STATE ENVIRONMENTAL QUALITY REVIEW (SEQR) ENVIRONMENTAL ASSESSMENT FORM SUPPLEMENT GLOBAL ALBANY TERMINAL

GLOBAL COMPANIES LLC - ALBANY TERMINAL 50 Church St Albany, NY 12202

DEC PERMIT APPLICATION #4-0101-00070/02003

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Attachment G	Global Noise Study
Attachment H	Photographs / Rendering of Truck Rack

ACRONYMS

- AGCs ANNUAL GUIDELINE CONCENTRATIONS
- APCD ALBANY PORT DISTRICT COMMISSION
- APRC ALBANY PORT RAILROAD CORPORATION
- CAA CLEAN AIR ACT
- CLCPA CLIMATE LEADERSHIP AND COMMUNITY PROTECTION ACT
- CO CARBON MONOXIDE
- CO₂ CARBON DIOXIDE
- CP RAIL CANADIAN PACIFIC RAILWAY
- CRRA COMMUNITY RISK AND RESILIENCY ACT
- DEC NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
- DMR DISCHARGE MONITORING REPORT
- DOS NEW YORK STATE DEPARTMENT OF STATE
- EAF ENVIRONMENTAL ASSESSMENT FORM
- ECL NEW YORK STATE ENVIRONMETNAL CONSERVATION LAW
- EIS ENVIRONMENTAL IMPACT STATEMENT
- EJ ENVIRONMENTAL JUSTICE
- EPA U.S. ENVIRONMENTAL PROTECTION AGENCY
- FEMA FEDERAL EMERGENCY MANAGEMENT AGENCY
- FRA FEDERAL RAILROAD ADMINISTRATION
- FRSA FEDERAL RAILROAD SAFETY ACT
- GCL GENSYNTHETIC CLAY LINER
- GHG GREENHOUSE GAS
- HFCs HYDROFLUOROCARBONS
- HMR HAZARDOUS MATERIAL REGULATIONS
- IFR INTERNAL FLOATING ROOF
- LDAR LEAK DETECTION AND REPAIR
- LWRP LOCAL WATERFRONT REVITALIZATION PROGRAM
- MOSF MAJOR OIL STORAGE FACILITY
- N₂O NITROUS OXIDE
- NAAQS NATIONAL AMBIENT AIR QUALITY STANDARDS
- NEPA NATIONAL ENVIRONMENTAL POLICY ACT
- NFPA NATIONAL FIRE PROTECTION ASSOCIATION
- NSR NEW SOURCE REVIEW
- NYCRR NEW YORK CODES, RULES AND REGULATIONS
- OSHA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
- PBS PETROLEUM BULK STORAGE
- PFCs PERFLUOROCARBONS
- PFOS PERFLUOROOCTANESULFONIC ACID

	ement
PHMSA	PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION
PM _{10/2.5}	PARTICULATE MATTER (MEASURED IN MICROMETERS)
PPP	PUBLIC PARTICIPATION PLAN
PSD	PREVENTION OF SIGNIFICANT DETERIORATION
PTE	POTENTIAL TO EMIT
RVP	REID VAPOR PRESSURE
SO ₂	SULFUR DIOXIDE
SEQR	STATE ENVIRONMENTAL QUALITY REVIEW (ACT)
SF_6	SULFUR HEXAFLOURIDE
SGCs	SHORT-TERM GUIDELINE CONCENTRATIONS
SHPO	NEW YORK STATE HISTORIC PRESERVATION OFFICE
SPCC	SPILL PREVENTION, CONTROL, AND COUNTERMEASURES
SPDES	STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM
STB	SURFACE TRANSPORTATION BOARD
TPY	TONS PER YEAR
TRAP	TRAFFIC RELATED AIR POLLUTION
USDO	UNIFIED SUSTAINABLE DEVELOPMENT ORDINANCE
USDOT	UNITED STATES DEPARTMENT OF TRANSPORTATION
VCU	VAPOR COMBUSTION UNIT
VRU	
WWTP	WASTEWATER TREATMENT PLANT

1.0 INTRODUCTION

Envirospec Engineering, PLLC (Envirospec), on behalf of Global Companies LLC (Global), has prepared a Long Environmental Assessment Form (EAF) and this attached Supplement to the EAF in support of proposed changes at its Albany Terminal (Terminal). Global is submitting an application to modify its Title V air permit (Application) that will afford it operational flexibility to address changing local and regional market conditions while at the same time significantly reducing the allowable Terminal throughput.

As further described in Section 2.3, this Project will include additional air emission control measures, installation of equipment to heat biodiesel, and changes to the truck and rail loading racks to reduce and improve operational efficiency (collectively, the Project). Although the Project requires Global to seek a modification of its existing Title V air permit which triggers a review under the State Environmental Quality Review Act (SEQR), it will not result in significant adverse environmental impacts to the community, including those relating to air quality, odor, noise and truck traffic. This Project EAF Supplement is intended to provide a comprehensive discussion of potential impacts under SEQR as discussed in detail below.¹

Global met with local community residents, leaders and elected officials prior to submitting its Application in accordance with a written public participation plan and will continue these outreach efforts throughout this permit review process.

¹ This document supplements and expands the information contained in the attached EAF form. References to the section(s) of the EAF supplemented by this document are included, as appropriate.

2.0 FACILITY DESCRIPTION

2.1 Facility Location (EAF Sections A, C, & E)

The Terminal is located on Church Street in a heavily industrial and commercial area of the City of Albany, NY. See Attachment A for a map of the area in the vicinity of the Terminal. The Terminal is located between New York Interstate I-787 and the Hudson River and is adjacent to the heavily industrialized Port of Albany and across the Hudson River from the Port of Rensselaer. The two Ports are collectively regulated by the Albany Port District Commission (APDC) as the Port of Albany. As described in a 2016 report prepared by the APCD (hereinafter the "2016 Port Annual Report"), "[t]he Port of Albany is a year-round, 24-hour facility spanning 300 acres on the Albany and Rensselaer sides of the Hudson River. . . . Operations include a range of tenant functions supported by critical multi-modal transportation resources" (APDC, 2016, p.7). The Albany County South Wastewater Treatment Plant (WWTP), which serves most of the City of Albany and the Port of Albany, is located immediately west of the Port of Albany and south of the Terminal (i.e., between the Terminal and the Port). The WWTP treats sanitary sewage and industrial wastewater.

There are many other industrial and large-scale commercial activities located in the Port of Albany in close proximity to the Terminal. These activities were most recently individually summarized in the 2016 Port Annual Report as follows:

- Gorman Brothers: A construction materials facility that includes the largest deep-water asphalt terminal on the East Coast, a rail terminal, asphalt emulsion manufacturing plants, and transportation facilities.
- Waste Management of New York: A solid waste transfer facility responsible for over 17,000 truck trips annually.
- W.M. Biers: A facility that provides locally produced landscape materials for commercial and residential customers, heavy-duty landscape equipment sales, as well as landscape and tree-removal services. Ten thousand trucks were loaded at the facility in 2015.

- Upstate Shredding/Ben Weitsman: An 18-acre facility that processes scrap metal and transports it to domestic mills and iron foundries with 13,680 annual truck shipments into and out of their Port facility.
- Mohawk Paper Mills: A global producer of high-performance papers for design and publishing. The company's Port warehouse and distribution center is home to a worldclass digital printing center. Mohawk Paper is used in publications with a world-wide reach, with 5,000 annual truck shipments of paper delivered throughout North America.
- Westway Feed Products: A facility that produces custom liquid animal feed supplements, fertilizer, and agricultural-based wastewater treatment solutions for farms throughout the Northeast U.S. with 3,131 truckloads of liquid product transported.
- Buckeye Partners: A facility permitted to store and transport crude oil, refined petroleum products (including asphalt) and ethanol. Products are delivered to and/or shipped from the Buckeye facility by rail, truck and vessel.²

The Port of Albany also is the home of a large-scale stevedoring operation and a major grain elevator, among other businesses (APDC, 2016).

Currently, the Port of Albany and adjacent industrial areas, including the location of the Terminal, are part of a major corridor for rail freight lines through the City of Albany that are operated by Canadian Pacific Railway (CP Rail), CSX Corporation, and short-line haulers. The Kenwood Rail Yard, which is owned by CP Rail, facilitates rail deliveries to a number of locations within and adjacent to the Port. A portion of the Kenwood Rail Yard is leased to Global and is used to offload product (herein referred to as the rail offload area). Beyond the Kenwood Rail Yard, CP Rail and CSX operate active rail lines throughout New York's Capital Region and in interstate commerce. The Port of Albany itself is served by the Albany Port Railroad Corporation (APRC), which is jointly owned and operated by CSX and CP Rail. The APRC provides on-site industrial track services and moves heavy lift and other commercial cargo through the Port using a 20-mile standard-gauge switching railroad, heavy lift, and on-

² Buckeye also maintains a petroleum bulk storage facility on the Rensselaer side of the Port along the Hudson River.

dock rail (APDC, 2016). Under federal law, discussed in Section 10.0 below, State and local control over the routine transportation-related activities of trains within the Kenwood Rail Yard are preempted by federal law.

There are no residences located immediately adjacent to the Terminal. However, the Ezra Prentice Homes—a 179-unit complex of garden apartments managed by the Albany Housing Authority—is located south of the Albany County WWTP along South Pearl Street and adjacent to the Kenwood Rail Yard. Albany's South End neighborhood is located northwest of the Terminal on the opposite side of Interstate 787.

2.2 Description of Terminal (EAF Section A)

The Terminal is an important hub for the receipt, storage and distribution of petroleum products and renewable fuels, such as ethanol, to customers in the Capital Region and beyond and is an important component of the energy infrastructure of the Northeast. Petroleum products have been stored at, and transported from, the Terminal since the 1920s. This use predates many of the uses in the surrounding area—including the Ezra Prentice Homes—by several decades. Global acquired the Terminal from ExxonMobil in 2007.

Currently, the Terminal is a 63-acre licensed, permitted and operational bulk storage and transfer terminal consisting of storage tanks and truck, rail and marine loading and offloading facilities. Terminal operations include storage, blending and distribution of various petroleum and related products including, but not limited to, refined petroleum products (e.g., gasoline, distillate, kerosene, heating oil), additives, ethanol, crude oil, and petroleum product/water mixtures. Products are delivered to and shipped from the Terminal by marine vessel, rail and truck and are stored in the tanks. Key components of the Terminal are described in greater detail below:

• **Bulk Storage Tanks:** The Terminal is the site of 16 bulk storage tanks ranging in size from 1.5 to 5.8 million gallons. Tanks used to store gasoline, crude oil, and ethanol are equipped with internal floating roofs (IFRs) to control emissions.

- Truck Loading Rack: The truck loading rack consists of eight loading positions. Product is pumped from the tanks to the truck loading rack where it is dispensed into trucks for delivery to retailers and other customers. Emissions from the truck loading rack are controlled by a vapor recovery unit (VRU).
- Rail Loading / Unloading: The rail loading rack consists of eight loading positions. Product is pumped from the tanks to the loading area where it is dispensed into railcars for transport. Emissions from rail loading are controlled by a vapor combustion unit (VCU). In addition, products are offloaded from railcars into the tanks at the rail offload area leased from CP and at a small spur located adjacent to the rail loading rack.
- Marine Dock: The marine dock is equipped with one position for loading or offloading products from vessels. Emissions from vessel loading are controlled by one of two VCUs.

Operations at the Terminal are governed by numerous federal and State laws and regulations, many of which require permits, licenses or other approvals. Of particular relevance to this submission, the Terminal is subject to a Title V air permit issued pursuant to 6 NYCRR Part 201. Global's current Title V permit requires compliance with federal and State air emission control requirements and includes limits on the amount of certain products that can be loaded at the racks. In addition, the VRU and VCUs must meet specific limits on the quantity of VOCs that may be emitted, measured in milligrams of VOC emitted per liter of product loaded (mg/L). A Site Plan showing the layout of the Terminal is included as Attachment B.

2.3 Description of Project (EAF Sections A, D.1, & D.2)

In 2015, Global submitted a timely and complete application to renew its Title V air permit to the New York State Department of Environmental Conservation (DEC) that did not seek any significant changes to the permit. DEC has not yet processed the renewal application. The Project is a modification separate from the previously submitted renewal. Global is requesting that DEC renew its existing permit and approve its request for a Title V air permit modification for the Project at the Terminal.

The Project will benefit the community and the environment through the installation of equipment to more efficiently capture and control emissions from the Terminal's loading operations. In addition, the Project will enable the Terminal to handle biodiesel consistent with the State's goals of increasing renewable fuel use, while reducing the allowable throughput at the Terminal by nearly one-third, or almost one billion gallons. At the same time, the Project will provide Global with the ability to adjust to changes in the market as well as enhance loading capabilities to provide better service to its customers, while significantly reducing the allowable crude oil throughout.

A more detailed description of the Project is set forth below.

Operational Flexibility:

Currently, loading of gasoline and ethanol at the Terminal is capped at each of three loading areas: the truck loading rack, the rail loading rack, and the marine dock. Loading of distillate products (including diesel fuel, heating oil and kerosene) is capped on a facility-wide basis. The Project includes the addition of a facility-wide cap that incorporates all refined products (including gasoline, ethanol, distillates, blendstocks, and biodiesel) as well as a reconfiguration of the existing sub-caps at each of the loading areas. This reconfiguration of the caps will allow flexibility in the type and volume of products distributed at the individual loading areas to adjust to changing market conditions, while ensuring against major changes in truck or rail traffic.

In addition to the refined product caps listed above, the current permit contains a separate cap on loading crude oil at the marine dock. As part of the Project, Global will reduce the cap on crude oil by over 75%, from 1,850 million gallons to 450 million gallons, while increasing the cap on loading refined products by 450 million gallons for a total reduction in facility throughput of approximately 950 million gallons.

A summary of the existing and proposed caps for refined products and crude oil is provided below. As part of the Project, Global is proposing to accept subcaps on the truck and rail loading racks and at the marine dock (for refined products) based on current allowable throughput levels at those racks. These subcaps are designed to limit potential truck, rail and marine traffic to current allowable levels.

Product Throughput Caps Before and After Project

Description of Cap	Current Permit Cap (gals)*	Proposed Permit Cap (gals)*
REFINED PRODUCTS		
Distillate Facility-wide Loading	229,300,000	see below
Truck Loading Gas/Ethanol	650,000,000	see below
Rail Loading Gas/Ethanol	150,000,000	see below
Marine Loading		
Gas/Ethanol/Distillate	450,000,000	see below
Overall Refined Products**	n/a	1,929,000,000
Sub-caps***		.,,,
Truck Loading Rack	n/a	880,000,000
Rail Loading Rack	n/a	300,000,000
Marine Dock (refined products)	n/a	900,000,000
CRUDE OIL		
Marine Dock (Crude Oil)	1,850,000,000	450,000,000
Total Facility Throughput	3,329,300,000	2,379,000,000

Notes:

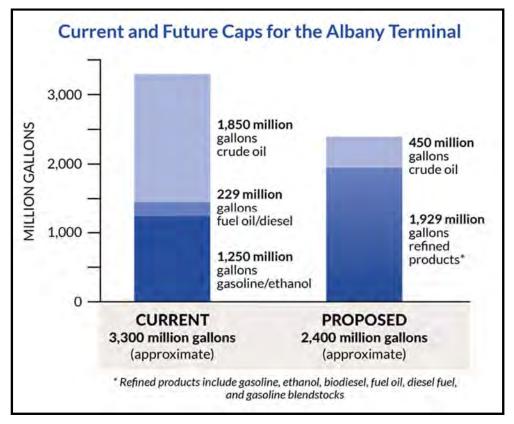
* Caps are maximum allowed throughput on a rolling 12-month basis.

Gasoline Blendstock Cap – Global is currently permitted to store up to 380,000,000 gallons of gasoline blendstock for gasoline blending, Under the proposed permit, Global would also be allowed load up to 380,000,000 gallons of gasoline blendstock. This blendstock will count against the total refined product cap. *Product loaded under each sub-cap is counted against the facility cap of 1,929,000,000 gallons. These caps limit

loading of refined products at the truck and rail rack to current allowable levels.

The bar graph below depicts the caps on refined product and crude oil before and after the Project.

Product Throughput Cap Summary



Loading Rack Modifications:

Currently, the truck loading rack is equipped with eight loading positions. Operation of the truck loading rack can become congested and is constrained during daily busy periods. The Project includes the addition of two loading positions to the truck loading rack to improve efficiency and reduce customer wait time and truck idling time. Although the rack change is not designed to increase the daily or annual throughput at the loading rack, the instantaneous flow at the rack will increase because of the additional loading bays.

The rail loading rack is equipped with eight loading positions. Since the rail loading area can accommodate up to fifteen railcars, loading all fifteen cars can require a locomotive to move the loaded cars out of the loading positions and move the empty cars into position. To improve efficiency and reduce locomotive use, the Project includes the addition of seven loading positions at the rail loading rack. The additional loading positions are not designed to increase

the loading rate at the rack but will allow railcars to be loaded more efficiently and eliminate the need for interim movement of railcars to load certain trains.

Enhanced Air Emission Controls:

Global will install additional air emission controls and accept strict uniform limits on all primary controls at the Terminal, consistent with its goal of improving operational flexibility and benefitting the community and environment as follows:

- Stack emission limits at the marine and rail loading VCUs will be lowered to 2 mg/L to be equivalent to the emission limit at the truck loading rack. This change will reduce the emission limit for the Terminal's existing primary marine loading rack from 3 mg/L to 2 mg/L. The emissions limit at the rail rack will be reduced from 10 mg/L to 2 mg/L. By accepting a strict emission limit of 2 mg/L across all primary emission control systems at the Terminal, Global can more easily move products among the various racks, providing flexibility.³
- A vacuum enhanced control system will be installed at the rail loading rack to ensure negative pressure loading, a change which will significantly reduce, if not eliminate, fugitive emissions from rail loading. Negative pressure loading was implemented at the marine dock in 2017. Permit conditions will be implemented as part of the Project that require the negative pressure loading at the rail loading rack and the marine dock for non-inerted marine vessels.

Biodiesel Handling and Storage:

Global is proposing to install equipment that will facilitate the handling and storage of biodiesel as follows:

 Install heating coils in Tank 30 and authorize storage of biodiesel with a maximum storage temperature of 120° Fahrenheit in Tanks 30 and 33.⁴

³ The existing backup marine loading VCU will remain permitted at 10 mg/L.

⁴ Biodiesel may solidify or become non-pumpable requiring heating to return it to a pumpable state for loading and storage. Tank cars carrying biodiesel are equipped with a jacket of noncontact piping that is located on the

 Install natural gas-fired steam boilers and oil heaters to heat railcars, Tanks 30 and 33, as well as associated product lines, as necessary, to manage biodiesel. The boilers will be housed in the existing Lube Oil Building. The oil heaters will be located in other existing on-site structures.

Crude Oil Restrictions and Throughput Reductions:

As previously noted, the Project will reduce the crude oil cap in the permit from 1,850 million to 450 million gallons per year; a 1,400-million-gallon decrease. This drastic reduction returns allowable crude oil throughput to pre-2012 levels. A permit condition will be added to limit the average Reid Vapor Pressure (RVP)—a measure of volatility—of crude oil to an annual average of 12.5 psi, with the point of compliance based on monthly tank samples.

2.4 Description of SEQR Process

SEQR requires government agencies issuing permits or other approvals to determine whether a Project will have a significant adverse environmental impact. The regulations distinguish among three types of actions for SEQR review purposes: Type I (actions listed in 6 NYCRR Part 617 that are likely to have a significant adverse environmental impact), Type II (actions listed in 6 NYCRR Part 617 that will not have a significant adverse environmental impact), and unlisted (actions that are neither a Type I nor a Type II action). The Project is an unlisted action under SEQR.

DEC has issued a pair of forms to be used to help the applicant assess the potential impact of its project—the short and long environmental assessment form. Global is using the long EAF—together with this Supplement—to provide important background information about the Terminal and the Project.

outside of the railcar and/or coils within the cars. The railcar's noncontact piping will be attached to a hose upon arrival at the Terminal where steam will flow around the railcar through the jacket of piping similar to an old fashion home radiator. The heating will return the biodiesel to a pumpable state, enabling it to be pumped to Tanks 30 and 33, which will be similarly heated by circulating hot oil through heating coils within the tanks. The boilers and heaters will not be used to heat crude oil or other products managed at the Terminal.

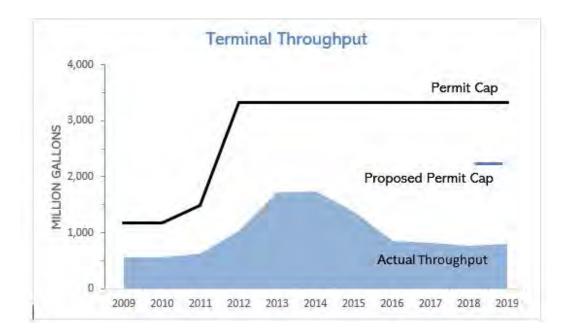
As articulated in the SEQR regulations,

The basic purpose of SEQR is to incorporate the consideration of environmental factors into the existing planning, review and decisionmaking processes of State, regional and local government agencies at the earliest possible time. To accomplish this goal, SEQR requires that all agencies determine whether the actions they directly undertake, fund or approve may have a significant impact on the environment, and, if it is determined that the action may have a significant adverse impact, prepare or request an environmental impact statement. (6 NYCRR § 617.1(c))

To determine whether a proposed unlisted action—such as the Project—may have a significant adverse impact on the environment, the agency must consider "the impacts that may be *reasonably expected* to result from the proposed action against various criteria that are considered "indicators of significant adverse impacts on the environment" (6 NYCRR § 617.7(c)(1)) (emphasis added). Of particular relevance to the Project, the agency must consider whether there will be "a substantial adverse change in existing air quality, ground or surface water quality or quantity, traffic or noise levels; a substantial increase in solid waste production; a substantial increase in potential for erosion, flooding, leaching or drainage problems" (6 NYCRR § 617.7(c)(1)).

The SEQR regulations do not specifically discuss how to determine the "baseline" for purposes of assessing whether there is a substantial adverse change to the environment resulting from a project. In the case of a "greenfield project" (i.e., a new project built on previously undisturbed land) assessing impacts is comparatively simple. However, in the case of an existing industrial facility that has served as a petroleum storage terminal for almost 100 years, the assessment is considerably more complex. Over time, the amount of activity at the Terminal (and the associated impacts from that activity) has varied based on market and other factors. The baseline for assessing whether the Project will have a significant adverse environmental impact must take account of these variations.

For purposes of assessing changes from the Project and whether those changes will have a significant adverse impact on the environment, Global has considered for "baseline" purposes both the range of allowable activity since shortly after it acquired the Terminal in 2007 and its past actual activity. A graph illustrating the Terminal's actual and allowable throughput from 2009 to the present is set forth below:



As this graph shows, both the Terminal's actual and allowable throughput have varied significantly over time based on market and other factors. In assessing whether the Project will have a significant adverse impact relative to past operations, these fluctuations must be taken into account. The baseline should not be dictated by a slowdown or spike in operations occurring at the time of the SEQR review.

Also, as previously noted, the SEQR regulations require consideration of "impacts that may be reasonably expected to result from the proposed action" (6 NYCRR § 617.7(c)). Impacts thus must be considered for SEQR purposes only if they can reasonably be linked to the proposed action under review. This requires an assessment of both actual and allowable activity before

and after a proposed project. If the impacts could have occurred during the course of normal operations before the change they cannot reasonably be linked to the proposed action.

Operations at the Terminal are governed by various throughput caps and other requirements in the Terminal's Title V air permit. As the graph above shows, the Terminal currently operates below these caps. Global thus could significantly increase the throughput at the Terminal now and remain below its caps regardless of whether it implements the Project. The Project calls for reducing overall Terminal throughput and reallocating the remaining throughput among the various products handled at the Terminal—an action that is not reasonably expected to cause impacts different from those associated with simply increasing operations under the current permit.

Because the Project is not designed to alleviate an immediate need, as would be the case if current operations were at or near the permit caps, it is difficult to assess what impacts could be *reasonably expected* to result from the proposed operational flexibility provisions. For instance, the current permit establishes a separate facility-wide cap that allows it to throughput up to 229.3 million gallons of distillate product. Under the Project, the existing distillate cap would be incorporated into the overall refined products cap. While Global has no business prospects that indicate the existing distillate cap will be exceeded, having the operational flexibility to load any refined product under the facility refined products cap would account for fundamental changes driven by the market or regulations that may occur in the future and change the landscape of petroleum distribution, such as increased demand for biodiesel or renewable diesel.

As discussed below, the Project will not significantly change activities at the Terminal relative to those already allowed under the Terminal's existing permits or in relation to past actual operations and will not result in significant adverse environmental impacts for SEQR purposes.

3.0 ZONING/LAND USE AND CONSISTENCY WITH LOCAL/REGIONAL PLANS

3.1 Zoning/Land Use (EAF Sections C.3 & E.1)

The Project does not impact the zoning of the site. Development in the City of Albany is governed by the 2017 Unified Sustainable Development Ordinance (USDO). The Terminal is located in the I-2 General Industrial District, which includes the Port of Albany. A copy of the zoning map is included as Attachment C. The stated purpose of the district "is to provide for industrial uses associated with the Port of Albany as well as those with greater noise, glare, or heavy traffic impacts in locations that are typically separated from nearby residential neighborhoods." USDO § 375-2(E)(2)(b). The USDO authorizes "heavy manufacturing" in the I-2 district, which is defined as:

The assembly, fabrication, or processing of goods and materials using processes that ordinarily have greater than average impacts on the environment, or that ordinarily have significant impacts on the use and enjoyment of other properties in terms of noise, smoke, fumes, odors, glare, or health or safety hazards. Examples include, but are not limited to: scrap metal processing facilities, battery, chemicals, machinery, plastics manufacture, and mining not otherwise prohibited in the City. . . . USDO § 375-6(B).

The processing of petroleum components to produce saleable products at the Terminal is a permitted heavy manufacturing use. Therefore, the Project does not impact the zoning of the site.

As part of the Project, Global is proposing to modify the existing Lube Oil Building to accommodate installation of the natural gas-fired boilers needed to heat biodiesel. This change may require a building permit from the City of Albany. This type of approval is a Type II action under SEQR (6 NYCRR § 617.5(c)(25)).

3.2 Consistency with City of Albany Comprehensive Plan (EAF Section C.2a)

The Project is consistent with the City of Albany's Comprehensive Plan, titled ALBANY 2030: The City of Albany Comprehensive Plan. The Comprehensive Plan includes an initiative to, "Determine requirements and investments to maximize the use of rail operations in support of the Port and examine potential for incentives that would encourage the use of freight rail rather than trucks." The Comprehensive Plan also includes suggested strategies and actions such as, "Leverage port assets and integrate with freight rail," and "Modernize the port to accommodate increased demand" (City of Albany, 2012, p. 111). The Project is consistent with each of these goals.

The Project is also consistent with suggested actions in the Comprehensive Plan. In particular, the Project "preserves industrial waterfront uses in the vicinity of the port to support future job growth and allow for future expansion if necessary" (City of Albany, 2012, p. 112). As discussed in Section 12.0 below, in assessing the Project, Global assessed implications of climate change and sea level rise. These considerations will factor into the design and construction of the Project. Consistent with 6 NYCRR § 617.7(c)(1)(iv), the Project does not create "a material conflict with a community's current plans or goals as officially approved or adopted" in the Comprehensive Plan.

3.3 Consistency with Local Waterfront Revitalization Program (EAF Section B.i.*ii*)

The Project is consistent with the City of Albany's Local Waterfront Revitalization Program (LWRP) adopted in conjunction with the New York State Department of State (DOS) for the preservation, enhancement, protection, development, and use of the State's coastal and inland waterways and adjacent waterfront land (City of Albany, 1991, sec. *Introduction*).⁵ Projects which may impact coastal areas or inland waterways must be reviewed for

⁵ The City of Albany began review of the LWRP as part of the Albany 2030: City of Albany 2013 Comprehensive Plan. To date, however, no changes to the LWRP have been made.

consistency with those LWRPs that pertain to territory within the project area. The Albany LWRP refines and supplements the State's Coastal Zone Management Program.

The City of Albany has adopted a LWRP containing its plan for Albany's Hudson River waterfront. The LWRP is designed to provide a framework for ensuring consistency between local, state, and federal policies and decisions. The Albany LWRP is divided into Four Sub-Areas—Patroon Island, Downtown, South End, and the Port. The Terminal is located wholly within the Port Sub-Area. The Port Sub-Area, which has access to the sea-has long been important to the City's development. As noted in the Albany LWRP, "Albany's port is the only upstate port with access to ocean-going vessels that operates ice-free, year-round. The City's later emergence as a highway and rail center, in part fostered by the attraction of the Port and its facilities, has further contributed to that development" (City of Albany, 1991, sec. II-4 (d)). The LWRP further states that the Port, as the largest industrial district in the City, is a facility of great regional importance handling the distribution of a wide range of products. The LWRP lists water-dependent commercial activities involving petroleum, automobile products, grain, molasses, wood pulp, scrap metal and other recyclable materials (City of Albany, 1991, sec. II-8(B)(4)). The proposed changes will have no effect on the local waterfront. Consistent with 6 NYCRR § 617.7(c)(iv), the Project does not create "a material conflict with a community's current plans or goals as officially approved or adopted" in the LWRP.

4.0 ENERGY USE (EAF Section D.2)

Although the Project will use energy to operate the negative pressure loading system, boilers, heaters and other ancillary equipment, it will not result in a "major change in the use of the quantity or type of energy" (6 NYCRR § 617.7(c)(1)(vi)). There are no significant adverse impacts related to energy use associated with the Project.

5.0 TRAFFIC ANALYSIS (EAF Section D.2)

The Project will not significantly impact the volume or type of truck, train, or marine traffic. The primary traffic-related impact of concern in the vicinity of the Terminal is the comparatively high volume of truck traffic travelling on South Pearl Street south of the Terminal in front of the Ezra Prentice Homes. Several recent studies, including one conducted by Global, show that the Terminal does not contribute significantly to traffic on this section of South Pearl Street. Although the Project calls for the addition of two loading positions at the truck rack, this change will not affect overall traffic volumes as it will not result in a daily increase in truck volume. With respect to rail traffic, the 1,400 million gallon reduction in allowable crude oil throughput will significantly reduce the potential number of crude oil trains. More generally, the Project will not have a significant adverse impact on rail or marine traffic as it does not increase the overall allowable throughput at any of the loading racks. To ensure against future traffic impacts, the Project includes throughput sub-caps at each rack to limit potential truck, rail and marine traffic to current allowable levels.

