com); Peter Klotz; Tara Thomas
Subject: RE: Balloon Viewing - Comments

And:

Kathy Lawrenz 39 Manning Cove Able to see balloons – do not want GF in Malta

From: Paul Sausville
Sent: Monday, May 06, 2013 6:40 PM
To: Anthony Tozzi; Roseanne Clavin
Cc: Glenn Rockwood (grockwood@solutions2go.com); John Hartzell; Maggi Ruisi; Paul Sausville (engineer@nycap.rr.com); Roseanne Clavin; Peter Klotz; Roseanne Clavin; Tara Thomas
Subject: RE: Balloon Viewing - Comments

Tony

Add to your calls---

A call from Mrs. Whalen of Riley Cove who said the balloons were barely visible.

Paul

Paul J. Sausville, Supervisor

*Town Of Malta
2540 Route 9
Malta, New York 12020
899-3434*

This message is intended only for you. It is a personal note, or it contains information that is confidential or privileged. Thank you for not copying this or forwarding it to others without first discussing this with me.

From: Anthony Tozzi
Sent: Monday, May 06, 2013 5:52 PM
To: Roseanne Clavin; Paul Sausville
Cc: Glenn Rockwood (grockwood@solutions2go.com); John Hartzell; Maggi Ruisi; Paul Sausville (engineer@nycap.rr.com); Paul Sausville; Roseanne Clavin; Peter Klotz; Roseanne Clavin; Tara Thomas
Subject: RE: Balloon Viewing - Comments

Here are comments I've received, either via email, by phone or in person:

Phone message: I live in Saratoga and the visual impact is "nothing serious" (unanimous).

Phone message: I don't feel that the view of the proposed GF plant is "not much of an impact" (unanimous).

Phone message: There is "little impact" (Abe Friedman).

Phone message: "The balloons appear significantly above the tree lines, and I feel this is a major visual impact. I live on Hill Road. I prefer to have them not there, particularly due to the emissions. I live on a ridge that looks onto the GF site (Paul Murphy)."

Phone message: "I viewed the GF site from my boat on the Lake. I was over near Snake Hill and I was not able to see any balloons."

In person: (a Stillwater resident on the tour who lives on Snake Hill Road, and his wife): Their general impression was that they did not want to see the proposed Fab, but in a conversation with Stu indicated that if that side of the building was painted in a darker color, it would help to camouflage it. They seemed more concerned about potential emissions.

In person: (A Stillwater resident who was on the trip) – was concerned about air emissions. Indicated that the site could probably be seen from higher vantage point when we were near Fitch Road in the Town of Saratoga.

Email: "Why is it not scheduled when the boats are seaworthy? Can it be rescheduled in a month when the lake is an appropriate depth and the view is 'seeable' from the lake? (Dr. Salvatore).

Email: We took our boat out from the South Shore and when parallel to Snake Hill the balloons were barely visible above the trees. I don't think there will be much if any visual impact from the building. If there is concern what has been done on Long Island with cellular towers is to make them look like trees. The top of the structure can be painted light blue to blend with the sky or a camo configuration to blend with the trees. (Neal Cramer).

Email: Balloons – no problem – minor impact (Edward Dweck).

Email: Hello,

Our opinion is that the smoke stacks would be offensive to us and we do not approve of increasing the height of any of them. We are also concerned about changes in our air and lake water quality and safety. We would like Global Foundries to address these issues before they build any smoke stacks. We feel that our quality of life is being compromised due to big business.

Sincerely,

Tina and Bill Mott

Anthony Tozzi

Director,
Building and Planning Department
Town of Malta
2540 Route 9
Malta, NY 12020
518.899.2685 office
518.461.2494 cell
518.899.4719 fax
www.malta-town.org

From: **Bablin, Lynda** <lynda.bablin@fnfg.com>

Date: Mon, May 6, 2013 at 9:34 AM

Subject: Video of GF

To: Paul Sausville <psausville@malta-town.org>, Tara Thomas

<tthomas@malta-town.org>, Maggi Ruisi <mruisi@malta-town.org>, Peter Klotz

<pklotz@malta-town.org>, John Hartzell <JHartzell@nolanandheller.com>

Good morning all.

I just viewed the video on the Town's website as it relates to GF view from Saratoga Lake. My question is, why was the view so obvious in the pictures published in the Gazette, but even at 8X enlargement, nothing is visible on the video? Please advise.