5.1 Truck Traffic

The Terminal and Port are located adjacent to Interstate 787, a main highway through the Albany area. The highway is connected to the NYS Thruway, located south of the Port. I-787 crosses South Pearl Street/Rt 32. The Ezra Prentice Homes are located on South Pearl Street/Rt 32, which is on the direct route from the south Port entrance to I-787. South Pearl Street is subject to considerable truck traffic. In addition to the south Port entrance, less than one mile south of Ezra Prentice on South Pearl Street is the Sierra Processing/Waste Connections Materials Recovery Facility, which receives mixed recyclable solid waste (paper/cardboard, glass, plastic, metal) by truck from homes and businesses and separates it for recycling purposes. Numerous other businesses located on South Pearl Street between Ezra Prentice Homes and the Normanskill to the south have the potential to generate heavy truck traffic in front of Ezra Prentice. Additional businesses located beyond the Normanskill on River Road in the Town of Bethlehem also use South Pearl Street.

Several studies have been conducted to assess traffic impacts on South Pearl Street both generally and in relation to the Port. The first such study was prepared by Creighton Manning Engineers on behalf of the Port of Albany (Creighton Manning, 2016). Automatic traffic recorders were installed at five locations around Ezra Prentice, including one at South Port Road east of South Pearl Street to capture traffic entering and exiting the Port to the south of Ezra Prentice. The resulting memorandum, dated October 31, 2016, "summarized the existing truck traffic and truck travel patterns in the south Albany area near the Port of Albany" looking specifically at the number of heavy vehicles traveling on South Pearl Street adjacent to Ezra Prentice. Among other things, the study found that approximately 1 in 6 heavy vehicles on South Pearl Street adjacent to Ezra Prentice Homes is traveling to and from South Port Road. The study did not specifically address the impact of truck traffic to and from the Terminal on South Pearl Street in front of the Ezra Prentice Homes or on the South End neighborhood generally.

More recently, the Capital District Transportation Committee commissioned a study of truck and other heavy-duty vehicle traffic along South Pearl Street in the vicinity of the Ezra Prentice Homes. The final study—entitled *City of Albany: S. Pearl St. Heavy Vehicle Travel Pattern Study* was issued in August 2018 and concluded that most of the traffic affecting Ezra Prentice originated from or was traveling to destinations along South Pearl Street. (Capital District Transportation Committee, 2018, p.5).

The study was conducted with traffic counts and a license plate survey. New York State Department of Motor Vehicles registration data was used to distinguish between different vehicle types. The study concluded, among other things, that: (1) 81% of northbound heavy vehicles that pass Ezra Prentice originate between Ezra Prentice and South Port Road (encompassing, among other things, the Port and the Waste Connections/Sierra Processing facility, which is located north of South Port Road); (2) only 3% of southbound vehicles that pass Ezra Prentice originate from Church Street East of 787 (i.e., the area in the immediate vicinity of the Terminal); (3) 62% of southbound heavy vehicles originate from the 787 southbound access roadway/Green Street; and (4) 35% of southbound heavy vehicles

originate from South Pearl Street, north of 1st Avenue (i.e., within the City of Albany but outside the study area). A map of the study is included as Attachment D along with the monitoring locations and northern and southern traffic patterns as presented in the study. The study data confirms that trucks entering and exiting the Terminal are not contributing significantly to heavy-duty truck traffic on South Pearl Street in front of Ezra Prentice.

To further confirm that Global trucks do not contribute significantly to transportation impacts on South Pearl Street in the vicinity of Ezra Prentice, Global commissioned its own study of truck traffic entering and exiting the Terminal, entitled *Global Company LLC, Truck Route Study.* The study report, which was completed by Alta Planning and Design in 2019, is included as Attachment E. A license plate survey was conducted to confirm the route of trucks entering and exiting the Terminal. The purpose was to determine how many trucks from the Terminal contributed to local traffic on South Pearl Street. License plate information was collected over two 12-hour periods between the hours of 4:00 a.m. and 4:00 p.m. at the Terminal and at Ezra Prentice. Out of 419 trucks documented on South Pearl Street during the study period, less than 6% were attributed to the Terminal. Out of 286 trucks recorded at the Terminal during the study period, less than 10% traveled to South Pearl Street. The Global study confirmed that truck traffic into or out of the Terminal does not significantly contribute to the traffic at Ezra Prentice.

Although the Terminal contributes comparatively little to the truck traffic on South Pearl Street near Ezra Prentice, Global is committed to reducing the potential for traffic-related impacts to Ezra Prentice associated with its activities. Consistent with that commitment, Global has contacted the owners/operators of trucks entering and leaving the Terminal and asked them to bypass South Pearl Street and use alternative routes whenever possible.

Going forward, the Project is not expected to result in significant adverse traffic impacts relative to current operations. Although the Project calls for the addition of two loading positions to the truck rack, the additional loading bays are designed to alleviate short-term congestion at the truck rack which currently results in long wait times and increased idling times for vehicles during certain times of the day. Additional truck traffic is not anticipated as a result of the Project. The shift in throughput to refined products is a result of market changes and the need for product throughput flexibility. It is not expected to result in an increase in truck traffic. Moreover, the total throughput at the truck rack will continue to be limited at the existing allowable level of 880 million gallons.

In short, the studies show that the Terminal does not contribute significantly to truck traffic in front of Ezra Prentice, and the Project will not change that fact. More generally, the Project will not significantly change truck traffic to and from the Terminal.

5.2 Rail Traffic⁶

Rail traffic at the Terminal consists of both incoming and outgoing railcars. As set forth in greater detail below, the Project will not result in significant adverse impacts relating to rail traffic. With respect to outgoing rail traffic, the Applicant has proposed to cap throughput at the rail loading rack at 300 million gallons, 80 million gallons less than currently allowed to be throughput at the rail rack.

Various products are delivered to the Terminal by rail. Prior to entering the Terminal's rail offload area, CP Rail typically stages the trains at various locations in the Kenwood Rail Yard and in the vicinity of the Terminal, including the siding located behind the Ezra Prentice Homes. When the railcars are ready to be offloaded, they are moved into the rail offload area, well north of Ezra Prentice. The movement of trains to and from the Terminal is handled by CP Rail. Global's responsibility is limited to the actual offloading of product into the tanks at the Terminal. Products also are loaded from tanks into trains at the rail loading rack for shipment.

As part of the Project, Global is proposing to significantly reduce the allowable crude oil throughput at the Terminal from 1,850 million gallons to 450 million gallons—a 1,400 million gallon decrease. Such a reduction completely eliminates the increase in crude oil throughput

⁶ Note that the long-form EAF does not specifically require an assessment of the impact on rail traffic of projects undergoing SEQR review. The Applicant has included this information to provide a thorough assessment of the potential impact of the Project on the surrounding community.

that the DEC authorized in 2012. The steep reduction in allowable crude oil throughput significantly reduces the number of crude oil trains that potentially may be received at the Terminal. Moreover, this major reduction in crude oil throughput is also significant relative to past activity at the Terminal. During the peak 12-month period for crude oil movement from January 2014 to January 2015, Global shipped 1,205 million gallons of crude oil at the Terminal. The reduction in allowable crude oil to 450 million gallons thus represents a reduction in crude oil throughput of 755 million gallons from actual past conditions.

The Terminal is currently operating below capacity and thus is capable of handling additional rail traffic. The Project will not increase rail traffic beyond the levels the Terminal can currently accommodate under the existing permit. Although actual levels of rail traffic may increase from recent short-term levels depending on market conditions, these fluctuations are consistent with past operations at the Terminal and could be accommodated now under Global's current permit. Moreover, any increase will not pose a significant adverse impact under SEQR.

Finally, Global is proposing to cap the total throughput for all products at the rail loading rack at 300 million gallons, down from approximately 380 million gallons. (This rack is currently permitted to load 150 million gallons of gasoline/ethanol and 229.3 million gallons of distillate per 12-month period for a total of 379.3 million gallons). The proposed scenario allows for a combined 300 million gallons of any refined products to be loaded, approximately 80 million less than currently allowed.

5.3 Marine Traffic

Marine traffic from the Terminal will not be significantly impacted as a result of this Project.⁷ Currently, the Terminal has one marine loading position that is equipped with two VCUs, a primary and secondary. Product is delivered to and shipped from the Terminal by marine vessels.

⁷ Note that the long-form EAF does not specifically require an assessment of the impact on marine traffic of projects undergoing SEQR review. The Applicant has included this information to provide a thorough assessment of the potential impact of the Project on the surrounding community.

As previously noted, Global is proposing to significantly reduce the allowable crude oil throughput from 1,850 million gallons to 450 million gallons, the amount allowed in 2012. This reduction in allowable crude oil throughput significantly reduces the number of crude oil vessels that may be loaded at the Terminal. This major reduction in crude oil throughput is also significant relative to past actual activity at the Terminal.

The allowable throughput for all products at the marine dock will be capped at 1,350 million gallons, which is 950 million gallons less than previously permitted. This cap will help ensure that environmental impacts associated with loading activities at the marine dock will not change significantly as a result of the Project. Compared to actuals, there could be in an increase in marine traffic when compared to recent short term actuals. However, this increase will not pose an adverse environmental impact.

6.0 AIR IMPACTS

As set forth in greater detail below and in the accompanying Application, the Project will not have a significant adverse impact on air. As discussed in Section 2.3 above, Global is proposing to: (1) realign the truck loading rack, rail loading rack and marine dock loading caps to provide operational flexibility and increase the overall product caps for refined products by 450 million gallons while reducing the crude oil cap by 1,400 million gallons; (2) add loading positions at the truck loading rack and the rail loading rack; (3) establish more stringent emission limits for the primary marine loading VCU and the rail loading VCU; (4) install equipment to load under negative pressure at the rail loading rack to significantly reduce if not eliminate fugitive emissions from loading operations;⁸ and (5) install exempt boilers, heaters and other equipment to heat biodiesel. Certain of these changes require Global to seek a significant Title V permit modification from DEC.

⁸ As discussed in Section 2.3 above, the marine dock is already equipped with vacuum assisted loading. This equipment will be incorporated into the permit as part of this Title V application.

This section outlines the analysis used to determine that the Project will not have a significant adverse impact on air. The SEQR analysis considered the following potential impacts associated with the Project:

- Reduction in crude oil throughput accompanied by a much smaller increase in refined product throughput.
- Reduction of fugitive emissions at the rail loading rack associated with negative pressure loading.
- Increase in emissions from equipment leaks associated with additional loading positions at the truck loading rack and the rail loading rack.
- Combustion emissions associated with boilers and heaters used to store and handle biodiesel.
- Tank emissions associated with storage of biodiesel.

6.1 Air Emissions Generally

Under the federal Clean Air Act (CAA), the U.S. Environmental Protection Agency (EPA) has established national ambient air quality standards (NAAQS) for ozone, nitrogen dioxide, particulate matter (including PM₁₀ and PM_{2.5}), sulfur dioxide (SO₂), carbon monoxide (CO) and lead. The NAAQS define what is considered "clean" air for purposes of the CAA. States monitor ambient air quality for these substances to determine whether the air in a given area is meeting (i.e., has attained) a particular NAAQS. The Terminal is located in the Albany air quality control region, which is currently designated as in attainment for all six of these substances, as set forth in the EPA Nonattainment Areas for Criteria Pollutants (Green Book). The most recent *New York State Ambient Air Quality Report for 2018* confirms that the nearest multi-pollutant air monitoring station—which is located in Loudonville, New York, is in compliance with NAAQS for the four substances monitored at the station: ozone, PM_{2.5}, SO₂ and CO. An additional air monitoring station located at the Albany County Health Department building in the South End also shows that the City of Albany is in attainment for PM_{2.5} (DEC, 2018, p. 27).

In recent years, concerns have been expressed by residents about ambient air quality in Albany's South End. In October 2019, DEC released the results of a multi-year comprehensive air study entitled *Albany South End Community Air Quality Study*, which was designed to evaluate air quality in the South End community, including at Ezra Prentice (NYSDEC, 2019, p. 2). The study began in 2017 and included a combination of stationary air quality monitors and portable instruments. The report concluded, among other things, that:

- More particulate matter is coming from motor vehicles than Port activities.
- Traffic-related air pollution (TRAP) is higher along South Pearl Street at Ezra Prentice compared to the background monitor at Third Avenue, where traffic is comparatively minimal.
- Particulate emissions from locomotives and port shipping transport are minimal compared to local traffic (NYSDEC, 2019, p. 3).

6.2 Terminal Air Emissions

The Project will significantly reduce potential VOC emissions from the Terminal. As discussed in greater detail in the accompanying Application, the Terminal currently has a total potential to emit (PTE) of 147.27 tons of VOCs. The Project will reduce the VOC PTE by approximately 45 tons per year (tpy), an approximate 30 percent reduction. As previously noted, Global is proposing to reduce the emission limit applicable to the primary marine VCU from 3 mg/L to 2 mg/L and to implement permit conditions that require negative pressure loading, which will largely eliminate fugitive emissions under most loading scenarios. Proposed upgrades to the rail VCU will decrease allowable emission limit. Also, fugitive emissions from rail loading activities from 10 mg/L to 2 mg/L by reducing the control device emission limit. Also, fugitive emissions from rail loading activities will be largely eliminated with the installation of vacuum assisted loading equipment at the rail loading rack. The Project will also decrease the total throughput limit at the Terminal by approximately 950 million gallons per year. These factors collectively will reduce potential emissions of VOCs, a precursor to the formation of ground level ozone.

As previously noted, Global proposes to install natural gas-fired boilers and oil heaters to heat biodiesel. Each boiler and heater has a maximum rated heat input capacity less than 10 million Btu/hr and is exempt from New York's air permit requirements (see 6 NYCRR § 201-3.2). The boilers are similar to equipment commonly found in a wide variety of institutional and industrial settings. The emissions from this additional equipment will not significantly impact ambient air quality. As a result, they are not significant from a SEQR perspective.

DEC requires applicants for certain air permits to determine whether emissions will have potential impacts to the surrounding community and, if so, to establish additional controls to eliminate that potential risk. Emissions associated with the Project and other emissions from the Terminal were quantified, and a protocol submitted to DEC as part of the Application to complete detailed air dispersion modeling to determine emission levels at the fence line of the Terminal. The results of this analysis will then be compared to health-based short-term guideline concentrations (SGCs) and annual guideline concentrations (AGCs) set by DEC. The SGCs protect the general public from short-term exposures of one hour and are used to assess whether ambient air impacts pose an immediate public health concern. By comparison, the AGCs are annual ambient air concentrations that protect the public health from long-term (e.g., continuous lifetime) exposure to an air contaminant. Once the protocol is approved by DEC, the detailed air dispersion model will be completed as part of the Application approval process. The analysis will require that the Terminal meet the applicable requirements.

6.2.1 Benzene

DEC has conducted a pair of studies of benzene in the South End neighborhood. The first study assessed short-term benzene emissions. The final report, entitled *Albany South End Community Air Quality Screening* found that the results for all samples collected by DEC and the community were well below the SGCs and that emissions in the area do not pose an immediate public health concern (NYSDEC, 2014, p.2). DEC also compared the results to measured concentrations from samples collected in DEC's Community Air Screening program and Air Toxics Monitoring Network. These comparisons showed that the levels in the Albany

South End community were comparable to those found in suburban and similar urban locations in New York.

More recently, DEC assessed benzene in the South End as part the 2019 Community Study, installing portable benzene monitoring equipment for two-week periods over 100 locations in and near the Port (NYSDEC, 2019, p.18). Based on the Study, DEC concluded that:

- Higher levels of benzene were not found in the residential neighborhoods outside the Port.
- Benzene detections were higher near the South Albany monitor (located near the Albany County Health Department Building at the intersection of Green and Rensselaer Streets) than at Ezra Prentice.
- Benzene detected at the South Albany permanent monitoring location was elevated when compared to measurements from other urban monitors in the State.
- Higher concentrations of benzene were detected within the Ports of Albany and Rensselaer near operations that store and transfer gasoline and petroleum products with the highest levels found across the Hudson River in the Port of Rensselaer (NYSDEC, 2019, p.4, 36).

The Terminal, to the north of the Port, is adjacent to Interstate 787 and is located in an active industrial area that is home to numerous potential sources of benzene, including other petroleum storage facilities, a major asphalt plant, and significant amounts of local traffic. The Project proposed by Global will not have a significant adverse impact on benzene emissions at or in the vicinity of the Terminal. The results of the air dispersion modeling discussed in Section 6.1 above will require that benzene concentrations at the fence line meet applicable requirements.

Moreover, as discussed in Section 2.3, as part of the Project, Global is proposing to install a vacuum enhanced control system at the rail loading rack and implement permit conditions that require negative pressure loading at the rail and marine loading racks to largely eliminate fugitive VOC emissions associated with product loading, including benzene. In addition,

allowable rail rack emissions will be reduced from 10 mg/L to 2 mg/L and allowable marine loading emissions associated with the primary VCU will be reduced from 3 mg/L to 2 mg/L. These measures will help minimize both actual and potential benzene emissions. In light of these factors, the Project will not have a significant adverse impact on benzene emission levels near the Terminal.

6.3 Terminal Inspections

The Terminal is designed and operated in accordance with applicable federal, State, and company standards to ensure the safe handling and management of all types of petroleum and related products while at the Terminal and also minimize emissions. Global implements inspections and related requirements designed to detect and repair vapor leaks and fugitive emissions, including:

- **Daily Shift Inspection** –Terminal inspections are conducted twice per day. These inspections include the truck yard and truck loading rack facilities, the rail loading rack, rail unloading facilities, the marine dock loading and unloading facility, the additive storage tanks, the product pumps, and other product transfer areas. These areas are evaluated for liquid and vapor leaks using sight/sound/smell as part of the inspection.
- Monthly Spill Prevention, Control and Countermeasures (SPCC) Inspection This
 is a comprehensive inspection of all the bulk storage tanks, associated piping, valves,
 flanges, and other appurtenances for leaks. Leak inspection of all equipment in gasoline
 service is also required under the leak detection and repair (LDAR) provisions of 40
 CFR § 63.11089 (Subpart BBBBBB). In addition, Global conducts the same inspections
 for equipment in crude oil and ethanol service despite the fact that these products are
 not subject to Subpart BBBBBB.
- Monthly Loading Rack Inspection This inspection is conducted on the truck loading rack as required under 40 CFR § 60.502(j) (Subpart XX). The vapor collection equipment in each bay of the truck rack loading gasoline is inspected via sight/sound/smell to ensure that it is in good condition and not leaking.
- Quarterly Internal Floating Roof (IFR) Inspection Each storage tank IFR is visually inspected from the roof hatch of each tank containing an IFR in conformance with 40

CFR § 60.113b (Subpart Kb). Although Subpart Kb requires only annual inspections, Global conducts them quarterly. A meter is used to screen the air from within the tank to confirm that the IFR is operating as designed.

- Vapor Treatment Unit Inspections The VRU at the truck loading rack and the VCU at the rail loading rack are inspected daily for proper operation and leaks via sight/sound/smell. In addition, Global monitors the temperature and vacuum of the VRU carbon beds. The marine VCUs are inspected prior to, and during, each vessel loading. In addition, quarterly to semiannual preventative maintenance inspections of the units are conducted by a qualified contractor to ensure proper operation. Periodic performance tests are also conducted on all vapor treatment units. During the performance tests, the vapor capture systems are tested for leaks following established EPA leak detection protocols.
- Railcar Inspection Railcars are inspected in accordance with U.S. Department of Transportation (USDOT) requirements. Prior to arrival of the railcars, a safety check is completed to ensure that the railcars can be accepted into the Terminal. Following arrival of the railcars, a checklist is completed to ensure that the railcars and the railyard are secured prior to offloading. During the offloading process, inspections of each car are conducted to make sure that equipment is operating properly and there are no leaks. Upon completion of offloading, the cars are secured, and a final safety checklist is completed to ensure that each car is prepared for shipment.

These inspection measures collectively ensure that the relevant equipment is operating properly, minimizing potential emissions.

7.0 WATER QUALITY IMPACTS

The Project will not have an adverse impact on groundwater or surface water quality. As set forth in greater detail below, the Project will result in the generation of a very minor new wastewater stream associated with operation of the boilers that Global proposes to treat offsite. Otherwise, the Project will not result in any significant changes either to the Terminal's generation of wastewater/stormwater or to the infrastructure designed to contain, manage and discharge it. The Project also does not call for significant changes to the Terminal's bulk storage infrastructure and thus will not increase the potential for spills and other discharges from the Terminal. The addition of biodiesel in Tanks 30 and 33 will not introduce any significant potential contaminants which are not currently regulated under the permit.

7.1 Product Bulk Storage (EAF Section D.2.p)

The Terminal is regulated as a Major Oil Storage Facility (MOSF) pursuant to DEC License number 4-1200, which was last renewed in February 2020. The MOSF license requires Global to submit data to DEC on operating activities, implement a SPCC plan, comply with license conditions and State Petroleum Bulk Storage (PBS) regulations, and report releases to DEC. The PBS regulations require the Terminal to construct petroleum storage facilities in accordance with industry standards and minimize the potential for spills and the associated impacts to ground and surface water. In addition, the regulations require inspections for purposes of minimizing the potential for leaks. The MOSF license has conditions that require monitoring of groundwater through routine groundwater sampling and requires spill containment areas to prevent discharges to groundwater and surface water. The secondary containment areas are required to be routinely sampled and certified that they meet the regulations as discussed below. DEC routinely inspects the Terminal to ensure it is in compliance with its MOSF and PBS requirements. These measures are collectively designed to minimize the potential impact of the Terminal on ground and surface water.

There are five types of operational areas at the Terminal: (1) tank dike areas, (2) loading and unloading racks, (3) oil transfer areas (not defined as racks under EPA regulations), (4) the marine dock area, and (5) other areas where the potential exists for an oil spill (piping runs, etc). Spills are prevented from reaching groundwater or surface water through the secondary containment areas which surround the tanks. The dikes are lined with a Geosynthetic Clay Liner (GCL) or HDPE liners (liners). The liners are sampled/tested and certified every five (5) years. The most recent certification was in 2019 and followed replacement of the liner system. Periodic inspections also verify that the containment has the appropriate volume and permeability.

There are two loading racks (rail and truck) at the Terminal that are regulated by the EPA as non-transportation-related and therefore subject to SPCC regulations. These loading racks are equipped with spill containment tanks and transfer systems which provide containment for the largest cargo compartment potentially served at each rack. Also, there are various unloading/transfer areas within the Terminal that are required to meet EPA's general secondary containment requirements set forth in the SPCC regulations. These include the rail offloading area, and areas for offloading additives. These areas meet the general secondary containment requirements via containment areas, terminal drainage, drip pans and/or readily available spill response materials.

The majority of piping at the non-transportation-related (EPA-regulated) portion of the Terminal is contained within tank secondary containment dikes or areas equipped with other secondary containment.

The piping associated with the transportation-related (U.S. Coast Guard regulated) portion of the Terminal runs from the first valve within secondary containment to the marine dock. It is recognized under the regulations that containment for marine dock piping is not generally feasible, and therefore, the regulations require annual hydrostatic testing of the piping at 150% of its operating pressure. Global conducts this annual testing in conformance with the regulations.

The Project will not call for any changes to the Terminal that are likely to significantly impact its potential to discharge oil or other products and thus adversely affect ground or surface water. The Project will not increase the Terminal's storage capacity or otherwise require changes that could increase the potential for spills and other discharges.

7.2 Wastewater and Stormwater Discharges (EAF Section D.2.d.iv & D.2.e)

The Terminal currently discharges stormwater and hydrostatic test water pursuant a State Pollutant Discharge Elimination System (SPDES) Permit (Permit No. NY 0021016). Under the SPDES permit, stormwater containing oil and other contaminants is collected at the Terminal for treatment. Stormwater is treated through an oil/water separator and discharged via internal Outfall 02A while hydrostatic test water is discharged via internal Outfall 02B. Outfall 02A and Outfall 02B combine and discharge to the Hudson River at Outfall 002. As required by the SPDES permit, discharges from the outfalls are monitored and the results reported to DEC on monthly Discharge Monitoring Reports (DMRs). Stormwater collected from the loading racks and other transfer areas is collected and stored in Tank 130 at the Terminal. The stormwater in Tank 130 is either treated on site and discharged via Outfall 002 or transported off site for reclamation.

Stormwater from the rail offloading area is discharged under the SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (GP-0-17-004). Stormwater is generally discharged to an infiltration basin, although it may be directed to the municipal storm sewer system during extreme weather events. Two of the rail spurs in the rail offload area are bermed and drain to a drainage swale which flows north to a cluster of three interconnected catch basins (Outfall 004), which drain to an infiltration pond. The other four rail spurs are in a separate bermed area which sheet flows to three other catch basins (Outfalls 001, 002, and 003). These catch basins have valves which remain closed during normal operating conditions to provide containment for the rail offloading system. Once the valves are opened, these catch basins discharge to the cluster of three catch basins identified above as Outfall 004. Overflow from the drainage system is directed by an engineered spillway into the City of Albany Municipal System. Quarterly visual sampling and semi-annual benchmark sampling are conducted and annual reports are submitted to DEC.

The only change to wastewater associated with the Project is the potential generation of small quantities of water associated with operation of the new boilers. This water will be collected in a small tank and shipped offsite for treatment. Otherwise, the Project will not generate new wastewater streams or introduce new contaminants, nor will it change how wastewater and

stormwater are managed on-site. As a result, the Project will not necessitate any change to the Terminal's SPDES permit. From a SEQR perspective, the Project will not have any impact on the Terminal's wastewater or stormwater discharges.

Installation of the Project will not disturb more than one acre of land. As a result, the Applicant will not be required to seek coverage under DEC's SPDES General Permit for Stormwater Discharges from Construction Activity.

No wetlands, streams, or other surface waters will be impacted by the Project. The Hudson River is directly east of the Terminal and will not be impacted by the Project.

8.0 ARCHEOLOGICAL / NATURAL RESOURCE IMPACTS (EAF SECTION E.2)

The Project will not cause "the impairment of the character or quality of important historical, archeological, architectural, or aesthetic resources or of existing community or neighborhood character" and will not have significant adverse impacts to natural resources" (6 NYCRR § 617.7(c)(1)(ii), (v)). The Project will be located at an existing industrial facility that has been in continuous operation since the 1920s. Ground disturbances associated with the Project will occur in areas that have been previously disturbed. Moreover, the extent of ground disturbance required for the Project will be substantially less than one acre and will involve only installation of various pipe supports, concrete pads, and other minor ground disturbance impacts. The new boilers and heaters will be installed inside existing buildings.

In June of 2009, a letter was sent to the New York State Historical Preservation Office (SHPO) addressing an earlier project and requesting a review of the proposed activity in order to determine whether the project would have the potential to result in a significant impact to recognized historical resources, or disturb sites that are archeologically sensitive. The project to improve access to the Terminal from CP Rail's Kenwood Rail Yard included adding service tracks and storage for tank cars, and a new aboveground pipeline to facilitate the transfer of fuel from the railyard to two existing storage tanks. Using SHPO's online mapper, no historical resources were found within or immediately adjacent to the proposed improvement area, or

the facility as a whole. SHPO reviewed the request and stated that the proposed work would have no adverse effect on historical or cultural resources listed on the National Register of Historical Places.

The Terminal location has been an active industrial site for at least 100 years. As a result, there are few natural resources at the site of the Project. According to the DEC Environmental Resource Mapper, the only location that might be considered "natural habitat" at the Terminal location is the river bank. However, no ground disturbance or other activities are proposed along the river bank as part of the Project. Otherwise, there are no natural habitats—defined as an ecological or environmental area where a specific species lives—within the Terminal site. There will be no impacts to natural resources from the Project, i.e., the Project will not cause "the removal or destruction of large quantities of vegetation or fauna; substantial interference with the movement of any resident or migratory fish or wildlife species; impacts on a significant habitat area; substantial adverse impacts on a threatened or endangered species of animal or plant, or the habitat of such a species; or other significant adverse impacts to natural resources" (6 NYCRR § 617.7(c)(1)(ii)). Also, there are no critical environmental areas located on or adjacent to the Terminal site. See 6 NYCRR § 617.7(c)(1)(iii).

9.0 ODOR (EAF SECTION D.2.o)

The Project will not result in adverse off-site odor impacts. A baseline study conducted on behalf of Global concluded that any odors associated with the Terminal are well below typical objectionable levels. Going forward, the Project calls for significantly reducing allowable crude oil throughput at the Terminal and installing additional air emission controls—changes that will reduce emissions of potential odor-causing VOCs and other pollutants. The addition of heated biofuels will not affect the odor potential at the Terminal.

In preparation for this Project, Global retained Odor Science & Engineering, Inc. to complete an odor study at the Terminal and the surrounding area. A copy of the odor study is included as Attachment F. The study concluded that odors associated with the Terminal are well below typical objectionable levels. The objective of the ambient odor monitoring study was to provide an odor baseline for the Terminal by determining the distance at which any Terminal-related odors could be detected off-site as well as documenting the odor impact of other sources in the surrounding area. The odor monitoring was conducted over a 5-day period. Four (4) on-site and twelve (12) off-site odor surveys were conducted at various times of the day and night to document the full range of diurnal meteorological patterns. During the surveys, the location, odor concentration, intensity, character and likely source of any odor detected were documented along with the meteorological conditions. The study concluded that any odors potentially associated with the Terminal are well below typical objectionable levels. Any odors attributable to the Terminal site were both infrequent and at very low levels that would not typically be the cause of odor complaints. The background odors in the general Port of Albany industrial area consisted of more frequently detectable and higher intensity odors from local industrial sources other than Global.

The Project calls for significantly reducing allowable crude oil throughput at the Terminal. Since crude oil is a potential source of odor, the reduction in crude oil throughput should reduce potential odor impacts. Also, Global operates its marine loading and truck loading operations under negative pressure (vacuum) and as part of the Project will install equipment to load under negative pressure at the rail loading rack. These operational practices should further reduce emissions of potential odor-causing substances.

As noted above, the Project calls for authorizing the heating of biodiesel to facilitate transfer operations. Biodiesel has been described as having a mild petroleum distillate odor or as having a "mild oily or animal fat odor" (USDOE, 2016, App. A). Biodiesel odors, if any, are not expected to extend outside the Terminal. Accordingly, the Project will not contribute to adverse odor impacts.

Finally, Global has an extensive and on-going inspection program in place to detect leaks and odors, including twice daily shift inspections of the Terminal, daily inspections of the Terminal's

VCUs and VRU, and USDOT-mandated inspections prior to railcar offloading. In recent years, the Terminal has been inspected on many dozens of occasions by federal, State and/or local agencies, including DEC, EPA, USDOT and the U.S. Coast Guard, among others. Odor impacts have not been identified as a concern during these inspections.

For the reasons set forth above, the Project will not cause adverse odor-related impacts at the Terminal.

10.0 NOISE (EAF SECTION D.2.m)

The Project will not generate noise that will affect offsite receptors. Existing noise from the Terminal originates primarily from the movement of railcars within the Terminal as well as various on-site equipment, including the VCUs. This noise does not currently create an off-site impact. As previously noted, although the Project calls for the installation of natural gas-fired boilers and heaters, this new equipment will be located within building structures and will not be audible outside the Terminal.

The Terminal is located adjacent to the industrial Port of Albany, which is the site of numerous active rail lines and yards as well as various significant industrial activities. The Terminal also is located near Interstate 787, a high traffic density highway. These activities contribute significantly to noise in the vicinity of the Terminal.

The only changes to the Terminal associated with the Project with the potential to impact noise levels are the installation of natural gas-fired boilers and heaters to be located inside buildings. Owing to the nature of the equipment and their location, they are not expected to generate noise that is audible outside the Terminal fence line. Global nevertheless retained JMT, a noise consultant, to determine baseline noise conditions in accordance with DEC Program Policy *Assessing and Mitigating Noise Impacts*. A copy of the noise study is found in Attachment G.

As part of the noise study, average ambient sound levels were recorded and were found to be consistent with urban and commercial areas per the Federal Highway Administration document, *Techniques for Reviewing Noise Analyses and Associated Noise Reports*. The measured noise levels were also consistent with residential areas proximal to highways.

In general, while there was some variability, average ambient sound levels recorded at the Ezra Prentice Homes and within the Terminal were effectively identical. Noise values observed at the core of Global's facility operation were below noise values observed at Ezra Prentice Homes for day, night, and combined monitoring periods. The results support anecdotal observations from field staff completing the noise study that highway traffic is the predominant source of environmental sound in the area, including at Ezra Prentice Homes. Furthermore, the study concluded based on observed noise values that the Terminal has little to no impact on surrounding sound levels.

The additional sound from the new equipment proposed to be installed indoors as part of the Project will not change the conclusion that the Terminal has little or no impact on surrounding sound levels.

The major source of noise affecting the Ezra Prentice Homes originates from the Kenwood Rail Yard located immediate to the east of the residences. In the past, members of the community have expressed concern to DEC about the noise associated with the movement of railcars in the Kenwood Rail Yard. However, neither Global nor State and local authorities have authority over the movement of railcars in the Kenwood Rail Yard. Railroad transportation activities are regulated solely by the federal government pursuant to the U.S. Constitution as "interstate commerce" and specific federal statutory provisions preempt local and state control over these railcar movements. As articulated in a 2014 Surface Transportation Board (STB) decision:

The Interstate Commerce Act (Act) is "among the most pervasive and comprehensive of federal regulatory schemes." <u>Chi & N.W.</u> <u>Transp. Co. v. Kalo Brick & Tile Co.</u>, 450 U.S. 311, 318 (1981). The Act, as revised by the ICC Termination Act of 1995, Pub. L. No. 104-88, 109 Stat. 803, expressly provides that the jurisdiction of

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the Board over "transportation by rail carriers" is "exclusive." 49 U.S.C. § 10501(b). The statute defines "transportation" expansively to encompass any property, facility, structure or equipment "related to the movement of passengers or property, or both, by rail, regardless of ownership or an agreement concerning use." 49 U.S.C. § 10102(9). Moreover, "railroad" is defined broadly to include a switch, spur, track, terminal, terminal facility, freight depot, yard and ground, used or necessary for transportation. 49 U.S.C. § 10102(6). Section 10501(b) expressly provides that "the remedies provided under [49 U.S.C. §§ 10101-11908] with respect to regulation of rail transportation are exclusive and preempt the remedies provided under Federal or State law." Thus, § 10501(b) is intended to prevent a patchwork of local regulation from unreasonably interfering with interstate commerce. See, e.g., Norfolk S. Ry.— Pet. For Declaratory Order, FD 35701, slip. op. at 6 & n.14 (STB served Nov. 4, 2013); H.R. Rep. No. 104-311, at 95-96 (1995).

Soo Line Railroad Co. Pet. for Declaratory Order, FD 35850, 2014 WL 7330097, at *3 (STB served Dec. 23, 2014).

These broad preemption principles limit claims against railroads for noise and other nuisance impacts associated with railroad operations. In a 2013 decision, the STB issued a declaratory order finding that a lawsuit by property owners for damages allegedly caused by noise, vibration and particulates from trains operating on the defendant's rail line was preempted by federal law. The STB noted that the alleged harms were the direct result of the defendant's railroad operations and that:

Subjecting [the railroad] to claims based on the alleged byproducts (such as noise, vibration and various discharges) of conventional and routine rail operations on the rail carrier's own property—which could be invoked by owners of property near operating rail lines anywhere—would unduly burden interstate commerce and significantly hinder [the railroad's] ability to function as a rail carrier, amounting to impermissible state regulation of [its] operations.

Norfolk Southern Railway Co., FD 35701, 2013 WL 5891582, at *3 (STB served Nov. 4, 2013) (citations omitted).

Consistent with these basic principles, authority for regulating noise associated with train operations rests exclusively with the Federal Railroad Administration (FRA), which has developed an elaborate network of regulations to address noise issues. Of perhaps greatest relevance, the FRA has issued the railroad noise emission compliance regulations, set forth at 49 CFR Part 210, that set noise standards for various types of equipment and operations.⁹ Responsibility for implementing and enforcing these noise standards rests with the railroads and FRA, respectively.

Likewise, horn blasts from locomotives also are governed by FRA regulations. The use of railroad horns at public highway-rail grade crossings is regulated under 49 CFR Part 222. The use of railroad horns for purposes other than crossings (including in rail yards) is governed by 49 CFR § 214.339, which requires railroads to develop and comply with written safety procedures addressing the use of horns or bells for trains and locomotives approaching workers. *See* 49 CFR Part 214, subpart C (roadway worker protection). In the present case, because the rail yards at and near the Port operate 24 hours per day, train horns may sound during the night consistent with FRA rules.

A brief overview of the logistics associated with managing the trains received at the rail offload area illustrates the strict limits of Global's authority to mitigate noise. In scheduling trains, CP Rail must take account of numerous factors, including other freight trains using the rail lines, Amtrak schedules (since passenger rail takes precedence over freight), and track work and

⁹ Part 210 applies "to the total sound emitted by moving railcars and locomotives . . . active retarders, switcher locomotives, car coupling operations, and load cell test stands, operated by a railroad" (49 CFR § 210.3(a)). Under Part 210, railroads must comply with railroad noise emission standards set by EPA in 40 CFR Part 201 for all types of equipment. Equipment that does not meet the EPA standards is considered "noise defective." Railroads using noise defective equipment must correct the noise defect or remove the equipment from service. Similarly, car coupling activities that exceed the EPA noise standards must be modified to bring them within prescribed noise limits (49 CFR § 210.5, 210.7.)

inspections. These restrictions limit options for avoiding night-time arrivals and minimizing nighttime noise.

Upon arrival at the Terminal, CP Rail remains responsible for moving the train within the rail offload area, including the coupling and uncoupling of cars. Global is responsible only for offloading product from the train into its tanks. From a practical perspective, however, Global has a strong incentive to establish offloading procedures that minimize the movement of railcars within the yard, and thus the amount of noise. Unnecessary movement increases the time and expense associated with the offloading process. Accordingly, Global is constantly reviewing its procedures for managing the receipt and offloading of railcars with CP Rail to reduce movement and, by extension, noise within the portion of the Kenwood Rail Yard leased by Global. Consistent with this effort, Global is proposing to increase the number of loading arms at the rail loading rack, a change that will enable the Terminal to load railcars without interim movements, reducing noise levels associated with this activity. Global also has worked with CP Rail to allow trains to be brought directly into the Terminal and has installed equipment that allows CP Rail to connect and test outbound railcars within the Terminal site. This change has limited the use of the rail spur located immediately behind Ezra Prentice to minimize the potential noise and other impacts to residents. However, Global cannot compel CP Rail to stage railcars in a particular location.

11.0 FIRE AND EMERGENCY RESPONSE

The Project will not affect the risk of fire at the Terminal. As set forth in greater detail below, the Terminal is already designed to handle all types of combustible and flammable fuels. The Terminal has been constructed and is operating in accordance with extensive federal, State and local regulations, applicable codes and internal operating standards. These standards, which cover all types of flammable and combustible liquids managed at the Terminal, address facility design, fire suppression and response equipment, inspections and training, among other topics.

The characteristics and fire potential of the products handled at the Terminal are incorporated into construction standards, operational requirements and fire safety standards. In particular, the National Fire Protection Association (NFPA) sets standards and codes intended to minimize the possibility and effects of fire and other risks. NFPA Code 30: Flammable and Combustible Liquids Code, provides safeguards to reduce the hazards associated with the storage, handling, and use of flammable and combustible liquids. Topics covered in NFPA 30 include fire and explosion prevention and risk control, storage of liquids in containers, storage of liquids in tanks, piping systems, processing facilities, bulk loading and unloading, and marine docks.

As set forth in greater detail below, the proposal to install equipment to indirectly heat certain comparatively viscous biodiesel to facilitate transfer will not increase the risk of fire. Similar to a radiator, the heating involves passing steam or hot oil through pipes to heat the railcars and tanks used to store biodiesel. This indirect heating process, which is commonly employed in the management of biodiesel, does not pose a significant fire hazard risk. More generally, the proposed changes to the Terminal will not impact either the risk of fire or the Terminal's emergency response needs.¹⁰

11.1 Fire Explosion Measures at the Terminal

The Project does not require implementation of any new or modified fire protection measures. Previously accepted and approved procedures will address any new biodiesel products introduced at the Terminal.

NFPA 30 categorizes liquids into three classes based on the liquid's initial boiling point or flashpoint: Flammable liquids (liquids with a flashpoint below 100 degrees Fahrenheit) are categorized as Class I liquids while combustible liquids (liquids with a flashpoint at or above 100 degrees Fahrenheit) are categorized as Class II or Class III liquids. The refined products

¹⁰ Note that the long-form EAF does not specifically require an assessment of the fire and explosion impacts of projects undergoing SEQR review. The Applicant has included this information to provide a thorough assessment of the potential impact of the Project on the surrounding community.

traditionally handled at the Terminal consist of Class I, II and III flammable and combustible liquids. Biodiesel is typically classified as a non-combustible liquid having a flashpoint above 200 degrees Fahrenheit.

Consistent with the applicable NFPA requirements, the Terminal is equipped with an extensive collection of fire suppression and response equipment. Foam suppression systems have been installed at the truck loading rack, the dock/east tank farm area and the west tank farm. According to Safety Data Sheets, the foams stored are not manufactured using perfluorooctane sulfonic acid (PFOS). In addition, two self-contained mobile foam trailers equipped with hoses, nozzles and monitors are available for fire response within the rail offload area. One is at the Terminal and the other is housed at the South Pearl Street Fire House for rapid deployment, if required. Each trailer is equipped with 500 gallons of foam, which can be resupplied without interruption using the resources at the Terminal. Global also has an additional 6,400 gallons of foam stored and available on-site as well as three additional self-contained mobile foam trailers holding an additional 1,500 gallons of foam located in Newburgh, New York, which are available for immediate deployment. The rail facility also has an 8" looped fire main with associated hydrants.

In addition to supplying the Albany Fire Department with a foam trailer, Global has donated three fire monitors for general fire department use. Global also made a significant contribution which allowed the Albany Fire Department to procure a spill response boat with firefighting capabilities.

In 2015, Global conducted a study of fire response and fire suppression resources under its MOSF license and met with the Albany Fire Department. The resulting report concluded that the Terminal had adequate fire-fighting equipment to provide protection for the rail loading and unloading areas, the marine dock, and other locations throughout the Terminal. In addition, the report found that the Terminal had sufficient support capabilities from outside emergency services, including the Albany Fire Department, County emergency response agencies and Global's contracted fire response organization, Williams Fire and Control.

Terminal fire systems are operated and tested annually by an outside contractor with expertise in NFPA 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems." This includes testing the thermal detectors at the truck loading rack, confirming water flow volumes for the various suppression systems, and evaluating the injection ratio of the foam concentrate to make sure it meets manufacturer specifications. Representative samples of the foam concentrate are also submitted to the foam manufacturer on an annual basis to ensure that the foam meets the manufacturer's specifications. The fire systems are equipped with generator backup to ensure operation in the event of a loss of power. The generators are tested on a weekly basis.

In addition to the annual inspections, the rack and foam system fire pumps are run on a weekly basis to ensure proper operation in the event of an incident. The foam trailers and foam houses are inspected monthly. The foam trailer housed at the South Pearl Street Fire Station is included in the inspection.

Fire extinguishers are provided near each product loading/unloading area for employee use. These extinguishers are distributed, inspected, and tested pursuant to applicable Occupational Safety and Health Administration (OSHA) and NFPA requirements.

Global has an emergency evacuation plan for the Terminal included in the Emergency Response Action Plan. The primary purpose of the evacuation plan is to provide instruction for evacuation of the Terminal and procedures to account for employees, contractors and visitors at the site. The Emergency Response Action Plan contains procedures for initial response and notification of federal, State and local authorities. Any additional evacuation that may be implemented beyond the Terminal would be directed by the Albany Fire Department as incident commander. Global would coordinate and cooperate with the Fire Department as needed. Global routinely communicates and trains with the local Fire Department, and officials are provided access to the Terminal to understand its operations and train. Emergency events that have a potential impact to the community need to be managed and communicated in a coordinated manner. Depending on the nature of the incident, Global would follow procedures and training consistent with the Incident Command System to involve local emergency services, which would include local fire and police departments and the Local Emergency Planning Commission.

The plan to heat certain railcars as well as Tanks 30 and 33 to facilitate the transfer of biodiesel does not significantly increase the risk of fire. Biodiesel has a comparatively low Fire Hazard rating from the NFPA compared to other products stored at the Terminal. Moreover, the biodiesel railcars, pipelines and tanks proposed to be heated are specially designed with internal or external jacketed heating coils. As the steam or hot oil circulates through the heating coils, it indirectly heats the biodiesel to a maximum temperature of only 120° Fahrenheit—or just enough to allow the product to be pumped. This type of heating system is commonly used whenever heat is needed to handle viscous fluids and is similar to systems currently employed at other facilities in the Port. The other components of the Project also will not affect the fire risk at the Terminal or Global's fire response.

11.2 Fire/Explosion Measures During Transport

The Federal Railroad Safety Act (FRSA) empowers the U.S. Secretary of Transportation, through the FRA, to "prescribe regulations and issue orders for every area of railroad safety" (49 USC § 20103(a)). To ensure nationwide consistency in railroad regulation, the FRSA provides that "[I]aws, regulations, and orders related to railroad safety and . . . security shall be nationally uniform to the extent practicable" (49 USC § 20106(a)(1)). It goes on to specifically preempt states from adopting state regulations covering any subject matter covered by a USDOT regulation with certain limited exceptions (49 USC § 20106(a)(2)). Under this provision, where USDOT has adopted regulations addressing a particular aspect of train safety, states are generally preempted from imposing their own, potentially conflicting regulations.

The Pipeline and Hazardous Materials Safety Administration (PHMSA), a USDOT agency, regulates the characterization of hazardous materials during shipment by rail, vessel and truck. The Hazardous Material Regulations (HMR) require individuals offering materials for transport to classify and characterize the material to determine proper packaging, labeling and other requirements. *See* 49 CFR Parts 171-177. The Terminal must classify and characterize oil consistent with these requirements.

11.3 Fire Training/Response

The Project does not require any modifications or additional measures to be implemented for fire training and response. Previously accepted and approved fire suppression systems and response training will address the additional biodiesel being introduced at the Terminal as part of the Project.

Global conducts fire training with the Albany Fire Department. The fire department training includes familiarization with each of the fire suppression systems at or near the Terminal, including the portable foam trailers stored at the Terminal and at the South Pearl Street Fire Station, the truck loading rack foam suppression system, the dock/east tank farm foam suppression system.

In addition, Global employees are provided with training on fire prevention and response practices on a regular basis. The training includes the controls used at the Terminal to prevent the occurrence of fires as well as work practices. Routine inspections are conducted at the Terminal to identify and correct abnormal conditions consistent with this training. Refresher training is provided on a scheduled basis or as needed depending on changes in operations or products handled.

To address the unlikely event of a fire, employees are trained on emergency notification and response practices in order to ensure they are familiar with the proper steps to implement if a fire is discovered, including summoning appropriate responders. These response practices are addressed through regular spill response training, reinforced during safety meetings, and

addressed during emergency response drills. Training, meetings and drills address responses specific to potential fire scenarios at the Terminal, response equipment and local response capabilities.

Annually, employees are provided with initial (incipient) stage fire extinguisher training that addresses the appropriate responses to small fires that can be extinguished quickly using available equipment on-site. Employees also receive periodic fire prevention training consistent with OSHA and NFPA standards so they are knowledgeable regarding the risks of flammable and combustible materials and how to effectively manage those risks.

12.0 CLIMATE CHANGE AND SEA LEVEL RISE

As set forth in greater detail below, greenhouse gas (GHG) emissions from the Terminal under the current Title V air permit are comparatively low, consisting primarily of small quantities of carbon dioxide (CO₂) from combustion equipment at the Terminal. Although the Project calls for the installation of additional combustion equipment, the additional GHG emissions associated with this new equipment are minor and from exempt sources. Overall, the Project will not have a significant climate change impact.

12.1 GHG Emissions (EAF Section D.2.f, g, & h)

12.1.1 DEC Regulation and Guidance Relating to GHGs

Available regulations and guidance on addressing GHGs under SEQR is limited. To date, the only substantive regulations DEC has adopted to address emissions of pollutants that contribute to climate change apply to fossil fuel-fired power plants. These regulations include 6 NYCRR Part 251 (establishing CO₂ emission limits for major new or modified fossil fuel-fired electric generating facilities) and 6 NYCRR Part 242 (establishing a cap-and-trade program for power plant CO₂ emissions for purposes of implementing the Regional Greenhouse Gas Initiative). However, these regulations address only emissions of CO₂ from power plants. Also, they do not require regulated entities to limit indirect GHG emissions in New York State, let

alone attempt to directly limit or otherwise regulate GHG emitting activities outside the State's borders.

Several years ago, DEC modified its EAF form to require information about emissions of specific GHGs, including methane, CO₂ and nitrous oxide (N₂O), which are byproducts of fuel combustion.¹¹ More recently, the SEQR regulations were revised to require the Draft Environmental Impact Statement (EIS) (if required) to identify and discuss "measures to avoid or reduce both an action's impact on climate change and associated impacts due to the effects of climate change such as sea level rise and flooding" where "they are relevant and significant" (6 NYCRR § 617.9(b)(5)(iii)(i)).

DEC regulations and policy do not compel applicants to engage in a lifecycle climate change analysis—which considers GHG emissions associated with the particular fuel from the point of extraction/production to the point of combustion. This conclusion is confirmed by DEC's full EAF, which seeks general information about energy use and GHG emissions but does not request detailed "lifecycle" data.

12.1.2 Direct Terminal GHG Emissions

Detailed information about GHG emissions from the Terminal and the Project can be found in the Application. The primary GHG emitted by equipment at the Terminal is CO₂, which is a byproduct of fossil fuel combustion from the Terminal's existing VCUs and from minor engines and emergency generators that are exempt from permitting under 6 NYCRR § 201-3.2(c).

The maximum CO₂ emissions from operating the Terminal under its currently Title V permit throughput limits is approximately 17,900 tpy. As part of the Project, Global is proposing to install several natural gas-fired boilers and heaters to heat biodiesel. Potential CO₂ emissions from this new equipment are estimated at 25,560 tpy, while actual emissions are expected to be significantly lower.

¹¹ The following six substances are recognized by DEC and others as GHGs: CO₂, methane (CH₄), N₂O, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).

Actual operation of the boilers and heaters are expected to be approximately 25% of the total potential operating capacity. They are not expected to operate as often in the summer as in the colder months.¹² This results in expected actual increase in GHG emissions of approximately 6400 tpy.

The Project will not result in a significant amount of GHG emissions and will not have a significant adverse impact on climate change.

12.1.3 Indirect Impacts

The Terminal provides a connection between fuel producers and refiners and their customers. To date, DEC has not established any regulation that would attribute GHG emissions associated with the production of a particular product to the middleman responsible for transferring that product in commerce from the producer to the consumer. Accordingly, no further analysis of these off-site indirect impacts is required.

12.1.4 Implications of CLCPA

In 2019, New York enacted the Climate Leadership and Community Protection Act (CLCPA), which requires reductions in statewide GHG emissions to 60% of 1990 levels by 2030 and 15% of 1990 levels by 2050. The CLCPA—which is codified primarily at N.Y. Environmental Conservation Law (ECL) Art. 75—calls for establishing a Climate Action Council, which will be responsible for preparing a scoping plan containing recommendations on regulations and other

¹² Further evidence that petroleum terminals generally are not significant sources of GHG emissions is provided by other GHG programs. For example, petroleum terminals are not included on the list of sources required to submit annual reports of their GHG emissions under 40 CFR Part 98, EPA's GHG reporting rule. This reflects EPA's conclusion that terminals are not a significant source of GHG emissions. Under EPA's Prevention of Significant Deterioration (PSD) program—the attainment equivalent of the nonattainment NSR program—EPA adopted special tailored applicability thresholds for new and modified sources of GHGs after concluding that the statutory thresholds for other pollutants were so low that they would result in an unmanageable expansion of the PSD program if applied to GHGs. 75 Fed. Reg. 31514 (June 3, 2010). Although the rule was eventually vacated by the U.S. Supreme Court, it provides a useful point of comparison for purposes of assessing the significance of GHG emissions. The so-called "GHG tailoring rule" established a 100,000 tpy major source threshold for GHG emissions measured in CO₂ equivalent, while the significant modification threshold was 75,000 tpy CO₂ equivalent.

state measures to achieve necessary GHG reductions. By January 2024 (the law's fourth anniversary), DEC must adopt regulations to ensure compliance with the statewide emission reduction limits and assist other state agencies in developing their own regulations, as necessary. Section 7(2) of the CLCPA requires all state agencies to consider whether permitting, licensing, and other administrative approvals and decisions are inconsistent with or will interfere with the attainment of the statewide GHG emission reduction mandates established in ECL Article 75.

The enactment of the CLCPA should not significantly affect the determinations required to be made under SEQR for the Project. As a preliminary matter, the data establishes that the Terminal is not a significant source of GHG emissions nor will it become one following implementation of the Project. Given the relatively minor GHG emissions associated with the Project, granting the requested permit modification will not interfere with attainment of the CLCPA's GHG reduction mandate and thus does not implicate Section 7.2 of the Act. Moreover, specific regulatory and other requirements under the CLCPA are at least four years away. Under these circumstances, the CLCPA does not affect the conclusion that the Project will not have a significant impact with respect to climate change.

12.2 Sea Level Rise

The Project does not call for the installation of extensive additional equipment at the Terminal. As previously discussed, Global is proposing to several small, exempt boilers and heaters to manage biodiesel, and additional loading positions at the truck and rail racks. The Project thus will not significantly increase the risks to the Terminal associated with climate change, including sea level rise. Moreover, as set forth below, Global is in the process of assessing the Terminal as part of a company-wide review of climate resiliency concerns. The results of that review may lead to changes at the Terminal to address climate resiliency issues.

In 2014, the NYS Legislature enacted the Community Risk and Resiliency Act (CRRA) to ensure that decisions regarding certain State permits and expenditures consider climate risk, including sea level rise. The CRRA requires DEC to: adopt regulations establishing sea level

rise projections; identify programs in which applicants, DEC and other agencies must consider climate risk, including the impact of sea level rise; and requires DEC and DOS to issue guidance on implementing the CRRA. In 2017, DEC adopted a regulation, set forth at 6 NYCRR Part 490, containing a range of five sea level rise projections (low, low-medium, medium, high-medium, and high) for three regions of the State (Mid-Hudson, New York City/Lower Hudson Region, and Long Island Region).

Part 490 does not impose obligations on facilities. See DEC, 6 NYCRR Part 490 Regulatory Impact Statement ("There is no compliance schedule required by the establishment of Part 490 because the rule does not impose any compliance obligations on any entity"). Although the CRRA required DEC and DOS to issue guidance on implementation by January 1, 2017, no guidance has been made available for public comment, let alone issued. Applicants for permits or funding are not be required to consider Part 490 sea level rise projections until DEC and DOS issue guidance explaining how sea level impacts are to be addressed. Finally, the list of State permits covered by the CRRA does not include air permits. Thus, even if the CRRA had been fully implemented, it would not have applied to the permit currently under review.

Based on the most recent Federal Emergency Management Agency (FEMA) map of the Terminal site (Map No. 36001CO194D, Effective March 16, 2015), the majority of the Terminal site is located within the 100-year floodplain of the Hudson River. For purposes of the CRRA, the City of Albany (including the Terminal location) is in the Mid-Hudson Region.

As previously noted, the Project does not include the construction of new structures or installation of significant amounts of new equipment. Moreover, the Project does not include the placement of fill or other encroachments into floodways or floodplains that could raise base flood elevations or otherwise impact the potential path of floodwaters. As a result, no significant impacts relating to flooding (including potential sea level rise) are expected from the Project.

Despite the lack of anticipated flooding/sea level rise-related impacts associated with the Project, Global nevertheless takes its obligations to address climate resiliency seriously.

Planning and response procedures for floods and other natural disasters are incorporated into the Terminal's spill prevention and response plans. These plans are reviewed periodically and response procedures are updated based on FEMA flood projections and sea level rise projections associated with climate change. This evaluation process helps ensure that the Terminal is not adversely affected by sea level rise attributable to climate change.

13.0 VISUAL ANALYSIS¹³

As discussed in Section 2.1 above, the Terminal is located in an existing industrial area along the Hudson River adjacent to the existing Port of Albany, a major industrial/commercial facility. The Terminal has been in its current location for almost a century. In fact, the Terminal has fewer storage tanks than were historically located on the property.

The only construction associated with the Project that could potentially affect the Facility from a visual perspective is the installation of additional loading positions at the truck rack and the rail rack and other minor appurtenances. (The new boilers and heaters will be installed inside existing structures and so will not have a visual impact.) A visual analysis was conducted of the truck rack expansion and the rail rack expansion. Photographs of the existing truck rack area and rail rack area from three (3) different angles each are included as Attachment H. As seen from the images, the nature and character of the site is not impacted, and views of the area are not substantially affected. A rendering of the additional bays at the truck loading rack is also included in Attachment H.

¹³ With respect to visual impacts, the EAF inquires whether "the project site is within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource?" This question reflects the fact that not all visual impacts are required to be assessed for SEQR purposes. As set forth in visual impacts must only be assessed when an action is proposed within the viewshed of a designated aesthetic resource such as a state park or national wildlife refuge. However, even if a project will be located within the viewshed of a designated historic resource, its significance will depend in large part on whether the area was designated for its aesthetic value. For further details, see DEC's Program Policy DEP-00-2, *Assessing and Mitigation Visual and Aesthetic Impacts* at https://www.dec.ny.gov/permits/115147.html. In this case, the Terminal is not located within five miles of any officially designated and publicly accessible federal, state or local scenic or aesthetic resource and so does not require a visual impact assessment. Nevertheless, Global has conducted an assessment of the impact of the Project from a visual perspective.

In the past, residents of Ezra Prentice Homes have expressed concerns about the visual presence of railcars located in Kenwood Yard immediately behind the homes after cars have been emptied. As a preliminary matter, the rail siding at issue, and Kenwood Yard as a whole, was in place well before Ezra Prentice was constructed by the Albany Housing Authority. More importantly, Global has no control over where CP Rail stages its railcars. Railcars parked on the Kenwood Yard siding are considered to be "in transit" and are staged based on CP Rail's own logistical and operational needs. As previously discussed in the Section 10.0 relating to noise, Global-despite lacking any authority to insist on railway operation changes-has reached out to CP Rail and asked them to minimize use of the rail spur immediately behind Ezra Prentice. Global also has provided additional infrastructure in the rail offload area located at the Terminal that allows CP Rail to build outgoing trains in the offload area rather than pulling the cars to the staging area near Ezra Prentice. In addition, when possible, CP Rail delivers railcars directly into the Global railcar area, rather than staging the railcars near Ezra Prentice. These voluntary measures have been implemented to reduce the visual impact of staged railcars on the residents of Ezra Prentice. As previously noted, however, CP Rail is ultimately responsible for determining how railcars will be staged.

14.0 DEC ENVIRONMENTAL JUSTICE POLICY

Global has taken—and will continue to take—steps to ensure that the members of the South End community and their representatives are fully informed about changes at the Terminal that could affect the community. As set forth in greater detail below, in recent years, Global has reached out to and engaged with the community in numerous ways, including hiring a community liaison. With respect to the Project, Global has prepared and is implementing a formal public participation plan (PPP) designed to inform the community about the proposed changes and obtain their input.

Global is committed to working with community members and stakeholders to ensure everyone's voice is heard and has taken numerous steps recently to fulfill that commitment, as detailed below.

- In June 2018, Global sent a letter to community members updating them on the permit modification status. The letter was mailed to all residential addresses in roughly a onemile radius around the Terminal.
- Global employees including executives, met with community leaders and neighbors on a regular basis.
- In August 2019, Global hired a full-time community liaison for the company with more than 35 years of community involvement experience in Albany.
- In November 2019, Global conducted a tour of the Terminal for local political leaders and others to familiarize them with Terminal operations.
- Global recently leased an office located at 40 South Pearl Street, Albany, NY, to facilitate community outreach. The office will be open regular hours and by appointment.
- Global supports K-12 education and recreation programs, community organizations, and public safety programs in Albany. Global also donates home heating oil to help families in need.
- Global contributes to numerous local organizations, including the Albany Police Athletic League, the Albany Boys and Girls Club, and Lark Street Business Improvement District (including *Movies Under the Stars* sponsorship), among many others.

Going forward, Global is committed to ensuring community engagement with respect to major projects at the Terminal. The Terminal is situated in an area that is identified as a potential environmental justice (EJ) area. Based on a review of GIS mapping and demographic application layers, DEC previously determined that census blocks meeting the EJ criteria are situated in the area north and west of the Terminal.

Because of the Project's proximity to EJ areas, Global has prepared a comprehensive PPP pursuant to DEC Commissioner's Policy CP-29, *Environmental Justice and Permitting*, with the goal of ensuring that members of EJ communities in the vicinity of the Terminal and other stakeholders are informed about the Project and provided with opportunities to provide input. The specific goals of the PPP are to:

- Establish avenues for members of the South End community and other stakeholders to learn about the planned changes at the Terminal and provide input.
- Create opportunities that foster open and effective dialogue with stakeholders.
- Build relationships with community members and other stakeholders.
- Provide forums to hear and respond to concerns.
- Identify any actions that minimize impacts on the community and the environment.

Consistent with these goals, the PPP identifies key stakeholders and establishes a program for communicating information about the Project that includes:

- A letter to stakeholders several weeks in advance of an open house concerning the Project;
- A letter to stakeholders concerning the Project will be sent after the Application has been submitted to DEC;
- A public meeting concerning the Project to be held after submission of the Application;
- Updating the website for the Terminal to include information concerning the Project;
- Making key documents available on the Terminal website and in various local document repositories.

As of the date of submission of Global's Application, Global had submitted a copy of its PPP to DEC for review. In addition, Global held an open house concerning the Project in the Community Room at Ezra Prentice Homes on February 25, 2020. Three weeks prior to the open house, notice was sent to individuals residing within an approximately one mile radius of the Terminal as well as numerous other stakeholders identified in the PPP. In addition, notice of the open house was posted in various locations throughout the community. Approximately 40 individuals attended the open house. The complete details of Global's public participation program are set forth in the PPP.

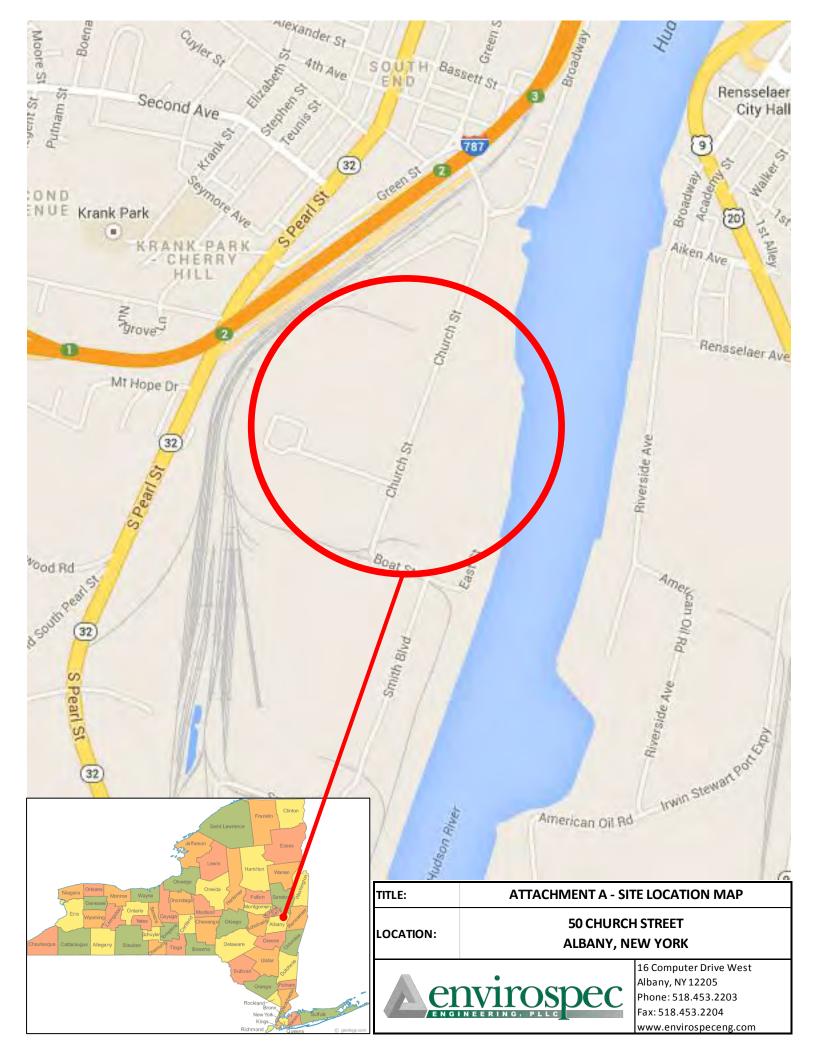
These public outreach efforts concerning the Project are in addition to those mandated by the State Administrative Procedures Act and DEC's implementing regulations.

Global will consider the information obtained during these public outreach efforts in its discussions with DEC concerning the Project. It will also prepare a document responding to the comments received. Consistent with CP-29, Global also will prepare status updates concerning its public outreach efforts.

15.0 REFERENCES

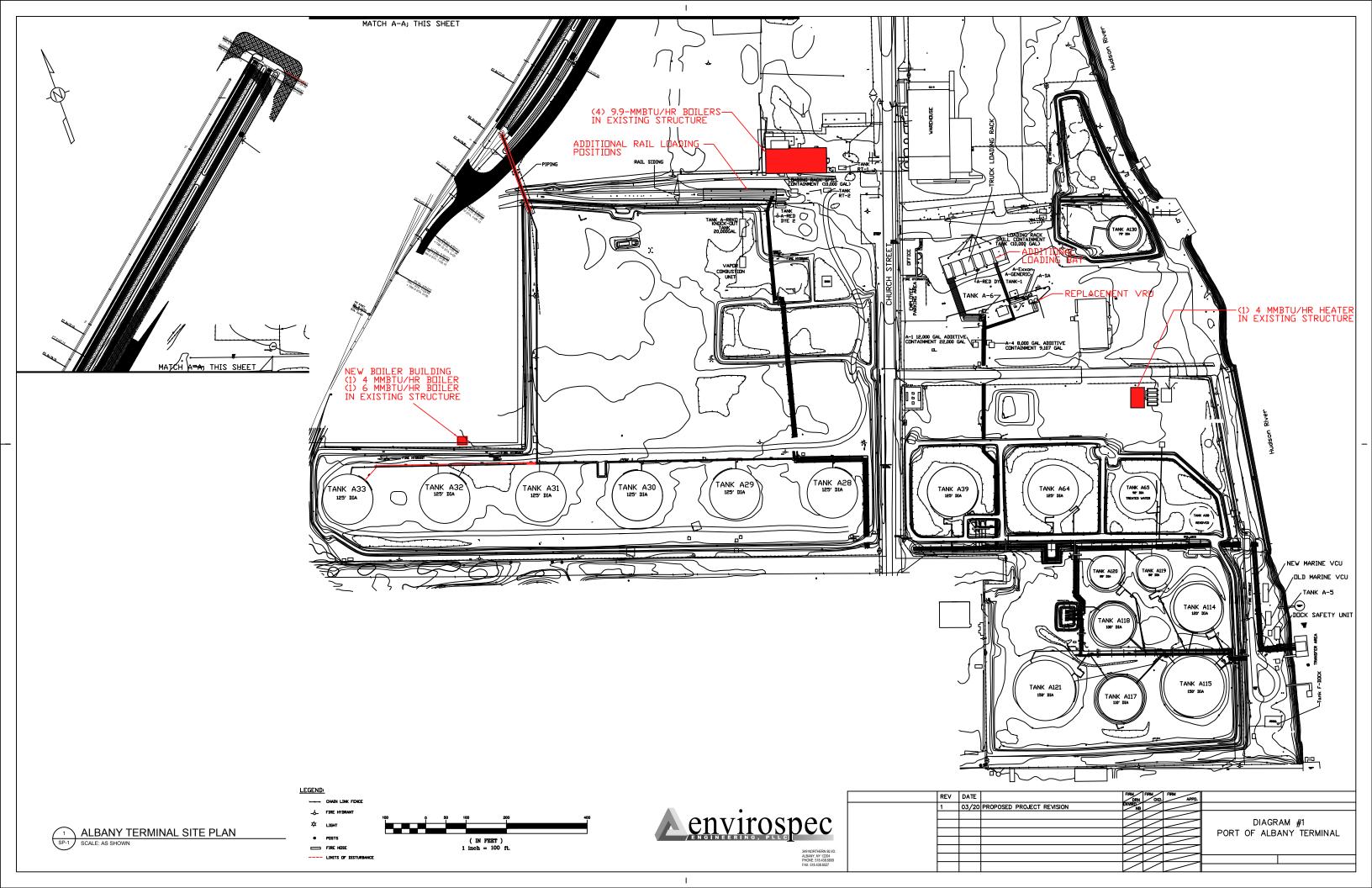
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Attachment A Site Location Map



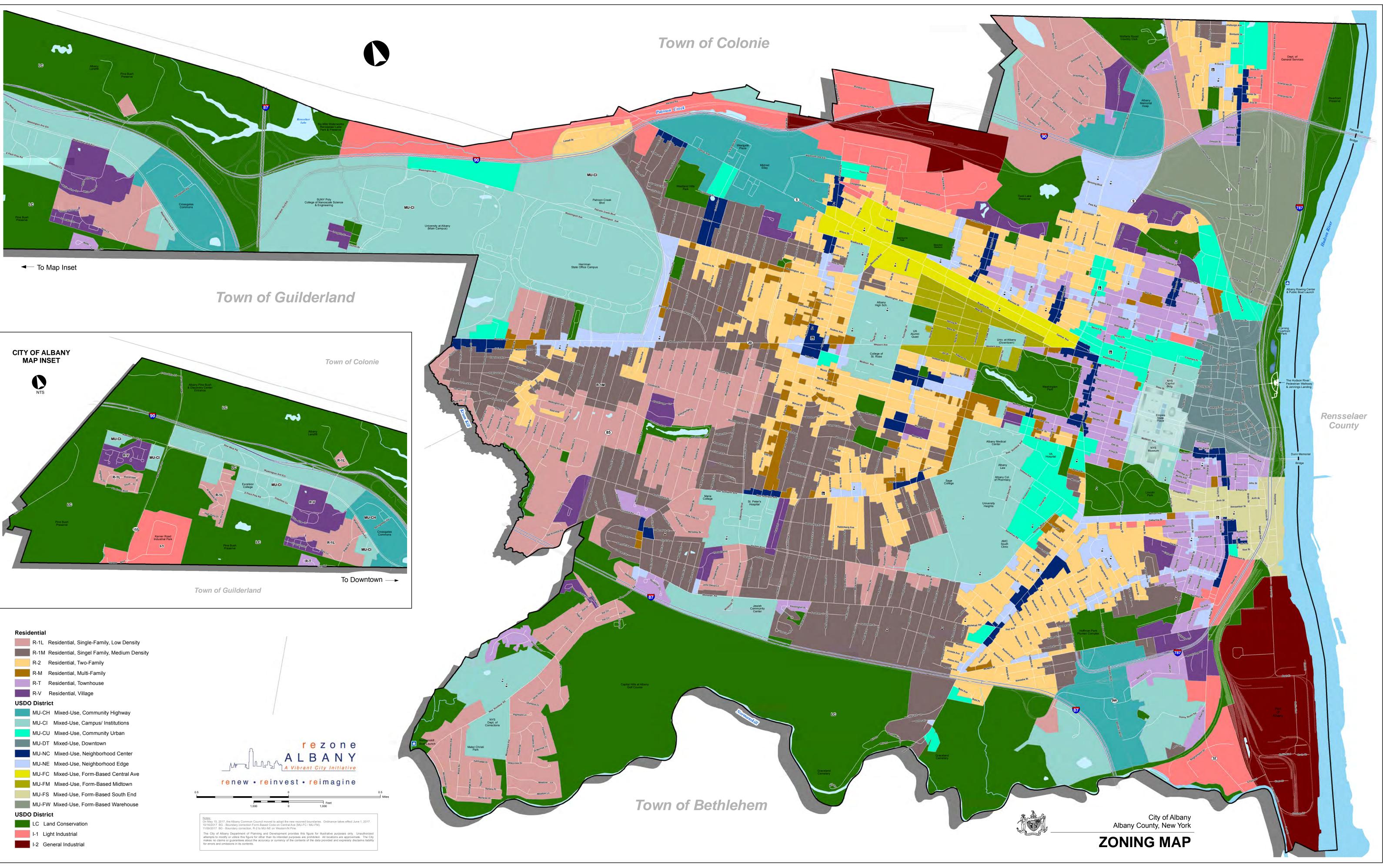
Attachment B

Site Plan



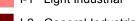
Attachment C

Zoning Map





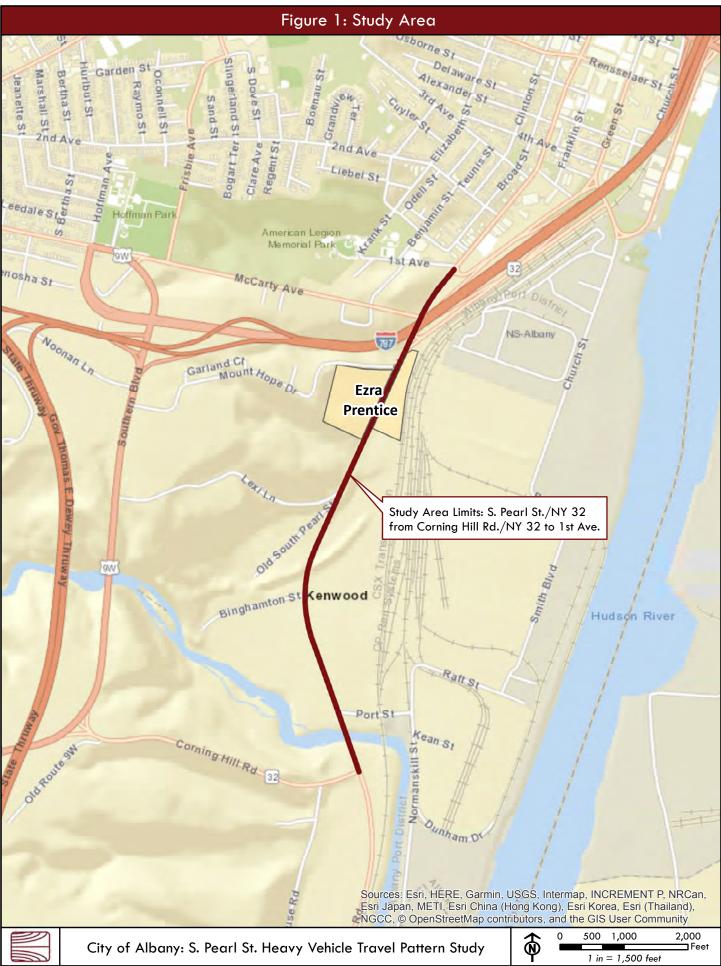
Resid	ential			
	R-1L Residential, Single-Family, Low Density			
	R-1M Residential, Singel Family, Medium Density			
	R-2 Residential, Two-Family			
	R-M Residential, Multi-Family			
	R-T Residential, Townhouse			
	R-V Residential, Village			
USDO	District			
	MU-CH Mixed-Use, Community Highway			
	MU-CI Mixed-Use, Campus/ Institutions			
	MU-CU Mixed-Use, Community Urban			
	MU-DT Mixed-Use, Downtown			
	MU-NC Mixed-Use, Neighborhood Center			
	MU-NE Mixed-Use, Neighborhood Edge			
	MU-FC Mixed-Use, Form-Based Central Ave			
	MU-FM Mixed-Use, Form-Based Midtown			
	MU-FS Mixed-Use, Form-Based South End			
	MU-FW Mixed-Use, Form-Based Warehouse			
USDO District				
	LC Land Conservation			
	I-1 Light Industrial			





Attachment D

Map of Capital District Transportation Committee Study Area



Attachment E

Global Truck Route Study

GLOBAL **COMPANIES LLC** TRUCK ROUTE STUDY

PREPARED BY:



November 11, 2019

INTRODUCTION

In July 2019, Alta Planning + Design was retained to perform a license plate survey on behalf of the Global Companies LLC. Global Companies has a facility at the Port of Albany in Albany, NY, and specializes in land-based liquid fuel transport using tanker trucks (see Fig. 1). The scope of this survey was to note the identifica-tion (including license plate number and/or company name) of fuel tanker trucks leaving the Global terminal at the Port, and comparing them to the identities of fuel tanker trucks observed traveling on NYS Route 32 (South Broadway) in the City of Albany, between the trucking facility and Ezra Prentice Homes on S Pearl Street (Rt. 32). The data collected from the two observation sites was then cross-referenced to find all, if any, matches between tanker trucks leaving the Global facility and tanker trucks traveling on NYS Route 32. The detailed methodology and results are shared below.

METHODOLOGY

The license plate, company name, time of day, and direction of travel for passing tanker trucks was collected over two 12.5-hour periods between the hours of 4:00 am and 4:00 pm via camcorders, still photos and hand-written notes at the following locations:

- "North" site: Global Companies terminal, 50 Church Street, Albany, NY
- "South" site: Ezra Prentice Homes, 625 South Pearl Street (Rt. 32), Albany, NY

Full data accuracy was hindered by limited visual conditions, such as darkness, truck speed, illegible license plates, tanker trucks with no obvious markings, and other cars blocking the truck plates. It was noted that a detour was posted at intersection of S Pearl Street and the exit/entrance ramps to I-787, which could



Figure 1. A typical tanker truck observed during the study.

have potentially manipulated traffic, but it is unlikely given the location and route of the detour.

Upon completion of the data collection, license plate numbers, tanker numbers, times, and/or company names were compared between north and southbound tanker trucks on S Pearl Street and tanker trucks exiting the Global Facility. The data was analyzed to identify definitive and possible matches.

DATA SUMMARY

ltem	Tuesday	Wednesday	Total	Average
Total Tanker Data Captured	336	369	705	352
Total Tankers on South Pearl I	198	221	419	209
Total Tankers Northbound	106	113	219	109
Total Tankers Southbound	92	108	200	100
Total Tankers Leaving Global	138	148	286	143

SUMMARY OF STUDY FINDINGS

Type of Match	Counts	% of Tanker Trucks on S. Pearl (419)
Definitive Matches: Leaving Global/Captured Southbound on South Pearl	21	5%
Possible Matches: Leaving Global to South Pearl	6	1%
Total Matches	27	6%

Of the 419 tanker trucks counted on South Pearl Street, only 5% matched and 1% possibly matched to those exiting or entering the Global facility. Of the 286 total trucks that left the global facility over the course of the two-day count, less than 10% routed to South Pearl Street.

DATA COLLECTION SITES



Attachment F

Global Odor Study



Odor Science & Engineering, Inc.

ODOR EVALUATION OF THE GLOBAL ALBANY TERMINAL AND SURROUNDING AREA PORT OF ALBANY NY

Prepared for: Global Companies LLC

Prepared by: Odor Science & Engineering, Inc.

October 23, 2019

OS&E Project No. 2153-M-00

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1. INTRODUCTION

Odor Science & Engineering, Inc. (OS&E) was retained by Global Companies LLC to conduct ambient odor monitoring at Global's tank farm/terminal located at 50 Church Street in Albany, NY and in the surrounding area. The Global terminal site is located in an industrial area at the Port of Albany on the west bank of the Hudson River shown in Figure 1. The tank farm consists of 17 tanks containing products including ethanol, gasoline and diesel. Tank loading and unloading is conducted at on-site rail, truck and marine loading stations all of which are equipped with vapor control and treatment systems. Potential sources of odor at the Global terminal and surrounding area include a municipal waste water treatment facility, the Global facility and other tank farm and terminal operations, asphalt storage tanks, an asphalt plant and grain/feed operations. In addition, the land to the east (across the Hudson and on the east bank) is occupied by a number of industrial facilities in the Port of Rensselaer. Potential odor sources on the east bank include cogeneration power plants, a large metal salvage yard, Albany Asphalt Plant, as well several active bulk storage and petroleum distribution facilities.

The objective of the ambient odor monitoring was to provide an odor baseline for the Global facility determining the distance to which any Global terminal-related odors could be detected off-site as well as documenting the odor impact of other sources in the surrounding area. The odor monitoring was conducted over the 5-day period: September $9^{th} - 13^{th}$, 2019.

Four (4) on-site and twelve (12) off-site odor surveys were conducted by OS&E over the 5-day period. The surveys were conducted at various times of the day and night to document the full range of diurnal meteorological patterns. During the surveys, the location, odor concentration, intensity, character and likely source of any odor detected were documented along with the meteorological conditions. The methodology used in quantifying and characterizing the odors is described in Section 2 of this report. The findings from this investigation are presented in Section 3.

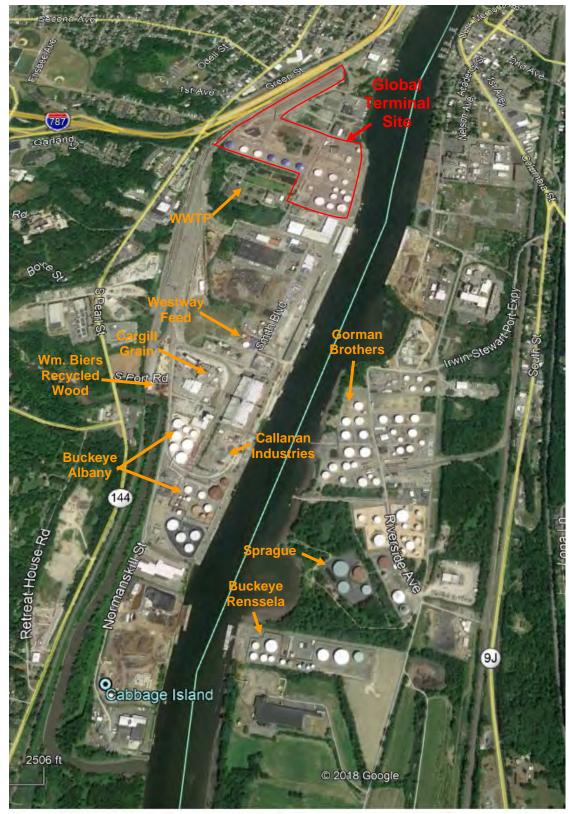


Figure 1. Global Terminal Site & Surrounding Area – Port of Albany

1-2

2. METHODOLOGY

Measurement of Odor Concentration with Portable Olfactometer

Odor concentration provides a measure of how many times an odor needs to be diluted to be reduced to the threshold level, at which only 50% of normal human population is able to detect the odor. Accordingly, odor concentration is often measured by a statistical procedure utilizing a panel of odor observers. This procedure, referred to as dynamic dilution olfactometry, follows the methodology specified in the ASTM Recommended Practice E679-04. The procedure is performed using odor samples collected in suitable containers, typically flexible bags made of inert and impervious material such as Tedlar. This procedure is not well suited for low level ambient level odors, in large part due to potential deterioration of such samples associated with sample storage and transport. For this reason, the analysis of ambient odors is typically performed in the field using portable olfactometers such as a Scentometer described below and shown in Figure 2-1.

Odor concentration does not provide as direct an indication of how objectionable an odor may be as does odor intensity, as described below. The reason is that different odors with the same odor concentration may have significantly different intensities. Nevertheless, some states and other jurisdictions have developed regulations limiting ambient odors based on odor concentration as measured by a portable olfactometer. In most cases the limit (maximum allowable odor concentration) has been set at 7 to 1 dilutions to threshold (D/T). Odors with very low concentration, such as a 2 to 1 dilution or < 2 D/T, are so close to threshold level that they would be very unlikely to be considered objectionable.

Ambient odor levels were measured using a Scentometer. This instrument provides a number of pre-set dilutions to measure the concentration of ambient odors. These dilutions are generated with a stream of activated carbon filtered air. The flow of both the uncontrolled odorous ambient air and the carbon filtered air used for dilution is generated by breathing through the instrument. The rate at which ambient air is introduced into the instrument is controlled by the observer who successively opens a series of inlet orifices of increasing size. Thus, the odor concentration evaluated by the observer increases successively until it becomes sufficiently high for the observer to detect the odor. In this sense the

2-1

instrument functions like a gas mask with a pre-set series of controlled and calibrated leaks. The reported odor concentration is the lowest concentration at which the odor is detected.



Odor Intensity

Odor intensity is the perceived strength of the odor sensation. More than any other property of odor, perceived odor intensity is what triggers odor complaints. It is measured by comparing the intensity of the odor perceived to that noted when sniffing standardized concentrations of a reference odorant. In this country, n-butanol is used as the reference odorant as prescribed by ASTM Method E544-18, "Recommended Standard Practices for Referencing Suprathreshold Odor Intensity". The now widely used n-butanol odor intensity scale is based on n-butanol vapor as the odorant at eight concentration levels or steps. The concentration increases by a factor of 2 at each intensity step starting with approximately 15 ppm at step 1 and ending with approximately 2000 ppm at step 8.

OS&E has developed a field kit which uses aqueous solutions of n-butanol to produce the standard vapor concentrations in the head space of the eight individual containers. In comparing intensities of various odors the differences in odor character are ignored as in comparing the intensities of lights of different colors. Numerous field investigations, as well as laboratory evaluations, have established that odors generally become objectionable when their intensity reaches 3 on the n-butanol scale. This

guideline has also been verified in many OS&E field studies conducted across the country and internationally has been found to be essentially a universal standard except, in areas where the

population has become sensitized to odors because of very frequent exposure to relatively high intensities of ambient odors. In these cases, such "sensitized individuals" may complain about odors of materially lower intensities than 3.0 on the n-butanol scale.

The following description is provided as an aid in interpreting the odor intensity measurements reported in this study.

odor intensity	description of perceived odor					
(E544-18)						
0.5 – 1	odor is detectable and recognizable but would generally be noticed only if					
	specifically targeted, such as during an odor survey					
2	odor is clearly recognizable but is likely not to be considered objectionable					
	except in sensitized communities					
3 and higher	odor is sufficiently intense to cause a distraction of a person fully occupied					
	by some activity, such as conversation. Odor would typically be					
	considered objectionable and would be expected to cause odor complaints					

Community Odor Surveying

The purpose of the community odor surveys conducted was to locate and quantify odors present in the community and to identify their character and the likely source. Specific attention was paid to the closest residential neighborhoods to the west of the Global terminal site on both sides of RT 32 S. Pearl Street. Community surveillance was accomplished by slowly driving or walking in the areas surrounding the Global facility. When an odor was perceived, the location, time, odor character and odor intensity were recorded. Observed meteorological conditions (wind speed and direction and cloud cover) were also recorded. Local meteorological data was obtained from both AccuWeather.com and ground level measurements made using a hand held Extech Thermo-Anamometer.

Odor intensity was measured using a portable standard n-butanol reference scale, as described in the preceding section.

3.0. ODOR SURVEYS

Over the 5-day period: September 9th through September 13th, 2019 OS&E conducted odor monitoring both on-site at the Global Albany Terminal and off-site in the areas surrounding the Global terminal property. The odor surveys were conducted to document the extent of any off-site impact from Global sources as well as the impact from other odor sources in the area which could potentially cause odor complaints from nearby residents particularly the Albany Housing Authority area located to the northwest of Global.

3.1 ON-SITE ODOR SURVEYS

Four (4) on-site odor surveys were conducted inside the Global Albany Terminal property during the following times and wind conditions:

Day	Date	Time	Wind		
			direction	Speed (mph)	
Tues.	9/10/19	10:45-11:45	SE-SSE	1-4	
Weds.	9/11/19	15:30-17:00	Calm-S-WSW	0-3	
Thurs.	9/12/19	07:00-08:15	NNE-NE	2-6 During Railcar Un	loading
Fri.	9/13/19	10:45-11:30	E-ESE	1-6	

The results of the on-site surveys are shown in Figures 3-1 through 3-4. The surveys were conducted by walking the areas along the storage tanks and downwind of any product transfer activities that were taking place at the time. The locations of any detectable odors are shown in red on the map, labeled in the order that they were detected. The numbers correspond to the entries in the tables on each figure which provide detailed information on the individual odor observations: intensity, character and the likely source of the odors. The meteorological conditions at the time of the survey are also included in the summary tables.

Any Global terminal-related odors detected on-site were found to be very light "gasoline/petroleum" odors which ranged in intensity from 0.25 -1.0 on the 8-point n-butanol intensity scale and measured <2 D/T. These odors were localized to the immediate areas around the tanks. No odors were detected in any areas downwind of railcar unloading activities taking place during the 9/12/19 on-site survey (Figure 3-3).

When the winds had a southerly component (Figures 3-1 and 3-4) stronger odors (up to intensity 1.5) were detected on the Global Site from other sources including the Wastewater Treatment Plant (WWTP), Westerly Feed and the Buckeye Albany asphalt plant located to the south of Global.

3.2 OFF-SITE SURVEYS

A series of twelve (12) odor surveys was conducted in the areas surrounding the Global Terminal site. Whenever an odor was detected, regardless of the potential source, its location was recorded on the map of the area along with its intensity, concentration, character and the likely source. The surveys were conducted at various times of day and night under a range of meteorological conditions. The results of the off-site surveys are presented in Figures 3-5 through 3-16.

Each survey included investigation in the closest residential neighborhoods to the northwest of the Global terminal site on both sides of RT 32 S. Pearl Street. The shaded area on each figure represents the boundary of the areas investigated during the survey. The locations of the individual zones of odors detected are shown in red, numbered in the order in which the observations were made. Any Global-related odor observations are highlighted in yellow. The numbers correspond to the entries in the table on each figure which provide the details of each odor observance. The tabular inserts in Figures 3-5 through 3-16 show the intensity of the odors on the n-butanol scale, odor concentration (in terms of "dilutions to threshold", D/T), the character and the likely source of the odor.

In summary, Global-related odors were detected in only 3 of the 12 off-site surveys (Figures 3-9, 3-10 and 3-16). The morning survey conducted on 9/11/19 is shown in Figure 3-9. During this survey, light winds were from the S-SSW. "Gasoline/petroleum" mixed with "asphalt" odors were observed immediately adjacent to the Global site (locations 2) and a little further north on Broadway (locations 11). These odors had a maximum intensity of 1.5 and measured between <2-2 D/T.

The survey conducted later that same afternoon is shown in Figure 3-10. During this survey light winds remained from the south. Light "gasoline/petroleum" odors were detected areas immediately adjacent to the Global site shown at location 5 and along Church Street at locations 6 and 7. These odors had a maximum intensity of 1.5 and measured between <2-2 D/T.

The survey conducted during the afternoon hours on 9/13/19 is shown in Figure 3-16. During this survey winds were variable between S, SE and ESE. Any detectable odors attributable to Global were again in the immediate vicinity as shown by locations 1, 2 and 3. These odors ranged in intensity from 0.5-1.5 and measured <2-2 D/T. In these cases the "gasoline/petroleum" odor was mixed with odors from other sources as well including the WWTP and from barge unloading activities taking place on the east side of the river associated with Gorman Brothers terminal. Odors from the WWTP and Gorman Brothers were found to extend further northwest of Global into the residential areas during this survey shown by locations 11 through 16.

Railcar unloading activities were taking place at the Global terminal during the surveys shown in Figures 3-7, 3-11, 3-13 and 3-14. No odors were detectable in any areas downwind of the railcar unloading during any of these surveys.

The results of the baseline odor survey have shown that any odors associated with the Global Albany terminal are well below typical objectionable levels. Any odors detected beyond the Global terminal site attributable to activities at the Global terminal were both infrequent and at very low intensity levels ranging from 0.5-1.5 in the butanol scale. Odors at these intensity levels would be characterized as:

n-butanol intensity level (0-8)	description of perceived odor						
ASTM E544-18							
0.5 – 1	Very Faint: An odor that would ordinarily not be noticed by the average person, but could						
	be detected by the experienced inspector or a hypersensitive individual.						
1-<2	Faint: An odor so weak that the average person might detect if his attentions are called to						
	it, but that would not otherwise attract his attention.						

Odors of such intensity level would not typically be the cause of odor complaints. Our experience has shown that odor complaints are usually initiated at an odor intensity value of 3.0 or greater on the 8-point n-butanol intensity scale. This has been verified in many of our field studies across the country for a wide variety of industries and their neighboring communities. Only when a community has become "sensitized" (developed a disproportionate lack of tolerance for certain odors) is the objectionability level significantly below 3.0.

The background odors in the general Port of Albany area consist of more frequently detectable and higher intensity odors from other local industrial sources some of which are described below.

3.3 OTHER ODOR SOURCES

While specifically looking for Global-related odors, several other odor sources were identified in the Port of Albany Area. Although most odors were detected in relatively close proximity to their sources, the more significant sources in terms of observed odor intensity and odor concentration included:

Source		Maximum Odors Observed Durin	g Off-Site Survey	'S		
Code ^(a)	Name	Character	Odor	Odor Conc.	Figure No.	
			Intensity ^(b)	(D/T) ^(b)		
F	Buckeye Albany	asphalt/petroleum	2.0-3.0	15-31	3-7	
		asphalt/sulfur	1.0-3.0	2-31	3-8	
		gas/asphalt/solvent	2.0-4.0	31-170	3-9	
		oily/petroleum/asphalt/gasoline	1.5-3.0	31-170	3-10	
		petroleum/asphalt	1.0-2.0	2-7	3-11	
		asphalt/petroleum/sharp	1.0-4.0	2-170	3-16	
В	WWTP	Sewage	1.0-2.5	2-15	3-6	
		Sewage	1.0-2.0	2-7	3-7	
		Sewage	1.0-2.0	2-7	3-8	
		Sewage	1.0-2.5	2-31	3-11	
		sour/sewage	1.0-2.5	7-15	3-13	
		Sewage	0.5-2.0	2-7	3-16	
D	Cargill Grain	sour grain/meal	1.0-2.0	7-15	3-7	
		sour/rotten/grain/feed	1.0-2.5	7-15	3-8	
		rotten meat/grain	1.5-2.75	7-15	3-12	
С	Westway Feed	sour molasses	1.5-2.0	2-7	3-12	
		sweet/sour/molasses	1.0-2.0	7-15	3-13	
		sweet/sour/molasses	2.0-3.0	15-31	3-14	
Е	Wood Recycling	fresh wood chips	1.0-2.0	7-15	3-8	
		fresh wood chips	1.5-2.0	2-7	3-9	
		wood chips/mulch	1.5-2.5	2-15	3-11	
		sour wood chips/mulch	1.5-2.75	7-15	3-12	
		sour wood chips/mulch	0.5-2.5	7-15	3-13	
		wood chips/mulch	1.0-3.0	2-31	3-14	
		wood chips/mulch	1.5-3.0	2-31	3-16	

a) letter indicated for source location on off-site odor survey maps

b) odor intensity on the n-butanol intensity scale 0-8 (ASTM E544-18)

c) D/T = dilutions to threshold as measured by Scentometer

ON-SITE ODOR SURVEYS



loc.	int.	d/t	character	source	loc.	int.	d/t	character	source	
1	0.5	<2	light gasoline	Global	6	0.5	<2	sweet/solvent/gas	Westway/Global	
2	0.5	<2	light gasoline	Global	7	0.5-1.5	<2-2	mercaptan/sewage	WWTP	
3	0.5	<2	light gasoline/petroleum	Global	8	0.5	<2	stagnant water/aeration	WWTP	
4	0.5	<2	gasoline	Global	9	0.5-1.5	<2-2	rotten sludge water	WWTP	
5	0.5-1.0	<2	gasoline	Global	10	0.5-0.75	<2	oily/diesel	Global	
	Wind: SE-SSE, 1-4 mph, gusts 5 mph, 73ºF, 75% cloud cover, mostly cloudy									

Figure 3-1. Tank Farm odor survey No. 1 (09/10/2019 10:30-11:45)



loc.	int.	d/t	character	source	loc.	int.	d/t	character	source	
1	0.5	<2	light sulfur	Global	3	0.25	<2	gasoline	Global	
2	2 0.5 <2 sweet Westway Feed						<2-2	paint solvent	?	
	Wind: S-WSW, 0-3 mph, gusts 5 mph, 89ºF, 40% cloud cover, mostly sunny									

Figure 3-2. Tank Farm odor survey No. 2 (09/11/2019 15:30-17:00)



loc.	int.	d/t	character	source	loc.	int.	d/t	character	source		
1	0.25	<2	gasoline	Global	4	0.5	<2	gasoline/petroleum	Global		
2	0.5-1.0	<2	gasoline/solvent	Global	5	0.5-1.0	<2-2	bread baking	bakery		
3	0.5	<2	gasoline/petroleum	Global	6	0.5	<2	petroleum/solvent	Global		
	Wind: NNE-NE, 2-6 mph, gusts 14 mph, 64ºF, 100% cloud cover, cloudy										

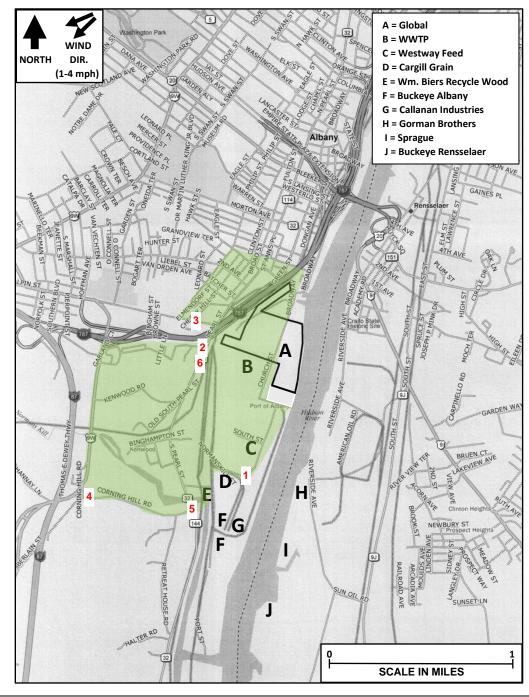
Figure 3-3. Tank Farm odor survey No. 3 (09/12/2019 07:00-08:15)



loc.	int.	d/t	character	source	loc.	int.	d/t	character	source	
1	0.25-0.5	<2	oily/petroleum	Offsite?	6	0.25	<2	gasoline	Global	
2	0.25-0.5	<2	oily/petroleum	Offsite?	7	0.25	<2-2	oily/petroleum	Global	
3	0.5-1.0	<2	gasoline	Global	8	0.25-1.5	<2-2	sewage	WWTP	
4	0.5-1.0	<2	gas/asphalt/solvent	Global/	9	0.5	<2-2	sour/musty/sewage	WWTP	
				Asphalt Plant						
5	0.25-0.5	<2	gasoline/petroleum	Global	10	1.0	<2	petroleum/asphalt	Asphalt Plant	
	Wind: E-ESE, 1-6 mph, gusts 12 mph, 70ºF, 35% cloud cover, partly cloudy									

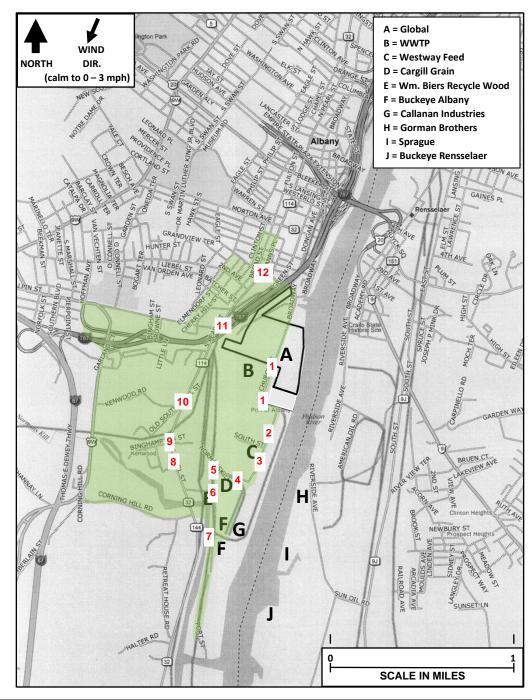
Figure 3-4. Tank Farm odor survey No. 4 (09/13/2019 10:45-11:30)

OFF-SITE ODOR SURVEYS



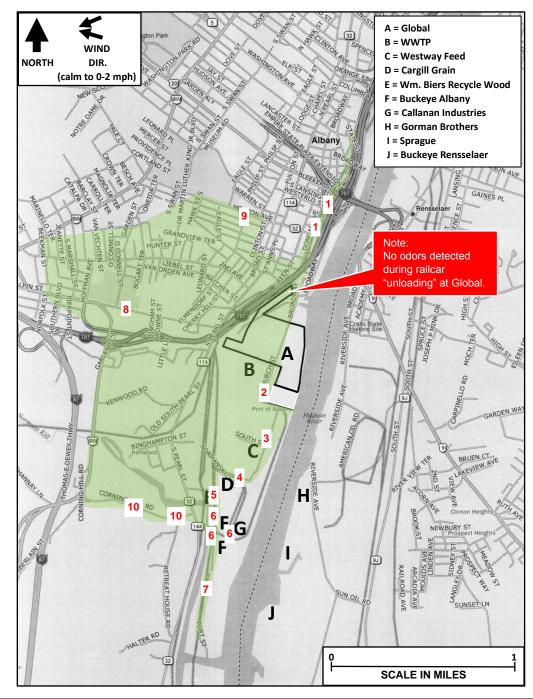
loc.	int.	d/t	character	source	loc.	int.	d/t	character	source
1	0.5	<2	oily/petroleum	Н	4	0.5	<2	sewage	WWTP
2	0.5-1.0	<2	oily/petroleum /chemical	railcars on tracks C P Kenwood?	5	0.5-1.0	<2	petroleum/asphalt /pesticide	F/H?
3	0.5	<2	asphalt	newly paved road	6	0.5	<2	food cooking	local homes
	Wind: ENE-NE, 1-4 mph, 71ºF, 65% cloud cover, mostly cloudy								

Figure 3-5. Community odor survey No. 1 (09/09/2019 13:15-15:15)



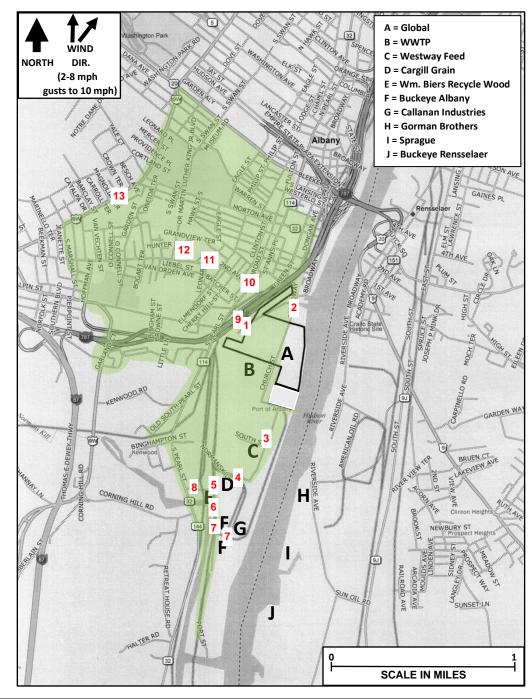
loc.	int.	d/t	character	source	loc.	int.	d/t	character	source
1	1.0-2.5	2-15	sewage	В	7	0.5-1.0	<2	burnt metal	scrap yard
2	1.0-1.5	<2-2	oily, petroleum, skunky	asphalt trucks	8	1.0-1.5	<2-2	sour garbage	County Waste Recycle
3	0.5-1.0	<2	sour grain	С	9	0.5	<2	sour grain	С
4	1.0-2.0	2-15	petroleum/asphalt	F	10	0.5	<2	sewage	В
5	0.5-1.0	<2	sour grain	D	11	0.5	<2	sewage	В
6	0.5-1.0	<2	sour grain	D	12	0.5-1.0	<2	garbage	local homes
	Wind: ENE-NE, calm to 0-3 mph, 69ºF, 85% cloud cover, mostly cloudy								

Figure 3-6. Community odor survey No. 2 (09/09/2019 19:30-21:20)



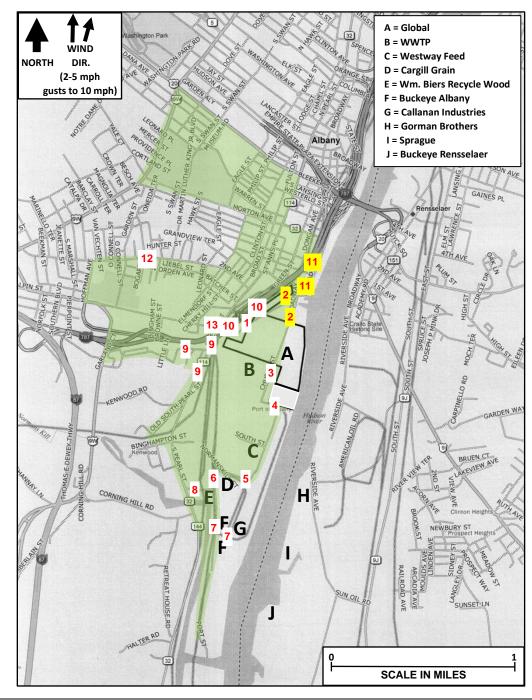
loc.	int.	d/t	character	source	loc.	int.	d/t	character	source
1	1.0-1.5	<2-2	baked bread	local bakery	6	1.0-2.0	7-15	sour grain/meal	D
2	1.0-2.0	<2-7	sewage	в	7	1.0-1.5	<2-2	petroleum	F
3	0.5	<2	sewage	в	8	0.5	<2	sewage	sewer drains
4	0.5-1	<2	animal feed/grain	C/D	9	1.0-1.5		sewage	sewer drains
5	2.0-3.0	15-31	asphalt/petroleum	F	10	1.0-2.0		oily/petroleum	J?
	Wind: ENE-ESE, 0-2 mph, 66°F, 50% cloud cover, partly sunny								

Figure 3-7. Community odor survey No. 3 (09/10/2019 07:30-09:40)



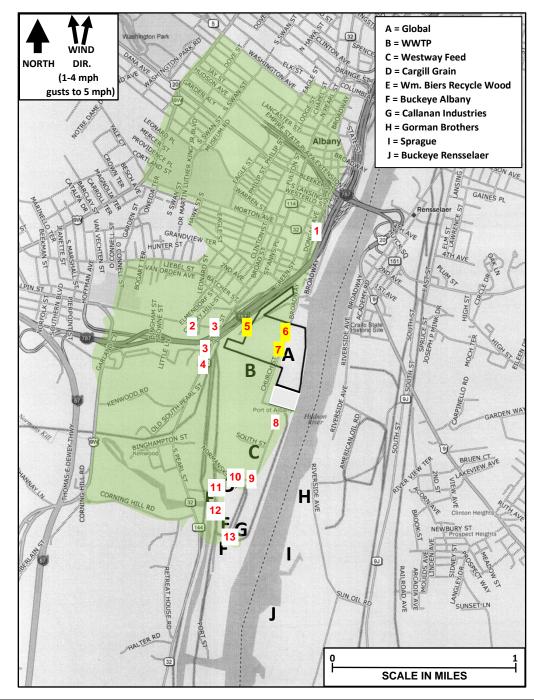
loc.	int.	d/t	character	source	loc.	int.	d/t	character	source
1	1.0-2.0	2-7	sewage	В	8	1.0-2.0	7-15	fresh wood chips	E
2	1.0-1.5	<2	food cooking	local rest.	9	0.5-1.0	<2	sewage	В
3	0.5-1.5	<2-2	gasoline	F?	10	0.5	<2	sewage	В
4	1.0-2.5	7-15	sour, rotten grain/feed	D	11	0.5	<2	sewage	sewer drain
5	1.0-2.0	2-7	sour, rotten, petroleum	F	12	1.0-1.5	<2	food cooking	loc. restaurant.
6	1.0-1.5	<2-2	asphalt/sulfur	F	13	1.0-2.0	2-7	fried food	loc. restaurant.
7	1.0-3.0	2-31	asphalt/sulfur	F					
	Wind: S-SW, 2-8 mph, gusts 10 mph, 75°F, 65% cloud cover, mostly cloudy								

Figure 3-8. Community odor survey No. 4 (09/10/2019 15:30-18:00)



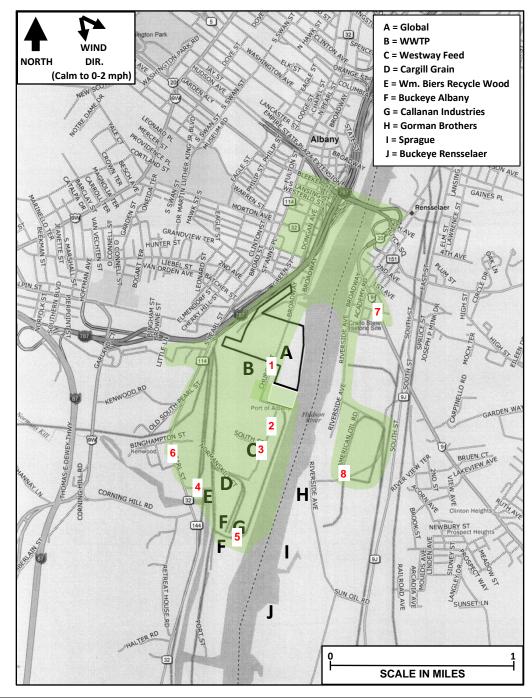
loc.	int.	d/t	character	source	loc.	int.	d/t	character	source
1	1.0-1.5	<2	sewage	В	8	1.5-2	2-7	fresh wood chips	E
<mark>2</mark>	<mark>1.0-1.5</mark>	<mark><2-2</mark>	gas/petroleum/asphalt	A/F	9	0.5-1	<2	sour/grain/meal	D
3	0.5	<2	sewage	В	10	0.5-1.5	<2-2	sewage	В
4	0.5-1.5	<2-2	petroleum/asphalt	F	<mark>11</mark>	<mark>1.0</mark>	<mark><2</mark>	petroleum/asphalt	A/F
5	1.0-1.5	<2-2	sour grain/meal	D	12	1.0	<2	sewage	sewer drain
6	1.0-1.75	2-7	gasoline/solvent	F	13	0.5	<2	sour grain/meal	D
7	2.0-4.0	31-170	gas/asphalt/solvent	F					
	Wind: S-SSW, 2-5 mph, gusts 10 mph, 72ºF, 80% cloud cover, mostly cloudy								

Figure 3-9. Community odor survey No. 5 (09/11/2019 06:45-09:15)



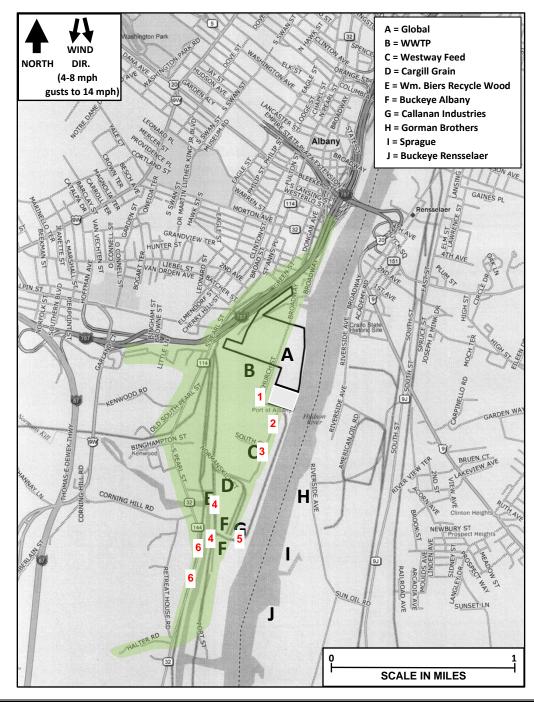
loc.	int.	d/t	character	source	loc.	int.	d/t	character	source
1	1.0-2.0	2-7	sewage	pump station	8	0.5	<2	oily/petroleum	F/H
2	1.0-1.5	<2-2	asphalt	repaved driveway	9	0.5	<2	sour grain/feed	D
3	1.0-1.5	<2-2	sewage	В	10	1.0	<2	petroleum/asphalt	F
4	1.0-1.5	<2-2	asphalt	repaved B-Ball court	11	0.5-1.0	<2	fresh wood chips	Е
<mark>5</mark>	<mark>0.5</mark>	<mark><2</mark>	petroleum	A	12	0.5-1.0	<2	oily/petroleum	F
<mark>6</mark>	<mark>1.0-1.5</mark>	<mark><2-2</mark>	<mark>gasoline</mark>	A	13	1.5-3.0	31-170	oily/petroleum/asphalt/ gasoline	F
<mark>7</mark>	7 0.5 <2 puffs of gasoline A								
	Wind: SSE-SSW, 1-4 mph, gusts 5 mph, 87°F, 50% cloud cover, partly sunny								

Figure 3-10. Community odor survey No. 6 (09/11/2019 12:30-14:50)



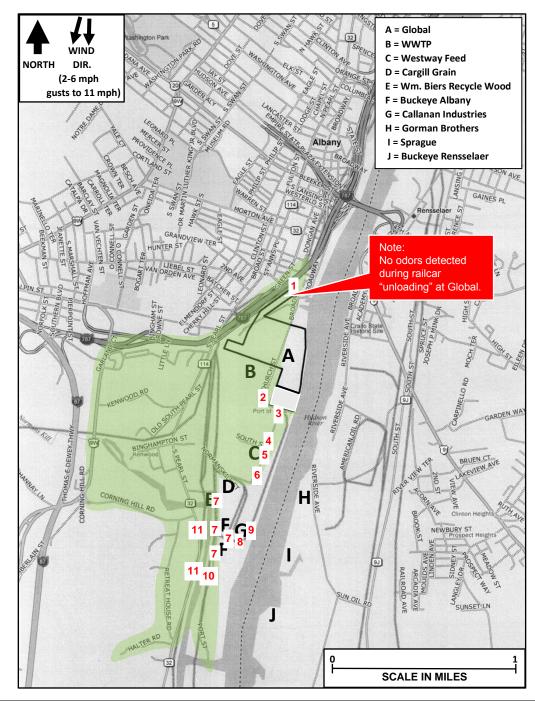
loc.	int.	d/t	character	source	loc.	int.	d/t	character	source
1	1.0-2.5	2-31	sewage	В	5	1.0-2.0	2-7	petroleum/asphalt	F
2	0.5	<2	light metallic	scrap yard	6	1.5-2.0	2-7	garbage	County Waste Recycle
3	0.5-1.0	<2	sour grain/meal	С	7	1.0	<2	petroleum	gas station
4	1.5-2.5	2-15	wood chips/mulch	E	8	0.5	<2	sour petroleum	New Castle asphalt plant
	Wind: NNW-WNW, 0-2 mph, 78ºF, 20% cloud cover, mostly clear								

Figure 3-11. Community odor survey No. 7 (09/11/2019 20:30-22:00)



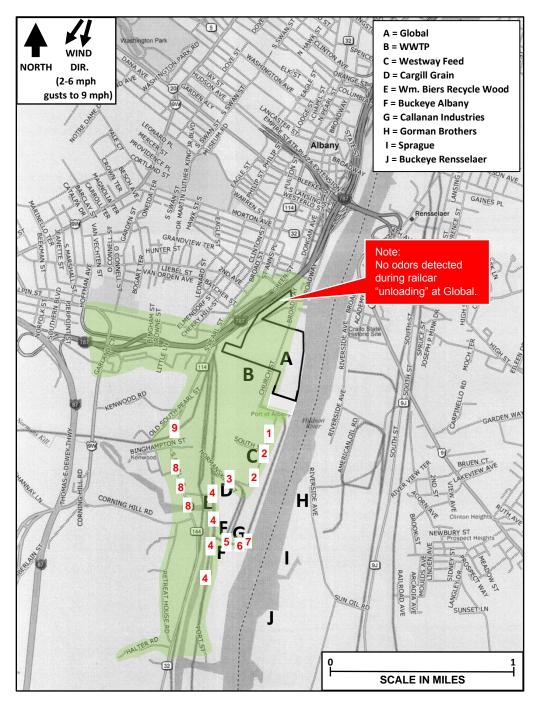
loc.	int.	d/t	character	source	loc.	int.	d/t	character	source
1	1.0-1.75	<2-2	sewage/burnt sludge	в	4	1.5-2.75	7-15	sour woodchips/mulch	E
2	1.0-2.0	2-7	sour food/grain/meal	С	5	1.5-2.75	7-15	rotten meat/grain	D
3	1.5-2.0	2-7	sour molasses	С	6	0.5-1.0	<2	rotten meat/sour mulch	D/E
	Wind: NNW-WNW, 4-8 mph, gust to 14 mph, 61ºF, 100% cloud cover, cloudy								

Figure 3-12. Community odor survey No. 8 (09/12/2019 09:05-10:35)



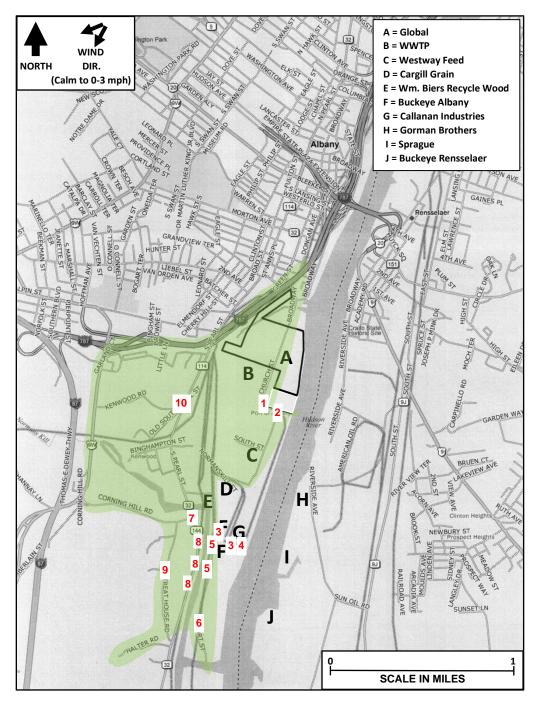
loc.	int.	d/t	character	source	loc.	int.	d/t	character	source
1	1.0-2.0	2-7	food cooking	local restaurant	7	0.5-2.5	7-15	sour mulch, wood chips	Е
2	1.0-1.75	2	sour, rotten sewage	В	8	0.5-1.0	<2	sour grain	D
3	0.5	<2	sour, wet cardboard	Waste Management	9	0.5-1.0	<2	asphalt//sour grain	F/D
4	1.0-2.5	7-15	sour sewage	В	10	0.5-1.5	<2	asphalt//sour grain, wood chips	F/D/E
5	1.0-2.0	7-15	sweet/sour molasses	С	11	0.5-1.0	<2	wood chips	E
6	1.0-1.5	<2	new cardboard	С					
			Wind: N-NNE, 2-6 r	nph, gusts 11 mph,	65⁰F, 1	00% clou	d cover,	cloudy	

Figure 3-13. Community odor survey No. 9 (09/12/2019 14:10-16:00)



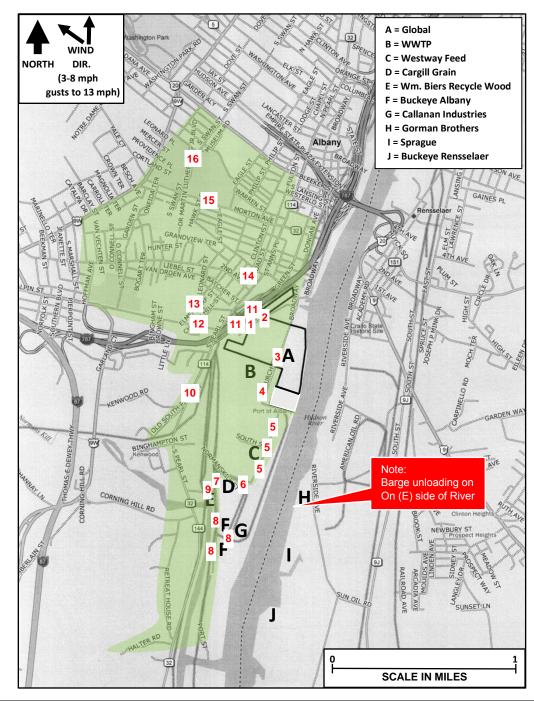
loc.	int.	d/t	character	source	loc.	int.	d/t	character	source
1	1.0-1.5	<2-2	sewage, sulfur, H ₂ S	В	6	1.0	<2	cooked grain	D
2	2.0-3.0	15-31	sweet/sour molasses	С	7	1.0-1.5	<2	petroleum/asphalt	G
3	0.25	<2	sewage	В	8	0.5-1.5	<2-2	sour garbage	County Waste Recycle
4	1.0-3.0	2-31	woodchips, mulch	ш	9	1.0-1.75	<2-2	wood smoke	local homes
5	0.5-1.0	<2	molasses	С					
	Wind: NE-NNE, 2-6 mph, gusts 9 mph, 61ºF, 25% cloud cover, mostly clear								

Figure 3-14. Community odor survey No. 10 (09/12/2019 20:30-22:00)



loc.	int.	d/t	character	source	loc.	int.	d/t	character	source
1	0.5-1.0	<2	petroleum	oil truck	6	0.25	<2	light metallic	scrap yard
2	0.25	<2	petroleum/oily	oil truck	7	0.5-1.0	<2	wood chips/sour grain/meal	E/D
3	0.5-1.0	<2	petroleum/gasoline	G	8	0.5-1.0	<2	petroleum/asphalt	F
4	0.25-0.5	<2	asphalt/rotten grain	G/D	9	0.5	<2	petroleum/asphalt	F
5	0.5-2.0	2-7	petroleum/asphalt/oily/ food	F/D	10	1.0-1.5	<2	asphalt	road repair
	Wind: NE-ENE, 0-3 mph, 58ºF, 25% cloud cover, mostly sunny								

Figure 3-15. Community odor survey No. 11 (09/13/2019 08:30-10:15)



loc.	int.	d/t	character	source	loc.	int.	d/t	character	source
1	0.5-1.5	<mark><2-2</mark>	sewage/gasoline	<mark>B/A</mark>	9	1.5-3.0	2-31	wood chips/mulch	Е
<mark>2</mark>	<mark>1.0</mark>	<mark><2</mark>	gasoline/petroleum	A	10	0.5-1.0	<2	sour petroleum	н
<mark>3</mark>	<mark>0.5-1.5</mark>	<mark><2</mark>	gas/petroleum/sulfur	A/H?	11	0.5-2.0	2-7	sewage	В
4	0.5-1.0	<2	gas/petroleum	н	12	0.5-1.0	<2	sewage	В
5	1.0-1.5	<2-2	sulfur/asphalt	H/F	13	0.25	<2	sour petroleum	Н
6	1.0-1.5	<2-2	rancid grain/meal	D	14	0.5	<2	sewage	В
7	0.5-1.5	<2	sour grain/meal	D	15	0.5	<2	petroleum	н
8	1.0-4.0	2-170	asphalt/petroleum/sh arp	F	16	0.5	<2	petroleum	н
	Wind: S-ESE, 3-8 mph, gusts 13 mph, 72°F, 40% cloud cover, mostly sunny								

Figure 3-16. Community odor survey No. 12 (09/13/2019 14:20-17:00)

Attachment G

Global Noise Study



December 12, 2019

Ms. Gianna Aiezza, P.E. Principal Engineer Envirospec Engineering, PLLC. 349 Northern Blvd. Albany, New York 12204

Subject: Baseline Environmental Nosie Study – Summary Report Global Companies-Port of Albany JMT Project No. 19-01944

Dear Ms. Aiezza:

This letter report summarizes the findings of the Baseline Environmental Noise Study conducted by JMT of New York, Inc. (JMT) for Global Companies' (Global) Port of Albany terminal. Global is a facility that is in operation 24 hours a day, 7 days a week. JMT conducted two, 24-hour baseline monitoring events on October 14-15, 2019 and October 23-24, 2019. Monitoring protocol and study results are described below. Contained within Appendix A are the sound level meter location map, detailed summary noise results presented in Table 1, and transcribed field notes and photographs of monitoring locations. Appendix B contains tabulated sound level meter data output tables.

PROTOCOL

JMT monitored five (5) locations during the study, as depicted on the attached Figure 1 and as described below:

	5 7 1 5
Location 1	Albany Housing Authority - Ezra Prentice Homes – Park
Location 2	Albany Housing Authority - Ezra Prentice Homes – Yard
Location 3	Global Companies Terminal – Rail Siding
Location 4	Global Companies Terminal – Westemmost Tank
Location 5	Global Companies Terminal – Main Facility (Truck Rack)

Meters were pre-programmed to monitor several sound parameters, and to record observations at five (5) minute intervals for a period of 24hours. Microphone height was set at approximately 5.0 feet above ground. The Photographic Log (see Appendix A) shows the setup of each sound level meter.

Field staff noted the predominant sound source at all locations to be vehicular traffic. At Location 5, this included on-site traffic and distant highway traffic. At all other locations, the predominant sound source noted was highway traffic associated with Interstate 787 (I-787) and, to a lesser extent, NYS Route 32. Additional sources of sound associated with nearby transportation and utility construction activities were noted at Location 1.

Locations 1 and 2 provided monitoring results for two, 24-hour data series. Locations 3, 4 and 5 provided reliable results for approximately 17 hours each, including daytime and overnight observations. Each location provided statistically valid results for both daytime and nighttime environmental sound levels.

S www.jmt.com



RESULTS

Table 1 presents the observed results of the study in LAeq and Lmax for the length of the test, and for day and night periods. LAeq is defined as the A-weighted 1 equivalent continuous sound level in decibels measured over the stated time period. In more simplified terms, LAeq is analogous to the "average" sound level for a given period, tailored to human hearing. Lmax is the maximum observed sound level during the stated time period. LAeq and Lmax are useful in discussion of environmental noise as they provide "average" and maximum sound levels, respectively, for a given period of observation, or a subset of that period, regardless of recording interval. Appendix B contains additional metrics, including percentile (Ln) metrics. Percentile metrics are useful in describing environmental noise over the recording interval (5 minutes in this study); however, they cannot be averaged over larger periods, and are therefore excluded from Appendix A, Table 1.

Detailed results are provided in Appendix A, Table 1, and a full record of recorded data is provided in Appendix B. In general, recorded "average" ambient sound levels (LAeq) ranged from a low of approximately 55.5 dB(A) near the Ezra Prentice Homes during night hours, to a high of approximately 68.8 dB(A) during daytime hours, also at the Ezra Prentice Homes. These results are consistent with urban and commercial areas per the Federal Highway Administration document, *Techniques for Reviewing Noise Analyses and Associated Noise Reports*. These levels are also consistent with residential areas proximal to highways.

In general, while there is some variability, LAeq levels recorded at the Ezra Prentice Homes and within Global's facility are effectively identical. LAeq values observed at Location 5, which is at the core of Global's facility operation were below values observed at Location 2 at Ezra Prentice Homes for day, night, and combined monitoring periods. These results support anecdotal observations from the field staff that highway traffic is the predominant source of environmental sound in the area, including at Ezra Prentice Homes. From a sound projection standpoint, these results also make sense, as sound levels decay with distance from a sound source in general accordance with the inverse square law. Global's primary focus of activity, represented by Location 5, is approximately 2,000 feet from Locations 1 and 2. At this distance, contributions to observed sound levels at the Ezra Prentice Homes from Global's focus of operations would be minimal.

Observed Lmax values further indicate that Global's Port of Albany facility has little to no impact on surrounding sound levels. In all cases, based on timing of the recorded Lmax for the observation period, Lmax values observed within Global's facility did not correlate to Lmax values observed outside the facility. Even within Global's facility, there was no correlation between Lmax timing.

If you have any questions or need further information, please do not hesitate to contact me at 518-218-5949 or by email at cminkler@jmt.com, or Ed Davidson, Project Manager, at edavidson@jmt.com.

Sincerely, JMT of New York, Inc.

(pristura M Minkler

Christina M. Minkler, PE Vice President CMM/egd

¹ A-weighting is a frequency weighting formula/filter that correlates well with human perceptions of loudness by "weighting" sound level observations based on their frequency when calculating a single, combined sound level.

APPENDIX A NOISE MONITORING SITE MAP

SUMMARY NOISE RESULTS

PHOTO LOG

FIELD NOTES



JMT of New York, Inc. Baseline Environmental Noise Study - Global Companies - Port of Albany **TABLE 1 - SUMMARY NOISE RESULTS**

Location ID	Motor ID	Teet #		Find Times		<u>Overall</u>		<u>Day (6 AM - 8 PM)*</u>			<u>Night (8 PM - 6 AM)*</u>		
	<u>Inter ID</u>	<u>Test #</u>	<u>Start Time</u>	End Time	Total Hours	LAeq	<u>Lmax</u>	LAeq	<u>Lmax</u>	Lmax Time	LAeq	<u>Lmax</u>	Lmax Time
1	C	1	10/14/19 18:00	10/15/19 18:00	24	61.0	92.7	62.8	92.7	10/15 06:40	55.5	82.8	10/14 21:10
2	E	1	10/14/19 18:00	10/15/19 18:00	24	59.8	94.1	59.9	92.5	10/14 19:10	59.6	94.1	10/14 21:40
1	С	2	10/23/19 12:00	10/24/19 12:00	24	60.8	91.1	61.7	91.1	10/23 18:40	59.1	89.5**	10/24 05:25
2	E	2	10/23/19 12:00	10/24/19 12:00	24	67.5	102.6	68.8	102.1	10/24 11:35	64.8	102.6**	10/24 05:20
3	В	2	10/23/19 12:00	10/24/19 4:35	16.6	61.9	88.3	62.7	83.7	10/23 18:05	61.0	88.3	10/23 20:10
4	A	2	10/23/19 12:00	10/24/19 5:30	17.5	66.9	101.8	66.6	101.8	10/23 16:30	67.2	95.1	10/23 22:35
5	Rental	2	10/23/19 12:00	10/24/19 4:35	16.6	63.5	93.2	64.7	93.2	10/23 13:35	62.1	85.1	10/23 23:50

*Locations 3, 4 and 5 did not observe the full period; parameters reflect hours monitored during each respective period. **Lmax at Locations 1 and 2 occurred outside recorded period of Locations 3, 4 and 5. Adjusting "Night" period to end at 4:35 AM for all Locations results in Lmax values of 79.7 at Location 1 and 84.4 at Location 2, occurring at 10/23 22:00 and 10/24 04:15, respectively.

<u>JMT of New York, Inc.</u> <u>Baseline Environmental Noise Study – Global Companies – Port of Albany</u> <u>Photographic Log</u>



Location 1 – Facing East



Location 2 – Facing Southeast

<u>JMT of New York, Inc.</u> <u>Baseline Environmental Noise Study – Global Companies – Port of Albany</u> <u>Photographic Log</u>



Location 3 - Facing West



Location 4 – Facing West

<u>JMT of New York, Inc.</u> <u>Baseline Environmental Noise Study – Global Companies – Port of Albany</u> <u>Photographic Log</u>



Location 5 - Facing Northeast

JMT of New York, Inc. Baseline Environmental Noise Study Global Companies – Port of Albany Transcribed Field Notes

<u>10/14/19-</u>

KO,ED,DS, Darren & Nicole onsite at 14:00.

Set up Location 5-005

Calibration: 92.8

14:20- Set time 10/14 18:00:00 to 10/15 18:00:00

Set up Location 3-003

Calibration: 92.8

14:40- Set time 10/14 18:00:00 to 10/15 18:00:00

Set up Location 4

Set up Location 1

Location moved to playground fence, located behind garbage area

Set up Location 2

Location moved to telephone pole.

<u>10/15/19-</u> KO, DS onsite 17:50.

17:56 Location 5 picked up

18:15 Location 3 picked up

Meter knocked over down small embankment.

Reset to 18:20-08:00

18:25 Location 4 picked up

Meter A shut off due to low battery

Replaced with rental unit

Reset to 18:25-08:00

18:40 Location 1 picked up

Meter post calibrated

18:45 Location 2 picked up

Meter post calibrated

10/23/19

KO and AR onsite 10:15 am. Global employee escorts KO and AR to Locations 5 and Location 3 on Global site.

Global Sample Locations:

Location 5- Rental Meter

Data File: 0508

Set to Record 10/23 12:00:00 to 10/24 12:00:00

Location 3- Meter B

Data File: 0305

Set to Record 10/23 12:00:00 to 10/24 12:00:00

Location 4- Meter A

Set to Record 10/23 12:00:00 to 10/24 12:00:00

Housing Association:

Location 1- Meter C

Set to Record 10/23 12:00:00 to 10/24 12:00:00

Location 2- Meter D

Set to Record 10/23 12:00:00 to 10/24 12:00:00

10/24/19-

KO arrives onsite at approximately 12:30 pm to collect noise meters.

All meters were in correct positions and appeared to be undisturbed when meters were collected.

APPENDIX B TABULATED NOISE DATA

METROSONICS db-3080 SN 1430 V1.20 TEST: 2 OF 2

REPORT PRINTED 10/31/19 AT 14:11:01

USER ID: 000001

EXCHANGE RATE: 3dB FILTER: A WT. DOSE CRITERION: 90dB RESPONSE: SLOW DOSE LENGTH: 8 hours

PRE-CALIBRATION TIME: N/A PRE-CALIBRATION RANGE: 39.9dBA TO 139.9dBA

POST-CALIBRATION TIME: 10/31/19 AT 14:00:02 POST-CALIBRATION RANGE: 39.8dBA TO 139.8dBA

TEST STARTED: 10/23/19 AT 12:00:00TEST LENGTH:01 DAYS00:00:00TEST ENDED:10/24/19 AT 12:00:00TIME HISTORY INTERVAL:00:05:00

Lavg...... 60.8dBA Lavg (80)... 48.3dBA Lavg (90)... 39.9dBA SEL..... 110.0dBA

TWA...... 65.6dBA TWA (80)... 53.1dBA TWA (90)... 41.7dBA

Lmax: 91.1dBA ON 10/23/19 AT 18:43:58 Lpk: 128.4dBC ON 10/23/19 AT 18:58:53 TIME OVER 66dBA 00 DAYS 00:50:11.36 DOSE (80)...... 0.01% PROJ. DOSE (80)...... > 8 HRS. DOSE (90)..... 0.00% PROJ. DOSE (90)...... > 8 HRS.

TIME	Lav	Lmax	Lpk	L(10.0)	L(90.0))
	dBA	tBA??	dzC ?	t{A¿¿	¿g{}íêíċ	10/23/19
12:00:00	61.7	76.1	<110.2	61	56	
12:05:00	60.2	70.9	<110.2	62	55	
12:10:00	65.1	80.8	<110.2	65	56	
12:15:00	59.7	68.1	<110.2	61	56	
12:20:00	60.9		<110.2	64	54	
12:25:00	61.8	76.7	<110.2	63	57	
12:30:00	59.3			61	57	
12:35:00	61.2		<110.2	63	57	
12:40:00	62.3		<110.2	65	57	
12:45:00	59.7		<110.2	62	56	
12:50:00	62.2	73.7	<110.2	64	56	
12:55:00	61.3		<110.2	63	57	
13:00:00	60.3			62	56	
13:05:00	61.0			63	58	
13:10:00	60.1		<110.2	62	56	
13:15:00	61.3		<110.2	63	57	
13:20:00	62.2		<110.2	62	56	
13:25:00	62.1	71.4	<110.2	65	57	
13:30:00	61.0		<110.2	63	58	
13:35:00	61.6			64	57	
13:40:00	63.4		<110.2	62	56	
13:45:00	61.3			64	57	
13:50:00	60.2			62	56	
13:55:00	63.2		<110.2	66	57	
14:00:00	60.5			63	56	
14:05:00	59.5	66.0	<110.2	61	57	
14:10:00	61.0	69.4	<110.2	63	56	
14:15:00	60.5			63	56	
14:20:00	60.3		<110.2	63	56	
14:25:00	60.5	68.1	<110.2	63	56	
14:30:00	59.8	65.6	<110.2	61	57	
14:35:00	62.2	78.9	<110.2	63	56	
14:40:00	60.9	69.4	<110.2	62	57	
14:45:00	59.2	66.4	<110.2	61	56	
14:50:00	60.1	67.1	<110.2	61	57	
14:55:00	60.2	66.5	<110.2	61	57	
15:00:00	60.6	67.8	<110.2	62	57	

TIME	Lav	Lmax	Lpk L(10	0.0) L(90.0)
		$IzA tB{$	dBA	dBA
í 16:00:00	59.			60 57
16:05:00	60.9	67.4 <11		
16:10:00	61.1	68.3 <11	0.2 6.	3 58
16:15:00	60.8	66.0 <11		
16:20:00	61.8	71.7 <11	0.2 6.	3 58
16:25:00	61.9	73.1 <11	0.2 6.	3 59
16:30:00	61.9	74.7 <11	0.2 6.	3 59
16:35:00	61.3	72.3 <11	0.2 6.	3 57
16:40:00	60.8	68.5 <11	0.2 62	2 58
16:45:00	60.9	70.3 <11	0.2 6.	3 58
16:50:00	59.9	64.9 <11	0.2 6	1 58
16:55:00	61.2	76.0 <11	0.2 6.	3 57
17:00:00	61.3	73.3 <11	0.2 6.	3 57
17:05:00	61.5	71.1 <11	0.2 6.	3 58
17:10:00	62.1	73.3 <11	0.2 6.	3 58
17:15:00	60.3	69.9 <11	0.2 6	1 57
17:20:00	59.5	63.7 <11	0.2 60	0 57
17:25:00	58.9	63.1 <11	0.2 60	0 57
17:30:00	61.4	75.1 <11	0.2 6	1 57
17:35:00	61.3	76.0 <11	0.2 6.	3 57
17:40:00	59.4	63.3 <11	0.2 6	1 56
17:45:00	58.9	62.7 <11	0.2 60	0 56
17:50:00	59.6	65.2 <11	0.2 60	0 57
17:55:00	61.2	72.3 <11	0.2 62	2 57
18:00:00	59.2	66.9 <11	0.2 6	1 56
18:05:00	62.4	73.1 <11	0.2 6.	5 58
18:10:00	60.4	67.4 <11	0.2 6	1 58
18:15:00	58.8	62.5 <11	0.2 60	0 56
18:20:00	61.5	74.0 <11	0.2 62	2 58
18:25:00	59.2	65.9 <11	0.2 6	0 57

18:30:00	59.4	65.0	<110.2	60	57
18:35:00	59.4	62.9	<110.2	60	58
18:40:00	68.5	91.1	128.4	68	59
18:45:00	60.9	77.7	<110.2	60	57
18:50:00	62.6	77.6	<110.2	65	58
18:55:00	70.0	90.3	128.4	70	59
19:00:00	59.3	64.0	<110.2	61	57
19:05:00	58.8	69.5	<110.2	59	56
19:10:00	59.3	66.7	<110.2	61	56
19:15:00	59.0	63.8	<110.2	60	57
19:20:00	59.3	66.7	<110.2	61	56
19:25:00	58.0	67.3	<110.2	59	55
19:30:00	58.5	69.5	<110.2	59	55
19:35:00	62.6	73.3	<110.2	65	58
19:40:00	57.9	62.2	<110.2	59	55
19:45:00	57.7	64.3	<110.2	59	55
19:50:00	57.7	64.7	<110.2	60	55
19:55:00	60.9	69.5	<110.2	64	55

TIME	Lav	Lmax	k Lpk	L(10.0	0) L(90.0)				
	dBA ?				¿¿tz}íëíë20:00:00	60.0	75.3 <110.2	63	54
20:05:00	56.7	64.5	<110.2		53				
20:10:00	58.9	69.3	<110.2	61	54				
20:15:00	57.3	62.3	<110.2	59	53				
20:20:00	56.2	63.3	<110.2	58	53				
20:25:00	57.4	65.8	<110.2	59	54				
20:30:00	55.7	61.9	<110.2	57	52				
20:35:00	55.8	62.0	<110.2	57	53				
20:40:00	55.9	63.5	<110.2	58	52				
20:45:00	58.1	69.3	<110.2	59	53				
20:50:00	56.7	65.9	<110.2	58	53				
20:55:00	56.5	63.4	<110.2	58	53				
21:00:00	58.1	65.5	<110.2	61	53				
21:05:00	55.9	60.3	<110.2	57	54				
21:10:00	55.9	62.2	<110.2	57	53				
21:15:00	55.1	61.5	<110.2	57	51				
21:20:00	54.7	59.7	<110.2	56	52				
21:25:00	54.9	60.3	<110.2	56	51				
21:30:00	56.1	62.8	<110.2	57	54				
21:35:00	54.8	63.6	<110.2	56	52				
21:40:00	56.0	64.3	<110.2	57	53				
21:45:00	56.1	64.7	<110.2	57	52				
21:50:00	62.1	71.5	<110.2	66	53				
21:55:00	55.2	60.8	<110.2	57	53				

22:00:00	65.7	79.7	<110.2	65	58
22:05:00	57.9	68.0	<110.2	63	51
22:10:00	59.1	66.1	<110.2	62	52
22:15:00	60.3	67.2	<110.2	63	52
22:20:00	56.2	67.8	<110.2	58	50
22:25:00	56.8	67.9	<110.2	59	51
22:30:00	59.9	67.8	<110.2	63	51
22:35:00	64.0	72.3	<110.2	67	58
22:40:00	55.8	61.6	<110.2	58	53
22:45:00	63.5	73.2	<110.2	67	53
22:50:00	56.3	64.1	<110.2	61	51
22:55:00	54.6	61.7	<110.2	56	51
23:00:00	56.8	71.2	<110.2	56	51
23:05:00	54.3	63.2	<110.2	57	50
23:10:00	54.9	64.5	<110.2	57	50
23:15:00	53.5	57.9	<110.2	55	51
23:20:00	54.6	64.4	<110.2	57	51
23:25:00	54.3	62.6	<110.2	56	51
23:30:00	53.0	59.1	<110.2	55	50
23:35:00	53.9	61.2	<110.2	57	50
23:40:00	54.2	63.0	<110.2	57	49
23:45:00	64.1	76.9	<110.2	68	51
23:50:00	56.4	67.9	<110.2	59	50
23:55:00	57.9	68.1	<110.2	61	50

TIME	Lav	Lmax	Lpk	L(10.0)	L(90.0)	
	dzA d	zA??	gBC??	ن WBA	dzAí ن	íê10/24/19
00:00:00	64.4	75.5	<110.2	68	50	
00:05:00	53.9	60.8	<110.2	56	50	
00:10:00	63.0	75.1	<110.2	66	51	
00:15:00	60.4	70.7	<110.2	65	50	
00:20:00	53.8	64.0	<110.2	56	49	
00:25:00	52.3	60.0	<110.2	54	49	
00:30:00	52.7	62.0	<110.2	54	49	
00:35:00	52.0	59.5	<110.2	54	48	
00:40:00	51.9	61.0	<110.2	53	48	
00:45:00	56.9	70.0	<110.2	61	50	
00:50:00	56.6	67.3	<110.2	60	51	
00:55:00	59.9	66.9	<110.2	63	52	
01:00:00	60.1	75.1	<110.2	64	52	
01:05:00	60.1	69.3	<110.2	64	51	
01:10:00	57.0	66.6	<110.2	61	50	
01:15:00	52.1	59.1	<110.2	54	49	
01:20:00	53.0	67.3	<110.2	54	50	

01:25:00	50.9	55.3	<110.2	52	49
01:30:00	51.8	58.3	<110.2	54	48
01:35:00	52.0	58.1	<110.2	53	49
01:40:00	55.2	64.0	<110.2	58	50
01:45:00	51.9	60.3	<110.2	53	49
01:50:00	53.0	62.5	<110.2	55	49
01:55:00	51.9	55.6	<110.2	53	50
02:00:00	52.9	59.5	<110.2	54	50
02:05:00	56.7	76.5	<110.2	57	50
02:10:00	59.5	78.4	<110.2	57	49
02:15:00	52.4	59.3	<110.2	54	49
02:20:00	53.0	59.0	<110.2	55	50
02:25:00	53.7	60.8	<110.2	55	51
02:30:00	54.6	62.9	<110.2	57	51
02:35:00	53.2	62.0	<110.2	55	50
02:40:00	54.1	63.5	<110.2	56	50
02:45:00	54.4	63.1	<110.2	57	51
02:50:00	52.1	57.5	<110.2	55	49
02:55:00	52.7	59.2	<110.2	54	49
03:00:00	51.9	57.9	<110.2	54	49
03:05:00	53.2	58.1	<110.2	55	50
03:10:00	53.3	62.7	<110.2	55	50
03:15:00	52.4	59.4	<110.2	54	50
03:20:00	54.7	66.9	<110.2	56	51
03:25:00	55.5	63.6	<110.2	57	52
03:30:00	54.1	60.3	<110.2	55	52
03:35:00	55.5	62.9	<110.2	57	50
03:40:00	54.6	63.2	<110.2	56	50
03:45:00	56.4	66.4	<110.2	59	52
03:50:00	54.3	63.6	<110.2	56	51
03:55:00	54.3	66.6	<110.2	56	50

TIME	Lav	Lmax	x Lpl	k L(10.0)) L(90.0)				
	dBA	dzA	dCC	¿tB} ?¿¿	¿¿t{Aíëíë04:00:00	53.5	64.3 <110.2	55	50
04:05:00	56.7	71.3	<110.2	2 59	50				
04:10:00	55.0	65.6	<110.2	2 57	51				
04:15:00	53.7	63.9	<110.2	2 56	49				
04:20:00	53.9	60.7	<110.2	2 56	50				
04:25:00	58.4	74.7	<110.2	2 57	50				
04:30:00	52.8	59.9	<110.2	2 55	50				
04:35:00	54.5	63.2	<110.2	2 57	50				
04:40:00	55.4	66.4	<110.2	2 57	50				
04:45:00	53.3	57.5	<110.2	2 55	50				
04:50:00	53.0	59.6	<110.2	2 55	50				

04:55:00	54.8	62.8	<110.2	57	52
05:00:00	60.3	73.6	<110.2	64	51
05:05:00	58.0	64.7	<110.2	60	53
05:10:00	56.2	62.8	<110.2	58	53
05:15:00	56.5	67.1	<110.2	59	52
05:20:00	71.8	85.3	<110.2	75	55
05:25:00	71.1	89.5	<110.2	75	53
05:30:00	57.5	67.8	<110.2	60	52
05:35:00	65.0	78.9	<110.2	68	55
05:40:00	66.7	80.3	<110.2	69	58
05:45:00	58.9	70.1	<110.2	62	53
05:50:00	58.9	67.8	<110.2	61	54
05:55:00	57.3	64.5	<110.2	59	54
06:00:00	59.3	77.6	<110.2	59	55
06:05:00	59.5	77.1	<110.2	60	54
06:10:00	59.8	67.1	<110.2	62	56
06:15:00	59.1	66.7	<110.2	61	56
06:20:00	59.6	67.5	<110.2	62	55
06:25:00	59.4	64.3	<110.2	61	57
06:30:00	61.9	76.3	<110.2	63	57
06:35:00	62.4	69.5	<110.2	65	59
06:40:00	62.7	73.6	<110.2	64	59
06:45:00	60.6	66.7	<110.2	62	58
06:50:00	64.6	82.9	<110.2	65	59
06:55:00	61.5	77.6	<110.2	63	58
07:00:00	63.6	73.3	<110.2	67	58
07:05:00	60.8	69.8	<110.2	62	57
07:10:00	61.3	65.2	<110.2	63	59
07:15:00	61.9	69.7	<110.2	64	59
07:20:00	62.4	74.2	<110.2	64	58
07:25:00	62.2	69.9	<110.2	63	59
07:30:00	62.0	68.9	<110.2	63	59
07:35:00	62.2	73.5	<110.2	63	59
07:40:00	65.6	77.9	<110.2	67	60
07:45:00	62.3	68.9	<110.2	64	60
07:50:00	61.9	70.7	<110.2	64	59
07:55:00	62.7	69.0	<110.2	65	60

TIME	Lav	/ Lmax	k Lpk	L(10.0)) L(90.0)				
	dBA	?dBA	dzC ¿	tC}	tz}íëíë08:00:00	62.4	74.2 <110	.2 64	60
08:05:00	61.6	6 68.1	<110.2	64	58				
08:10:00	62.9	9 70.8	<110.2	65	59				
08:15:00	62.9	9 77.0	<110.2	63	59				
08:20:00	61.0	65.8	<110.2	63	58				

08:25:00	61.3	67.8 <110.2	63	59
08:30:00	63.3	82.1 <110.2	64	57
08:35:00	63.8	72.1 <110.2	66	58
08:40:00	64.1	81.2 <110.2	63	58
08:45:00	63.1	78.5 <110.2	65	58
08:50:00	61.7	76.8 <110.2	62	57
08:55:00	61.6	73.1 <110.2	63	58
09:00:00	60.1	73.4 <110.2	61	57
09:05:00	60.1	65.7 <110.2	62	56
09:10:00	59.7	66.8 <110.2	61	56
09:15:00	59.5	66.2 <110.2	62	56
09:20:00	66.8	75.6 <110.2	71	57
09:25:00	59.8	65.2 <110.2	62	56
09:30:00	59.6	67.6 <110.2	62	56
09:35:00	58.6	65.1 <110.2	60	56
09:40:00	60.2	71.0 <110.2	61	56
09:45:00	59.9	72.7 <110.2	62	55
09:50:00	60.1	69.6 <110.2	63	55
09:55:00	60.7	68.3 <110.2	64	55
10:00:00	58.9	66.0 <110.2	61	55
10:05:00	59.7	70.4 <110.2	61	56
10:10:00	58.6	64.9 <110.2	61	55
10:15:00	59.3	68.4 <110.2	61	55
10:20:00	59.7	64.8 <110.2	61	57
10:25:00	58.9	70.4 <110.2	60	55
10:30:00	58.8	65.4 <110.2	61	55
10:35:00	62.6	78.7 <110.2	62	54
10:40:00	60.0	74.0 <110.2	62	55
10:45:00	61.4	71.8 <110.2	63	57
10:50:00	66.3	73.5 <110.2	70	58
10:55:00	66.2	72.0 <110.2	69	60
11:00:00	63.7	73.1 <110.2	66	55
11:05:00	59.0	66.9 <110.2	61	55
11:10:00	59.5	66.4 <110.2	62	55
11:15:00	63.2	77.5 <110.2	65	55
11:20:00	59.2	67.5 <110.2	61	55
11:25:00	59.4	67.9 <110.2	62	55
11:30:00	62.1	70.9 <110.2	64	59
11:35:00	69.0	78.8 <110.2	72	62
11:40:00	65.3	79.1 <110.2	67	56
11:45:00	61.7	72.7 <110.2	65	56
11:50:00	59.3	67.7 <110.2	62	55
11:55:00	59.0	68.4 <110.2	61	55

REPORT PRINTED 10/31/19 AT 14:11:32

USER ID: 000001

EXCHANGE RATE: 3dB FILTER: A WT. DOSE CRITERION: 90dB RESPONSE: SLOW DOSE LENGTH: 8 hours

PRE-CALIBRATION TIME: N/A PRE-CALIBRATION RANGE: 39.9dBA TO 139.9dBA

POST-CALIBRATION TIME: 10/15/19 AT 18:41:42 POST-CALIBRATION RANGE: 39.8dBA TO 139.8dBA

TEST STARTED: 10/14/19 AT 18:00:00 TEST LENGTH: 01 DAYS 00:00:00 TEST ENDED: 10/15/19 AT 18:00:00 TIME HISTORY INTERVAL: 00:05:00

Lavg...... 61.0dBA Lavg (80)... 52.0dBA Lavg (90)... 47.3dBA SEL..... 110.2dBA

TWA...... 65.8dBA TWA (80)... 56.8dBA TWA (90)... 52.1dBA

Lmax: 92.7dBA ON 10/15/19 AT 06:43:15 Lpk: 116.6dBC ON 10/15/19 AT 14:20:45 TIME OVER 66dBA 00 DAYS 00:50:29.60

DOSE (80)..... 0.04% PROJ. DOSE (80)..... > 8 HRS. DOSE (90)..... 0.01% PROJ. DOSE (90)..... > 8 HRS.

TIME	Lav	Lmax	Lpk	L(10.0)	L(90.0)	
	dBA	dBA	wB{?	· · ·	¿t{}íêíë10/1	14/19
18:00:00	63.4	72.4	<110.2	66	59	
18:05:00	61.4	68.7	<110.2	63	58	
18:10:00	63.6	77.6	<110.2	63	58	
18:15:00	61.1	70.5	<110.2	63	57	
18:20:00	60.1	72.7	<110.2	61	57	
18:25:00	58.3	62.2	<110.2	60	56	
18:30:00	58.9	68.7	<110.2	61	55	
18:35:00	58.8	64.3	<110.2	60	56	
18:40:00	60.5	74.0	<110.2	62	55	
18:45:00	60.5	67.8	<110.2	63	56	
18:50:00	57.9	64.8	<110.2	59	55	
18:55:00	57.8	61.9	<110.2	59	55	
19:00:00	58.9	74.4	<110.2	59	54	
19:05:00	57.6	65.6	<110.2	58	55	
19:10:00	58.9	66.7	<110.2	60	56	
19:15:00	60.9	78.3	<110.2	61	56	
19:20:00	59.1	64.8	<110.2	61	56	
19:25:00	58.8	65.0	<110.2	60	56	
19:30:00	58.0	64.7	<110.2	59	56	
19:35:00	56.9	64.7	<110.2	58	54	
19:40:00	64.4	76.7	<110.2	68	57	
19:45:00	58.9	64.7	<110.2	60	55	
19:50:00	56.5	60.3	<110.2	58	54	
19:55:00	58.0	66.5	<110.2	59	54	
20:00:00	59.1	70.8	<110.2	59	55	
20:05:00	57.2	60.7	<110.2	59	55	
20:10:00	63.1	82.8	<110.2	61	54	
20:15:00	58.4	65.9	<110.2	61	54	
20:20:00	57.0	62.9	<110.2	59	54	
20:25:00	56.3	61.4	<110.2	58	53	
20:30:00	57.8	61.6	<110.2	59	54	
20:35:00	57.7	73.5	<110.2	58	53	
20:40:00	59.5	74.7	<110.2	61	54	
20:45:00	56.4	61.5	<110.2	57	54	
20:50:00	58.3	72.1	<110.2	60	54	
20:55:00	55.5	59.4	<110.2	57	53	
21:00:00	56.2	66.9	<110.2	58	52	
21:05:00	55.3	64.9	<110.2	57	52	
21:10:00	55.8	64.8	<110.2	57	52	
21:15:00	54.5	65.5	<110.2	55	52	
21:20:00	54.2	59.9	<110.2	55	51	
21:25:00	55.3	60.7	<110.2	57	52	
21:30:00	55.0	69.6	<110.2	56	52	
21:35:00	55.5	62.7	<110.2	57	52	
21:40:00	57.4	70.5	<110.2	60	51	

21:45:00	64.7	75.4	<110.2	67	54
21:50:00	61.6	76.3	<110.2	64	50
21:55:00	53.3	58.7	<110.2	55	50

TIME	Lav	Lmax	k Lpk	L(10.0)	L(90.0)					
	dBA	dBA			wzAíêíë22:00:00) 62.0	76.3	<110.2	67	52
22:05:00	53.3	59.6	<110.2	55	51					
22:10:00	52.9	57.5	<110.2	54	50					
22:15:00	52.8	58.4	<110.2	55	50					
22:20:00	54.1	62.8	<110.2	56	50					
22:25:00	53.0	60.9	<110.2	55	49					
22:30:00	54.3	63.5	<110.2	56	50					
22:35:00	52.2		<110.2	54	49					
22:40:00	53.8	59.5	<110.2	56	50					
22:45:00	53.5	61.5	<110.2	55	49					
22:50:00	58.5		<110.2	60	49					
22:55:00	55.5	67.1	<110.2	57	51					
23:00:00	53.1		<110.2	56	48					
23:05:00	57.0		<110.2	59	50					
23:10:00	52.8		<110.2	54	49					
23:15:00	60.3		<110.2	59	50					
23:20:00	54.0		<110.2	56	50					
23:25:00	58.7		<110.2	60	50					
23:30:00	54.2		<110.2	57	47					
23:35:00	53.7		<110.2	54	47					
23:40:00	52.6		<110.2	55	47					
23:45:00	52.0		<110.2	54	47					
23:50:00	52.0		<110.2	55	46					
23:55:00	57.4	74.4	<110.2	55	47					
10/15/19										
00:00:00	51.0		<110.2	55	46					
00:05:00	52.9		<110.2	55	49					
00:10:00	52.6		<110.2	54	49					
00:15:00	52.6		<110.2	55	49					
00:20:00	53.0		<110.2	56	49					
00:25:00	50.2		<110.2	52	48					
00:30:00	52.7		<110.2	55	48					
00:35:00	50.0		<110.2	51	48					
00:40:00	53.9		<110.2	56	49					
00:45:00	50.7		<110.2	52	47					
00:50:00	51.5		<110.2	53	47					
00:55:00	50.7	57.8	<110.2	54	45					
01:00:00	49.2	59.6	<110.2	51	44					
01:05:00	50.1	56.5	<110.2	53	44					

01:10:00	48.1	54.5 <110.2	51	44
01:15:00	51.0	57.5 <110.2	53	47
01:20:00	50.0	56.3 <110.2	53	46
01:25:00	57.0	74.7 <110.2	55	45
01:30:00	51.0	61.2 <110.2	53	46
01:35:00	50.5	63.5 <110.2	53	44
01:40:00	48.9	58.1 <110.2	51	45
01:45:00	49.9	58.9 <110.2	53	45
01:50:00	50.8	60.3 <110.2	54	45
01:55:00	48.6	57.1 <110.2	51	44

TIME	Lav	Lmax	1	· · · ·	L(90.0)
	dBA	dBA	dBC	dBA ?	?wzA
ë					
02:00:00	48.9	57.6	<110.2	52	44
02:05:00	50.0	62.3	<110.2	51	45
02:10:00	50.6	57.5	<110.2	53	46
02:15:00	52.2	68.9	<110.2	53	47
02:20:00	52.0	61.5	<110.2	55	46
02:25:00	51.8	60.8	<110.2	55	45
02:30:00	56.5	73.4	<110.2	55	46
02:35:00	50.3	61.2	<110.2	52	45
02:40:00	49.8	57.5	<110.2	52	46
02:45:00	52.5	63.1	<110.2	54	47
02:50:00	50.9	58.8	<110.2	53	47
02:55:00	52.3	60.0	<110.2	55	47
03:00:00	51.6	61.9	<110.2	53	47
03:05:00	54.9	63.9	<110.2	57	50
03:10:00	51.3	61.2	<110.2	53	46
03:15:00	52.8	60.3	<110.2	55	48
03:20:00	52.5	61.5	<110.2	54	48
03:25:00	50.8	61.9	<110.2	52	46
03:30:00	51.2	58.3	<110.2	53	47
03:35:00	52.8	60.9	<110.2	56	47
03:40:00	53.4	61.5	<110.2	55	49
03:45:00	53.5	60.3	<110.2	55	48
03:50:00	53.3	61.8	<110.2	56	49
03:55:00	52.2	58.7	<110.2	55	48
04:00:00	54.4	63.1	<110.2	57	49
04:05:00	50.4	54.3	<110.2	52	48
04:10:00	54.3	64.1	<110.2	57	48
04:15:00	60.8	78.4	<110.2	63	47
04:20:00	52.7	61.7	<110.2	55	47
04:25:00	56.4	70.9	<110.2	58	49

04:30:00	52.8	62.3	<110.2	55	48
04:35:00	52.2	61.9	<110.2	54	48
04:40:00	54.2	63.6	<110.2	56	50
04:45:00	54.4	62.9	<110.2	58	49
04:50:00	55.9	64.1	<110.2	58	51
04:55:00	52.2	60.6	<110.2	54	47
05:00:00	52.9	62.9	<110.2	55	47
05:05:00	54.3	61.9	<110.2	58	47
05:10:00	54.2	63.2	<110.2	56	49
05:15:00	54.0	59.9	<110.2	56	50
05:20:00	55.2	63.7	<110.2	57	51
05:25:00	56.1	64.1	<110.2	59	52
05:30:00	57.2	62.3	<110.2	59	53
05:35:00	57.9	65.9	<110.2	60	53
05:40:00	56.6	64.4	<110.2	58	53
05:45:00	58.9	68.8	<110.2	61	55
05:50:00	57.5	63.6	<110.2	59	54
05:55:00	57.8	66.5	<110.2	59	54

TIME	Lav	Lmax	Lpk	L(10.0)	L(90.0)
	dBA d	BA	tB{ t	z}; ?? tz	z}í
06:00:0	0 64.5	80.3	3 <110.2	2 68	55
06:05:00	57.6	63.4	<110.2	59	55
06:10:00	57.9	63.9	<110.2	59	55
06:15:00	57.8	64.1	<110.2	60	54
06:20:00	61.5	74.7	<110.2	63	56
06:25:00	58.7	63.8	<110.2	60	55
06:30:00	60.2	66.4	<110.2	62	57
06:35:00	60.4	68.6	<110.2	62	57
06:40:00	75.8	92.7	<110.2	72	59
06:45:00	62.3	71.7	<110.2	64	58
06:50:00	60.5	65.7	<110.2	62	57
06:55:00	59.7	65.0	<110.2	61	57
07:00:00	62.4	72.6	<110.2	65	58
07:05:00	63.1	73.9	<110.2	66	57
07:10:00	61.8	67.9	<110.2	63	59
07:15:00	62.5	69.2	<110.2	65	59
07:20:00	62.1	68.4	<110.2	64	59
07:25:00	69.1	79.9	<110.2	73	60
07:30:00	61.4	65.8	<110.2	62	60
07:35:00	61.9	70.4	<110.2	63	59
07:40:00	66.2	75.7	<110.2	70	60
07:45:00	73.2	83.6	<110.2	78	62
07:50:00	63.2	69.6	<110.2	64	62

63.1	67.5	<110.2	64	61
70.1	78.8	<110.2	75	62
70.2	79.1	<110.2	75	61
65.9	76.7	<110.2	66	61
62.9	78.0	<110.2	63	60
61.2	71.7	<110.2	61	59
61.2	70.8	<110.2	63	58
61.2	66.8	<110.2	62	59
62.2	69.2	<110.2	63	60
61.3	65.5	<110.2	62	60
68.0	74.9	<110.2	73	60
62.6	70.7	<110.2	64	59
66.7	74.8	<110.2	72	59
61.8	70.9	<110.2	63	58
66.5	77.1	<110.2	71	59
61.0	69.5	<110.2	62	58
60.8	65.3	<110.2	62	58
65.3	84.7	<110.2	65	58
62.3	78.3	<110.2	64	58
60.0	65.9	<110.2	62	56
61.3	68.0	<110.2	64	57
60.4	74.3	<110.2	61	57
58.6	64.6	<110.2	60	56
62.9	80.7	<110.2	64	56
62.3	67.3	<110.2	64	59
	$\begin{array}{c} 70.1 \\ 70.2 \\ 65.9 \\ 62.9 \\ 61.2 \\ 61.2 \\ 61.2 \\ 61.2 \\ 62.2 \\ 61.3 \\ 68.0 \\ 62.6 \\ 66.7 \\ 61.8 \\ 66.5 \\ 61.0 \\ 60.8 \\ 65.3 \\ 62.3 \\ 60.0 \\ 61.3 \\ 60.4 \\ 58.6 \\ 62.9 \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

TIME	Lav	Lmax	Lpk	L(10.0)	L(90.0)
t	BA dl	BA d	ы?; ЭВ	dB} ?	t{}íë
ê10:00:00	67.7	80.8	<110.2	69	59
10:05:00	65.8	74.5 <	<110.2	68	59
10:10:00	61.6	69.7 <	<110.2	64	58
10:15:00	63.3	70.0 <	<110.2	66	56
10:20:00	61.2	72.4 <	<110.2	64	54
10:25:00	65.0	71.2 <	<110.2	66	59
10:30:00	67.4	81.1 <	<110.2	68	64
10:35:00	60.2	68.3 <	<110.2	64	55
10:40:00	59.1	67.3 <	<110.2	62	54
10:45:00	59.1	70.7 <	<110.2	61	55
10:50:00	57.8	68.1 <	<110.2	59	53
10:55:00	59.4	68.5 <	<110.2	61	56
11:00:00	60.2	76.7 <	<110.2	61	55
11:05:00	60.5	69.5 <	<110.2	62	57
11:10:00	61.0	74.9 <	<110.2	62	57
11:15:00	59.8	69.2 <	<110.2	62	56

60.6	67.7	<110.2	63	56
57.5	61.9	<110.2	59	55
59.1	67.0	<110.2	61	55
60.3	65.3	<110.2	63	55
58.3	66.3	<110.2	60	55
60.1	75.5	<110.2	61	55
57.6	65.7	<110.2	59	54
58.9	68.7	<110.2	61	54
58.0	66.9	<110.2	60	54
58.7	65.1	<110.2	61	55
59.8	70.8	<110.2	61	55
57.9	66.7	<110.2	59	53
56.8	63.2	<110.2	58	54
56.9	65.1	<110.2	58	54
61.2	72.3	<110.2	63	56
60.1	68.3	<110.2	63	56
57.8	65.2	<110.2	59	54
58.2	63.9	<110.2	60	55
58.7	67.7	<110.2	61	55
59.1	70.1	<110.2	61	54
62.6	70.4	<110.2	67	58
60.6	66.8	<110.2	63	57
59.3	65.1	<110.2	61	56
59.9	68.4	<110.2	61	57
59.0	66.0	<110.2	60	56
60.7	72.0	<110.2	62	56
60.1	68.5	<110.2	62	56
62.8	81.6	<110.2	63	56
59.1	65.5	<110.2	61	57
60.4	69.1	<110.2	61	57
61.0	67.1	<110.2	63	57
59.1	64.8	<110.2	61	56
	57.5 59.1 60.3 58.3 60.1 57.6 58.9 58.0 58.7 59.8 57.9 56.8 56.9 61.2 60.1 57.8 58.2 58.7 59.1 62.6 60.6 59.3 59.9 59.0 60.7 60.1 60.6 59.3 59.9 59.0 60.7 60.1 60.6 59.3 59.9 59.0 60.7 60.1 60.4 59.1 60.4 60.4 61.0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

TIME	Lav	Lmax	Lpk	L(10.0)) L(90.0)
dI	BA (dB} o	$dC\{?$	ئن Azb	i'sm{A
êíê14:00:00	61	.5 74.	8 <110	.2 6	2 56
14:05:00	61.0	75.6	<110.2	63	55
14:10:00	59.3	70.5	<110.2	61	56
14:15:00	59.5	65.5	<110.2	61	56
14:20:00	65.5	86.8	116.6	60	55
14:25:00	59.5	70.7	<110.2	61	55
14:30:00	59.2	66.7	<110.2	61	55
14:35:00	65.3	84.5	<110.2	65	56
14:40:00	62.5	75.5	<110.2	63	55

14:45:00	60.4	71.1	<110.2	63	56
14:50:00	60.6	70.9	<110.2	64	55
14:55:00	58.1	63.2	<110.2	60	55
15:00:00	61.6	74.7	<110.2	62	55
15:05:00	59.6	71.3	<110.2	62	55
15:10:00	57.5	62.0	<110.2	59	55
15:15:00	61.8	74.3	<110.2	63	56
15:20:00	61.1	77.6	<110.2	62	56
15:25:00	59.1	66.1	<110.2	61	55
15:30:00	62.5	73.5	<110.2	66	56
15:35:00	60.1	72.3	<110.2	61	55
15:40:00	58.7	66.0	<110.2	59	56
15:45:00	59.5	66.9	<110.2	61	56
15:50:00	58.7	64.3	<110.2	60	56
15:55:00	59.0	72.4	<110.2	59	55
16:00:00	58.8	66.7	<110.2	60	55
16:05:00	58.8	64.4	<110.2	61	56
16:10:00	62.5	76.5	<110.2	64	56
16:15:00	61.6	76.3	<110.2	62	56
16:20:00	59.2	68.7	<110.2	60	56
16:25:00	60.6	74.0	<110.2	62	57
16:30:00	58.5	63.5	<110.2	60	56
16:35:00	59.4	73.9	<110.2	60	56
16:40:00	61.2	80.1	<110.2	62	56
16:45:00	58.7	67.5	<110.2	60	56
16:50:00	57.9	61.9	<110.2	59	56
16:55:00	62.3	80.9	<110.2	63	57
17:00:00	62.3	74.9	<110.2	65	56
17:05:00	59.6	70.9	<110.2	61	56
17:10:00	59.8	73.9	<110.2	59	56
17:15:00	59.2	67.9	<110.2	61	56
17:20:00	58.2	63.9	<110.2	59	55
17:25:00	61.6	74.7	<110.2	64	56
17:30:00	63.2	76.9	<110.2	66	56
17:35:00	65.6	75.3	<110.2	68	59
17:40:00	62.5	80.8	<110.2	64	56
17:45:00	66.3	76.5	<110.2	70	61
17:50:00	68.4	82.5	<110.2	71	58
17:55:00	58.9	64.2	<110.2	60	57

METROSONICS db-3080 SN 5899 V1.20 TEST: 2 OF 2

REPORT PRINTED 10/31/19 AT 14:13:53

USER ID: 000002

EXCHANGE RATE: 3dB FILTER: A WT. DOSE CRITERION: 90dB RESPONSE: SLOW DOSE LENGTH: 8 hours

PRE-CALIBRATION TIME: 09/20/19 AT 10:59:28 PRE-CALIBRATION RANGE: 42.2dBA TO 142.2dBA

POST-CALIBRATION TIME: 10/31/19 AT 14:01:26 POST-CALIBRATION RANGE: 42.2dBA TO 142.2dBA

TEST STARTED: 10/23/19 AT 12:00:00TEST LENGTH:01 DAYS00:00:00TEST ENDED:10/24/19 AT 12:00:00TIME HISTORY INTERVAL:00:05:00

Lavg....... 67.6dBA Lavg (80)... 66.8dBA Lavg (90)... 65.9dBA SEL...... 116.8dBA

TWA...... 72.3dBA TWA (80)... 71.6dBA TWA (90)... 70.6dBA

Lmax: 102.6dBA ON 10/24/19 AT 05:21:56 Lpk: 120.1dBC ON 10/24/19 AT 05:21:56 TIME OVER 66dBA 00 DAYS 00:49:08.24 DOSE (80)..... 1.41% PROJ. DOSE (80)..... > 8 HRS. DOSE (90)..... 1.14% PROJ. DOSE (90)..... > 8 HRS.

TIME	Lav	Lmax	-			0) L(90.0)
	dBA	dzA	dB{	?	tCA	??dzA
ëíê10/23/						
12:00:00	63.0		<112		60	52
12:05:00	53.8	62.8	<112	.5	55	51
12:10:00	59.3		<112	.5	63	53
12:15:00	56.7		<112		58	
12:20:00	53.8	60.9	<112	.5	56	
12:25:00	54.0	64.8	<112	.5	55	51
12:30:00	54.2	60.4	<112	.5	56	51
12:35:00	53.7	59.7	<112		55	52
12:40:00	61.1	74.8	<112	.5	62	52
12:45:00	54.8	60.1	<112	.5	57	51
12:50:00	55.4	64.0	<112	.5	58	51
12:55:00	55.3	60.0	<112	.5	57	52
13:00:00	53.8	61.4	<112	.5	56	51
13:05:00	55.0	65.0	<112	.5	57	52
13:10:00	54.4	58.8	<112	.5	56	52
13:15:00	55.2	59.9	<112	.5	56	53
13:20:00	54.3	64.4	<112	.5	55	50
13:25:00	55.0	63.2	<112	.5	57	52
13:30:00	53.3	56.3	<112	.5	54	51
13:35:00	55.3	65.7	<112		56	52
13:40:00	54.3	60.8	<112	.5	55	51
13:45:00	53.9	58.0	<112	.5	55	51
13:50:00	54.4	59.6	<112	.5	56	51
13:55:00	56.7	65.7	<112	.5	60	52
14:00:00	53.5	57.3	<112	.5	55	51
14:05:00	55.6	62.1	<112	.5	57	53
14:10:00	54.3	57.7	<112	.5	55	52
14:15:00	53.6	60.5	<112	.5	55	50
14:20:00	54.2	60.9	<112	.5	56	51
14:25:00	54.5	61.2	<112	.5	56	52
14:30:00	53.8	57.2	<112	.5	55	51
14:35:00	53.4	62.4	<112	.5	54	51
14:40:00	54.8	68.1	<112	.5	56	51
14:45:00	53.9	58.1	<112	.5	55	52
14:50:00	53.8	56.5	<112	.5	55	52
14:55:00	53.5	57.3	<112	.5	55	51

15:00:00	55.6	63.2	<112.5	57	53
15:05:00	59.2	69.0	<112.5	62	53
15:10:00	53.4	57.6	<112.5	54	52
15:15:00	55.4	62.9	<112.5	57	53
15:20:00	55.1	59.2	<112.5	57	52
15:25:00	55.7	59.3	<112.5	57	54
15:30:00	55.8	58.5	<112.5	57	54
15:35:00	56.8	60.8	<112.5	58	54
15:40:00	56.7	60.5	<112.5	58	54
15:45:00	55.9	63.2	<112.5	57	53
15:50:00	55.6	59.2	<112.5	56	54
15:55:00	55.7	59.2	<112.5	57	54

TIME	Lav	Lmax	Lpk	L(10.0)	L(90.0)						
	dBA	tBA??	dBC ?	dBA	tCAíêí	16:00:00	55.2	57.9	<112.5	56	52
16:05:00	54.8	57.6	<112.5	56	53						
16:10:00	55.9	61.6	<112.5	57	53						
16:15:00	55.9	59.2	<112.5	57	54						
16:20:00	57.0	66.1	<112.5	58	54						
16:25:00	57.7		<112.5	59	54						
16:30:00	57.6	70.9	<112.5	59	54						
16:35:00	56.8		<112.5	59	53						
16:40:00	55.1		<112.5	56	52						
16:45:00	58.4		<112.5	62	54						
16:50:00	55.0		<112.5	56	52						
16:55:00	64.8		<112.5	62	51						
17:00:00	59.2		<112.5	58	52						
17:05:00	55.7		<112.5	56	52						
17:10:00	62.0		<112.5	63	53						
17:15:00	54.9		<112.5	56	53						
17:20:00	54.9		<112.5	56	53						
17:25:00	54.2		<112.5	55	52						
17:30:00	57.1		<112.5	56	52						
17:35:00	56.3		<112.5	58	53						
17:40:00	54.5		<112.5	55	52						
17:45:00	55.5		<112.5	56	53						
17:50:00	55.9		<112.5	56	54						
17:55:00	55.8		<112.5	57	53						
18:00:00	55.4		<112.5	56	53						
18:05:00	63.6			66	55						
18:10:00	59.8		<112.5	61	57						
18:15:00	56.8			58	55						
18:20:00	59.4		<112.5	60 50	57						
18:25:00	58.1	61.6	<112.5	59	56						

10.20.00	500	CO 1	.110 5	50	F 1
18:30:00	56.9	60.4	<112.5	58	54
18:35:00	57.0	64.0	<112.5	58	55
18:40:00	58.4	68.1	<112.5	60	56
18:45:00	65.4	84.4	<112.5	63	56
18:50:00	68.4	86.3	<112.5	71	58
18:55:00	67.7	81.0	<112.5	68	57
19:00:00	58.7	63.6	<112.5	60	56
19:05:00	57.3	66.6	<112.5	58	54
19:10:00	58.6	70.9	<112.5	60	55
19:15:00	59.3	62.8	<112.5	61	56
19:20:00	59.1	68.6	<112.5	61	56
19:25:00	57.1	60.4	<112.5	58	56
19:30:00	57.9	60.8	<112.5	59	56
19:35:00	65.4	78.0	<112.5	69	59
19:40:00	55.9	66.8	<112.5	58	53
19:45:00	54.0	56.4	<112.5	55	52
19:50:00	56.4	67.5	<112.5	55	52
19:55:00	69.0	82.9	<112.5	72	52

TIME	Lav	Lmax	Lpk I	L(10.0)	L(90.0)
d	lBA d	z} ?;w	BC ?	dBA?¿	i{Bw?يز}
20:00:00	60.1	74.0	<112.5	64	53
20:05:00	54.7	58.5 <	<112.5	56	51
20:10:00	54.9	64.4 <	<112.5	55	52
20:15:00	54.2	56.5 <	<112.5	55	52
20:20:00	54.2	57.4 <	<112.5	55	53
20:25:00	54.4	58.1 <	<112.5	56	52
20:30:00	52.5	55.3 <	<112.5	53	51
20:35:00	53.2	56.5 <	<112.5	54	51
20:40:00	52.5	58.0 <	<112.5	53	51
20:45:00	54.2	64.9 <	<112.5	54	52
20:50:00	53.4	57.0 <	<112.5	54	52
20:55:00	54.4	59.6 <	<112.5	56	52
21:00:00	55.2	62.4 <	<112.5	57	53
21:05:00	53.7	58.5 <	<112.5	54	52
21:10:00	54.7	62.0 <	<112.5	55	53
21:15:00	52.7	54.9 <	<112.5	53	51
21:20:00	53.1	59.3 <	<112.5	53	52
21:25:00	53.3	55.7 <	<112.5	54	52
21:30:00	53.4	57.5 <	<112.5	54	52
21:35:00	54.1	63.3 <	<112.5	55	51
21:40:00	55.3	64.9 <	<112.5	56	52
21:45:00	53.1	56.8 <	<112.5	53	52
21:50:00	65.5	75.7 <	<112.5	70	52

21:55:00	62.4	74.5	<112.5	64	59
22:00:00	67.5	77.6	<112.5	68	64
22:05:00	54.6	66.5	<112.5	53	50
22:10:00	60.6	67.3	<112.5	64	51
22:15:00	62.6	68.5	<112.5	66	51
22:20:00	56.0	66.0	<112.5	60	49
22:25:00	58.8	74.5	<112.5	61	50
22:30:00	65.1	81.8	<112.5	67	50
22:35:00	66.6	82.9	<112.5	69	52
22:40:00	54.9	67.6	<112.5	56	50
22:45:00	67.8	83.3	<112.5	71	56
22:50:00	53.0	62.0	<112.5	54	50
22:55:00	50.9	53.7	<112.5	51	50
23:00:00	53.2	65.9	<112.5	53	50
23:05:00	51.0	55.1	<112.5	52	50
23:10:00	51.5	54.4	<112.5	52	50
23:15:00	51.6	54.4	<112.5	52	50
23:20:00	51.6	54.8	<112.5	52	50
23:25:00	52.0	58.4	<112.5	53	50
23:30:00	51.1	55.8	<112.5	52	50
23:35:00	50.4	56.0	<112.5	51	49
23:40:00	50.7	54.5	<112.5	52	49
23:45:00	66.9	77.7	<112.5	71	51
23:50:00	59.9	73.7	<112.5	63	50
23:55:00	60.4	71.7	<112.5	64	50

TIME	Lav	Lmax	k Lpk	L(10.0)	L(90.0)
	dBA	dBA	ىئ? dBC زز	dBA¿	? tz}íë
10/24/19					
00:00:00	66.9	76.9	<112.5	72	50
00:05:00	51.5	56.7	<112.5	52	50
00:10:00	63.8	72.9	<112.5	67	50
00:15:00	58.0	69.8	<112.5	60	50
00:20:00	50.6	53.3	<112.5	51	49
00:25:00	50.8	55.2	<112.5	51	49
00:30:00	50.4	54.4	<112.5	51	49
00:35:00	49.5	52.8	<112.5	50	48
00:40:00	49.3	52.7	<112.5	50	48
00:45:00	60.8	75.2	<112.5	64	49
00:50:00	58.6	67.6	<112.5	64	50
00:55:00	62.6	71.7	<112.5	65	52
01:00:00	63.1	75.7	<112.5	67	52
01:05:00	62.2	74.4	<112.5	67	53
01:10:00	59.9	69.9	<112.5	65	50

01:15:00	51.0	54.6	<112.5	51	50
01:20:00	51.7	65.2	<112.5	52	50
01:25:00	51.0	54.3	<112.5	51	49
01:30:00	50.1	52.5	<112.5	50	49
01:35:00	50.7	53.2	<112.5	51	49
01:40:00	54.5	60.0	<112.5	57	50
01:45:00	51.0	52.8	<112.5	51	50
01:50:00	50.7	55.7	<112.5	52	49
01:55:00	50.0	54.9	<112.5	50	49
02:00:00	58.7	78.4	<112.5	54	49
02:05:00	55.3	72.9	<112.5	57	48
02:10:00	63.8	83.8	<112.5	56	48
02:15:00	50.2	55.2	<112.5	51	48
02:20:00	53.1	59.3	<112.5	55	50
02:25:00	53.8	60.9	<112.5	56	51
02:30:00	52.9	62.3	<112.5	56	49
02:35:00	49.9	53.6	<112.5	51	48
02:40:00	49.8	54.3	<112.5	50	48
02:45:00	50.9	63.7	<112.5	52	48
02:50:00	49.7	54.8	<112.5	51	47
02:55:00	52.3	58.8	<112.5	54	49
03:00:00	54.5	62.8	<112.5	59	49
03:05:00	55.8	66.4	<112.5	62	48
03:10:00	50.3	54.0	<112.5	51	49
03:15:00	49.5	52.8	<112.5	50	48
03:20:00	53.3	66.4	<112.5	54	50
03:25:00	57.8	71.5	<112.5	61	52
03:30:00	57.5	65.6	<112.5	61	53
03:35:00	59.6	70.9	<112.5	63	50
03:40:00	53.7	63.7	<112.5	55	50
03:45:00	53.7	69.6	<112.5	53	50
03:50:00	51.5	55.4	<112.5	52	50
03:55:00	52.6	66.4	<112.5	52	50

TIME	Lav	Lmax	k Lpk	L(10.0)	L(90.0)
	dBA	gBA ,	ί dBC	ن gBA ز	tB}
í					
04:00:00	55.8	71.0	<112.5	56	50
04:05:00	61.8	84.4	<112.5	54	51
04:10:00	51.8	55.0	<112.5	53	50
04:15:00	51.1	54.4	<112.5	52	50
04:20:00	52.3	58.0	<112.5	54	50
04:25:00	61.1	79.7	<112.5	57	50
04:30:00	51.9	56.5	<112.5	53	50

04:35:00	51.2	54.6	<112.5	52	50
04:40:00	51.4	54.9	<112.5	52	50
04:45:00	52.4	54.6	<112.5	53	51
04:50:00	53.0	55.2	<112.5	53	51
04:55:00	54.5	57.1	<112.5	55	53
05:00:00	55.8	60.1	<112.5	57	54
05:05:00	61.3	78.0	<112.5	60	54
05:10:00	55.7	66.0	<112.5	56	53
05:15:00	53.2	57.0	<112.5	54	51
05:20:00	82.5	102.6	120.1	79	55
05:25:00	80.1	101.9	117.7	78	53
05:30:00	54.3	61.7	<112.5	56	52
05:35:00	65.0	84.9	<112.5	60	53
05:40:00	61.4	76.8	<112.5	63	54
05:45:00	54.2	60.9	<112.5	55	52
05:50:00	55.0	64.5	<112.5	56	53
05:55:00	54.7	63.6	<112.5	55	53
06:00:00	64.9	87.6	<112.5	58	52
06:05:00	64.4	86.9	<112.5	55	52
06:10:00	54.5	58.9	<112.5	56	53
06:15:00	53.9	58.5	<112.5	55	52
06:20:00	54.4	59.7	<112.5	55	52
06:25:00	53.7	57.3	<112.5	55	52
06:30:00	55.3	61.2	<112.5	57	53
06:35:00	61.9	76.9	<112.5	65	55
06:40:00	62.3	75.1	<112.5	65	55
06:45:00	57.2	70.9	<112.5	59	54
06:50:00	67.7	89.3	<112.5	66	54
06:55:00	60.7	81.7	<112.5	58	54
07:00:00	62.2	77.3	<112.5	64	55
07:05:00	56.9	61.2	<112.5	58	54
07:10:00	57.0	60.6	<112.5	58	55
07:15:00	57.6	68.4	<112.5	58	55
07:20:00	56.9	70.0	<112.5	57	55
07:25:00	60.1	75.3	<112.5	62	56
07:30:00	57.1	64.0	<112.5	57	55
07:35:00	61.2	71.7	<112.5	65	56
07:40:00	68.7	82.9	<112.5	67	57
07:45:00	59.1	62.2	<112.5	60	57
07:50:00	56.7	61.4	<112.5	57	55
07:55:00	61.5	81.2	<112.5	60	56

TIME Lav Lmax Lpk L(10.0) L(90.0dBA dBA ? dBC ? ? dB} ?; ?; dC}í

08:00:00	57.0	64.0 <1	12.5	58	55
08:05:00	58.3	67.9 <1	12.5	60	56
08:10:00	59.3	66.1 <1	12.5	61	56
08:15:00	63.4	82.5 <1	12.5	58	55
08:20:00	55.6	61.2 <1	12.5	56	54
08:25:00	58.7	67.7 <1	12.5	61	55
08:30:00	69.6	91.9 <1	12.5	59	54
08:35:00	69.8		12.5	68	54
08:40:00	59.3		12.5	61	54
08:45:00	64.5	87.2 <1	12.5	58	54
08:50:00	62.7	82.0 <1	12.5	59	53
08:55:00	57.0	66.4 <1	12.5	58	54
09:00:00	56.8		12.5	58	54
09:05:00	62.8		12.5	66	55
09:10:00	56.1		12.5	57	54
09:15:00	56.1		12.5	58	54
09:20:00	73.0	83.0 <1	12.5	78	57
09:25:00	61.4	77.2 <1	12.5	63	56
09:30:00	57.9	71.7 <1	12.5	58	55
09:35:00	56.9	60.0 <1	12.5	58	55
09:40:00	58.5	70.9 <1	12.5	60	55
09:45:00	58.8	76.9 <1	12.5	60	54
09:50:00	57.8	64.4 <1	12.5	61	54
09:55:00	58.6		12.5	61	55
10:00:00	57.7		12.5	59	55
10:05:00	57.5		12.5	59	54
10:10:00	57.5	62.1 <1	12.5	59	55
10:15:00	56.4	61.9 <1	12.5	58	54
10:20:00	56.4	64.9 <1	12.5	58	54
10:25:00	58.3	63.2 <1	12.5	60	55
10:30:00	57.9	61.5 <1	12.5	59	55
10:35:00	66.4	84.8 <1	12.5	60	55
10:40:00	61.6	79.4 <1	12.5	60	54
10:45:00	63.3	81.3 <1	12.5	61	55
10:50:00	58.4	62.4 <1	12.5	60	54
10:55:00	59.6	62.5 <1	12.5	61	58
11:00:00	58.7	63.1 <1	12.5	60	55
11:05:00	56.5	62.5 <1	12.5	58	54
11:10:00	63.3	82.9 <1	12.5	58	55
11:15:00	64.0	83.1 <1	12.5	61	54
11:20:00	57.5	66.5 <1	12.5	59	54
11:25:00	58.9	63.5 <1	12.5	60	56
11:30:00	67.8	77.2 <1	12.5	72	58
11:35:00	90.0	102.1 11	17.3	92	74
11:40:00	78.2	95.6 <1	12.5	74	55
11:45:00	58.1	65.3 <1	12.5	60	54
11:50:00	56.9	61.7 <1	12.5	58	54
11:55:00	58.3	62.0 <1	12.5	60	56

METROSONICS db-3080 SN 5899 V1.20

REPORT PRINTED 10/31/19 AT 14:14:24

USER ID: 000002

EXCHANGE RATE: 3dB FILTER: A WT. DOSE CRITERION: 90dB RESPONSE: SLOW DOSE LENGTH: 8 hours

PRE-CALIBRATION TIME: 09/20/19 AT 10:59:28 PRE-CALIBRATION RANGE: 42.2dBA TO 142.2dBA

POST-CALIBRATION TIME: 10/15/19 AT 18:47:13 POST-CALIBRATION RANGE: 42.2dBA TO 142.2dBA

TEST STARTED: 10/14/19 AT 18:00:00 TEST LENGTH: 01 DAYS 00:00:00 TEST ENDED: 10/15/19 AT 18:00:00 TIME HISTORY INTERVAL: 00:05:00

Lavg...... 59.9dBA Lavg (80)... 56.1dBA Lavg (90)... 46.7dBA SEL..... 109.1dBA

TWA....... 64.6dBA TWA (80)... 60.8dBA TWA (90)... 51.5dBA

Lmax: 94.1dBA ON 10/14/19 AT 21:40:24 Lpk: 115.3dBC ON 10/14/19 AT 21:40:24 TIME OVER 66dBA 00 DAYS 00:32:08.08

DOSE (80)..... 0.11% PROJ. DOSE (80)...... > 8 HRS. DOSE (90)..... 0.01%

TIME	Lav dBA	Lmax dBA	t Lpk dBC	L(10.0) dBA ?	L(90.0)
	uDA	uDA	uDC	uDA :	: :uz ;
10/14/19					
18:00:00	55.5	59.6	<112.5	57	53
18:05:00	54.7		<112.5	55	53
18:10:00	56.9		<112.5	58	53
18:15:00	55.1	60.4	<112.5	56	53
18:20:00	54.3	60.9	<112.5	55	52
18:25:00	54.6	58.5	<112.5	56	52
18:30:00	55.0	60.4	<112.5	56	53
18:35:00	55.0	59.8	<112.5	57	52
18:40:00	65.8	86.0	<112.5	66	55
18:45:00	56.0	64.0	<112.5	57	53
18:50:00	56.1	62.4	<112.5	58	53
18:55:00	66.0	86.4	<112.5	68	52
19:00:00	52.4	58.6	<112.5	53	51
19:05:00	52.8	55.7	<112.5	54	51
19:10:00	70.3	92.5	114.5	60	52
19:15:00	55.8	61.7	<112.5	57	53
19:20:00	55.1	61.1	<112.5	57	52
19:25:00	55.1	60.5	<112.5	56	52
19:30:00	52.7	55.3	<112.5	54	51
19:35:00	58.0	67.9	<112.5	62	50
19:40:00	63.3	77.3	<112.5	67	53
19:45:00	54.0	61.6	<112.5	56	51
19:50:00	52.4		<112.5	53	51
19:55:00	54.6	63.9	<112.5	56	51
20:00:00	52.2	54.4	<112.5	53	50
20:05:00	56.8		<112.5	59	52
20:10:00	54.5	65.7	<112.5	56	51
20:15:00	52.7	56.8	<112.5	54	51
20:20:00	52.4	56.4	<112.5	53	50
20:25:00	54.3	61.7	<112.5	57	51
20:30:00	53.5	64.0	<112.5	54	51
20:35:00	54.9	67.7	<112.5	56	51
20:40:00	57.1	68.6	<112.5	60	51
20:45:00	58.9	76.5	<112.5	58	50
20:50:00	56.7	74.8	<112.5	58	50
20:55:00	50.5	54.9	<112.5	51	49
21:00:00	51.8	59.2	<112.5	53	49
21:05:00	59.5	81.3	<112.5	52	49

21:15:00 2 21:20:00 2 21:25:00 2 21:30:00 2 21:35:00 2 21:40:00 2 21:45:00 2 21:50:00 2	50.3 52.4 50.2 53.2 50.8 54.5 54.8 84.9 55.1 83.0 72.0 94.1 67.9 74.9 50.2 54.8	 <112.5 115.3 <112.5 <112.5 <112.5 	51 51 52 52 65 72 51	50 49 48 49 48 49 51 62 48 49
21:55:00	51.0 54.8	3 <112.5	52	49

TIME	Lav	Lma	ax Lpk	L(10.0)	L(90.0)
	dBA	dBA	? dBC	?dCA	¿?tC}í

ê22:00:00	63.9	80.3	<112.5	69	50
22:05:00	50.0	54.4	<112.5	50	48
22:10:00	49.6	51.7	<112.5	50	48
22:15:00	49.8	52.5	<112.5	51	48
22:20:00	50.8	54.3	<112.5	52	49
22:25:00	51.2	53.3	<112.5	52	50
22:30:00	50.8	54.1	<112.5	51	49
22:35:00	50.7	53.4	<112.5	52	49
22:40:00	51.3	55.8	<112.5	52	50
22:45:00	54.2	73.7	<112.5	52	50
22:50:00	57.2	72.5	<112.5	60	49
22:55:00	54.8	71.2	<112.5	55	49
23:00:00	56.8	73.7	<112.5	60	48
23:05:00	52.8	68.9	<112.5	53	49
23:10:00	57.8	76.9	<112.5	53	49
23:15:00	54.0	67.9	<112.5	53	50
23:20:00	54.7	73.3	<112.5	54	50
23:25:00	57.6	71.2	<112.5	62	51
23:30:00	51.0	54.5	<112.5	52	49
23:35:00	53.6	67.8	<112.5	52	48
23:40:00	49.9	53.2	<112.5	51	48
23:45:00	49.5	54.4	<112.5	50	48
23:50:00	62.1	81.7	<112.5	54	47
23:55:00	48.6	53.6	<112.5	49	47
10/15/19					
00:00:00	48.6	53.3	<112.5	50	46
00:05:00	50.3	53.6	<112.5	51	48
00:10:00	48.7	55.4	<112.5	50	47
00:15:00	55.9	66.5	<112.5	59	48
00:20:00	48.8	53.6	<112.5	49	47

00:25:00	48.5	52.4	<112.5	50	47
00:30:00	48.3	51.7	<112.5	49	47
00:35:00	48.2	52.5	<112.5	49	47
00:40:00	50.2	56.7	<112.5	52	47
00:45:00	48.5	52.9	<112.5	50	46
00:50:00	48.9	52.7	<112.5	50	47
00:55:00	48.6	52.8	<112.5	49	47
01:00:00	48.4	50.5	<112.5	49	47
01:05:00	49.2	52.7	<112.5	50	48
01:10:00	48.7	50.9	<112.5	49	47
01:15:00	48.5	52.4	<112.5	49	47
01:20:00	62.0	80.9	<112.5	56	47
01:25:00	48.6	52.4	<112.5	50	47
01:30:00	49.5	57.4	<112.5	50	47
01:35:00	48.3	52.4	<112.5	49	46
01:40:00	48.0	52.4	<112.5	49	46
01:45:00	48.5	53.0	<112.5	50	47
01:50:00	48.4	53.1	<112.5	49	47
01:55:00	48.3	51.0	<112.5	49	47

TIME	Lav			L(10.0)	
(dBA d	BA ? d	C{	ئ ACb	tBAíê
ê02:00:00	48.7	55.6 <	(112.5	50	47
02:05:00	49.4	52.9 <1	12.5	50	48
02:10:00	48.7	51.2 <1	12.5	49	47
02:15:00	53.3	63.2 <	12.5	56	47
02:20:00	49.3	54.0 <1	12.5	51	47
02:25:00	61.8	80.4 <	12.5	56	47
02:30:00	48.4	52.1 <	12.5	49	47
02:35:00	49.3	53.2 <	12.5	50	47
02:40:00	50.5	60.6 <1	12.5	52	48
02:45:00	50.2	57.1 <	12.5	51	48
02:50:00	50.4	57.4 <	12.5	52	47
02:55:00	50.3	55.3 <	12.5	52	48
03:00:00	50.8	56.0 <1	12.5	52	48
03:05:00	51.6	56.6 <1	12.5	54	48
03:10:00	50.1	53.6 <1	12.5	51	48
03:15:00	51.2	54.4 <	12.5	53	49
03:20:00	50.4	55.2 <1	12.5	52	48
03:25:00	49.7	54.4 <	12.5	51	47
03:30:00	50.7	58.0 <1	12.5	52	48
03:35:00	50.8	58.8 <	12.5	52	48
03:40:00	51.7	58.3 <1	12.5	54	48
03:45:00	53.0	58.5 <	12.5	55	49

03:50:00	51.3	56.9	<112.5	53	49
03:55:00	50.8	53.7	<112.5	52	49
04:00:00	50.4	55.2	<112.5	52	48
04:05:00	51.8	65.2	<112.5	51	48
04:10:00	60.7	81.9	<112.5	60	49
04:15:00	62.9	84.4	<112.5	53	49
04:20:00	60.1	81.2	<112.5	54	49
04:25:00	54.3	69.3	<112.5	52	49
04:30:00	51.4	57.1	<112.5	52	49
04:35:00	51.2	54.1	<112.5	52	50
04:40:00	51.6	53.6	<112.5	52	50
04:45:00	51.9	54.8	<112.5	52	50
04:50:00	52.8	59.9	<112.5	54	50
04:55:00	51.2	64.1	<112.5	51	48
05:00:00	50.1	52.4	<112.5	51	49
05:05:00	51.3	59.2	<112.5	52	49
05:10:00	51.1	56.4	<112.5	52	50
05:15:00	51.2	53.7	<112.5	52	50
05:20:00	52.4	59.2	<112.5	54	50
05:25:00	52.5	56.4	<112.5	53	51
05:30:00	53.0	55.6	<112.5	54	51
05:35:00	53.1	57.1	<112.5	54	51
05:40:00	52.5	58.8	<112.5	54	51
05:45:00	52.8	55.3	<112.5	53	51
05:50:00	52.9	62.5	<112.5	53	51
05:55:00	53.9	60.3	<112.5	56	52

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 2>>>

TIME	Lav	Lmax	Lpk	L(10.0)	L(90.0)
	dBA	dBA	tBC? ??	wCA	?? tz}íë
06:00:00	64.9	76.2	<112.5	70	53
06:05:00	53.2	56.5	<112.5	54	52
06:10:00	53.9	56.6	<112.5	54	52
06:15:00	53.8	56.1	<112.5	54	52
06:20:00	55.4	63.3	<112.5	57	53
06:25:00	53.5	56.0	<112.5	54	52
06:30:00	54.2	57.5	<112.5	55	53
06:35:00	65.0	76.6	<112.5	70	53
06:40:00	68.5	82.9	<112.5	73	54
06:45:00	55.4	59.6	<112.5	56	54
06:50:00	55.3	56.8	<112.5	56	54
06:55:00	55.4	58.5	<112.5	56	53
07:00:00	56.8	66.4	<112.5	58	54
07:05:00	65.2	86.9	<112.5	62	54
07:10:00	55.9	59.6	<112.5	56	55

07:15:00	56.4	62.4	<112.5	57	55
07:20:00	59.9	71.1	<112.5	63	55
07:25:00	57.4	66.6	<112.5	59	55
07:30:00	55.3	63.2	<112.5	56	54
07:35:00	55.3	58.8	<112.5	57	54
07:40:00	77.9	89.8	<112.5	83	56
07:45:00	58.1	62.1	<112.5	59	57
07:50:00	58.6	61.4	<112.5	59	57
07:55:00	59.8	62.7	<112.5	61	58
08:00:00	58.8	61.6	<112.5	60	57
08:05:00	58.3	64.0	<112.5	59	56
08:10:00	58.1	63.6	<112.5	59	56
08:15:00	57.7	61.1	<112.5	58	56
08:20:00	57.1	59.6	<112.5	58	55
08:25:00	55.5	62.0	<112.5	56	54
08:30:00	55.7	58.0	<112.5	56	54
08:35:00	57.0	59.8	<112.5	58	56
08:40:00	57.5	66.9	<112.5	58	56
08:45:00	57.9	64.0	<112.5	61	54
08:50:00	57.1	61.1	<112.5	58	55
08:55:00	56.9	64.0	<112.5	58	54
09:00:00	56.9	66.0	<112.5	59	54
09:05:00	56.2	62.3	<112.5	58	54
09:10:00	61.2	76.8	<112.5	62	55
09:15:00	56.5	73.6	<112.5	56	53
09:20:00	69.4	91.3	<112.5	67	54
09:25:00	57.6	68.1	<112.5	60	53
09:30:00	55.8	60.2	<112.5	57	53
09:35:00	60.4	70.5	<112.5	65	53
09:40:00	55.4	58.8	<112.5	56	53
09:45:00	59.5	72.1	<112.5	63	53
09:50:00	62.1	77.6	<112.5	66	55
09:55:00	56.3	64.8	<112.5	59	52

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 2>>>

TIME	Lav	Lmax	Lpk	L(10.0) L(90	.0)
	dBA	dBA	wBC?	gBA	? tB}	
í 10:0	0:00	57.5 7	/2.3 <1	12.5	58	53
10:05:00	55.7	66.8	<112.5	56	51	
10:10:00	59.1	71.5	<112.5	60	53	
10:15:00	52.7	56.0	<112.5	54	50	
10:20:00	52.8	56.5	<112.5	54	51	
10:25:00	53.4	60.3	<112.5	55	51	
10:30:00	53.0	56.4	<112.5	54	51	
10:35:00	52.9	62.0	<112.5	54	50	

10:40:00	54.4	65.5	<112.5	55	51
10:45:00	52.9	57.2	<112.5	54	51
10:50:00	52.0	55.0	<112.5	53	50
10:55:00	54.1	61.2	<112.5	56	51
11:00:00	52.8	61.2	<112.5	54	50
11:05:00	53.6	58.8	<112.5	54	52
11:10:00	54.2	58.9	<112.5	55	52
11:15:00	53.6	57.9	<112.5	54	52
11:20:00	54.1	65.5	<112.5	55	52
11:25:00	53.4	57.7	<112.5	54	52
11:30:00	53.5	59.2	<112.5	55	51
11:35:00	52.7	56.7	<112.5	55	50
11:40:00	51.4	55.6	<112.5	52	50
11:45:00	52.8	61.7	<112.5	54	51
11:50:00	52.9	61.5	<112.5	54	51
11:55:00	53.5	61.5	<112.5	54	52
12:00:00	52.7	56.6	<112.5	54	51
12:05:00	52.1	55.6	<112.5	53	51
12:10:00	52.1 52.5	56.1	<112.5	53 54	50
12:15:00	52.5 52.6	55.4	<112.5	53	50 51
12:10:00	52.0 51.3	54.8	<112.5	52	50
12:25:00	53.6	63.1	<112.5	52 54	50
12:30:00	53.0 53.7	68.8	<112.5	54	50
12:35:00	51.8	54.0	<112.5	53	50
12:35:00	53.0	57.8	<112.5	53 54	50 51
12:40:00	53.0 53.3	57.8	<112.5	54 54	52
12:43:00	53.3 53.8	58.4	<112.5	55	52 52
12:55:00	53.8 53.9	58.4 58.4	<112.5		
12:33:00				55 56	52 52
	54.9	60.5	<112.5	56	52 52
13:05:00	54.3	59.5	<112.5	56	52 52
13:10:00	54.1	62.6	<112.5	54	52 52
13:15:00	54.0	58.8	<112.5	55	52 52
13:20:00	53.4	56.5	<112.5	54	52
13:25:00	53.2	56.2	<112.5	54	51
13:30:00	54.2	60.1	<112.5	55	52
13:35:00	53.4	57.6	<112.5	55	51
13:40:00	52.5	55.2	<112.5	53	51
13:45:00	53.4	58.9	<112.5	54	52
13:50:00	53.9	58.4	<112.5	55	52
13:55:00	54.4	65.8	<112.5	55	51

<<< TIME HISTORY REPORT FOR TEST NUMBER 1 OF 2>>>

TIME	Lav	/ Lm	ax]	Lpk L(10	.0) L(9	0.0)
	dBA	dBA	? dB	C ??dC}	b? ن	BA
í 14:0	0:00	51.8	54.9	<112.5	52	50

14:05:00	54.6	62.8	<112.5	56	51
14:10:00	54.0	57.4	<112.5	55	52
14:15:00	54.2	59.2	<112.5	55	53
14:20:00	55.3	58.0	<112.5	56	54
14:25:00	55.4	61.9	<112.5	56	53
14:30:00	54.9	61.7	<112.5	56	53
14:35:00	57.1	67.7	<112.5	60	52
14:40:00	53.6	56.4	<112.5	54	52
14:45:00	54.1	57.8	<112.5	55	52
14:50:00	53.8	57.6	<112.5	54	52
14:55:00	54.3	61.6	<112.5	55	53
15:00:00	54.8	58.0	<112.5	56	53
15:05:00	54.7	62.4	<112.5	55	53
15:10:00	54.4	57.7	<112.5	55	53
15:15:00	54.9	58.5	<112.5	56	53
15:20:00	54.3	60.0	<112.5	55	53
15:25:00	54.6	61.2	<112.5	55	53
15:30:00	54.4	57.2	<112.5	55	53
15:35:00	54.2	56.0	<112.5	54	53
15:40:00	55.1	59.3	<112.5	56	54
15:45:00	54.6	58.4	<112.5	55	53
15:50:00	54.3	56.9	<112.5	55	53
15:55:00	55.1	64.9	<112.5	56	53
16:00:00	54.6	58.8	<112.5	55	53
16:05:00	54.2	58.0	<112.5	55	53
16:10:00	59.4	80.1	<112.5	56	53
16:15:00	54.4	59.2	<112.5	55	53
16:20:00	61.2	82.4	<112.5	61	53
16:25:00	61.8	84.0	<112.5	60	52
16:30:00	54.1	58.0	<112.5	55	52
16:35:00	60.5	78.5	<112.5	61	53
16:40:00	54.5	65.3	<112.5	55	52
16:45:00	54.0	58.9	<112.5	54	53
16:50:00	54.5	63.3	<112.5	55	53
16:55:00	67.6	82.3	<112.5	67	55
17:00:00	67.0	81.8	<112.5	71	53
17:05:00	53.8	63.2	<112.5	55	52
17:10:00	53.8	55.8	<112.5	54	52
17:15:00	54.2	61.9	<112.5	55	52
17:20:00	54.2	66.1	<112.5	54	52
17:25:00	63.7	76.1	<112.5	68	53
17:30:00	67.1	78.5	<112.5	71	57
17:35:00	64.4	76.9	<112.5	68	52
17:40:00	68.5	88.8	<112.5	67	52
17:45:00	68.3	76.8	<112.5	73	58
17:50:00	73.0	89.4	<112.5	73	53
17:55:00	57.3	68.5	<112.5	60	52

[Setting] [Property] System Version, 1.5 NX-42EX Version,1.5 NX-42WR Version, 1.4 NX-42RT Version,1.5 NX-42FT Version,1.1 Serial Number,145380 [NL-42] Store Name,0304 Type,NL-42 Index Number,1 Frequency Weighting,A Time Weighting,S Output Level Range Upper, 120 Output Level Range Lower,40 Delay Time,Off Windscreen Correction, WS-10 Diffuse Sound Field Correction,Off LN Mode,Leq 1s Display Leq,On Display LE,Off Display Lmax,On Display Lmin,On Display Ly,On Display LN1,Off Display LN2,Off Display LN3,Off Display LN4,On Display LN5,Off Display Time Level, On Percentile 1,5 Percentile 2,10 Percentile 3.50 Percentile 4,90 Percentile 5,99.9 Ly Type,LCpeak AC OUT,Z DC OUT, Main Comparator,Off Comparator Level,66 Comparator Channel, Main Battery Type, Alkaline Communication Interface, USB Baud Rate.9600 Language, English

CSV

[NX-42EX] Lp Store Interval,Off Leq Calculation Interval,5 m Timer Auto Start Time,2019/10/23 12:00:00 Timer Auto Stop Time,2019/10/24 12:00:00 Timer Auto Interval,Off Sleep Mode,Off

[Status] Measurement Start Time,2019/10/23 12:00:00 Measurement Stop Time,2019/10/24 04:30:20 Lp Data Number,-Leq Data Number,199 Measure Time,00d 16:30:20.0

Address Start Time Measurement Time Leq LE Lmax Lmin Ly LN1 LN2 LN3 LN4 LN5 Ov	an Undan
1 10/23/2019 12:00 00d 00:05:00.0 63.9 88.7 81.7 58.2 98.1 65.3 64.6 61.7 59.8 57.6	test 1 (10/23/19)-(10/24-19)
2 10/23/2019 12:05 00d 00:05:00.0 60.5 85.3 68 54.9 89.1 63.7 62.7 59.9 57.1 54.8	row row
3 10/23/2019 12:10 00d 00:05:00.0 60.8 85.6 71.4 55.6 91 64 62.9 60.1 57.1 55.4	Time Finish Start Stop LAEQ
4 10/23/2019 12:15 00d 00:05:00.0 65 89.8 72.5 55.1 93.9 67.9 66.4 64.6 63.3 54.4	"""12:00-18:00""" 2 74
62.99723914 1993994.307 \$D\$2:\$D\$74 \$D\$2 \$D\$74	
5 10/23/2019 12:20 00d 00:05:00.0 64.7 89.5 68.3 63.1 90.1 66.1 65.7 64.6 63.7 63	"""18:00-24:00""" 74 146
62.45440565 1759707.823 \$D\$74:\$D\$146 \$D\$74 \$D\$146	
6 10/23/2019 12:25 00d 00:05:00.0 64.8 89.6 70.5 62.5 93.1 66.8 66.2 64.3 63.6 62.3	00:00-04:35 146 200
58.1619773 654934.2908 \$D\$146;\$D\$200 \$D\$146 \$D\$200	
7 10/23/2019 12:30 00d 00:05:00.0 66.5 91.3 81.5 62.6 99.8 67.6 66.5 64.9 63.9 62.5	4 4 60.8
1202264.435 \$D\$4:\$D\$4 \$D\$4 \$D\$4 \$D\$4	00.0
8 10/23/2019 12:35 00d 00:05:00.0 65.4 90.2 71.3 63.2 96.8 67.8 67.2 64.9 64.2 63.1	14.5 hr avg 2 291
	14.5 III avg 2 291
60.24787317 1058735.113 \$D\$2:\$D\$291 \$D\$2 \$D\$291	4 4 60.8
9 10/23/2019 12:40 00d 00:05:00.0 65 89.8 68.7 63.5 93 66.3 66.1 64.9 63.9 63.5	4 4 60.8
1202264.435 \$D\$4:\$D\$4 \$D\$4 \$D\$4	
10 10/23/2019 12:45 00d 00:05:00.0 63.7 88.5 73.4 58 94 69.3 66.4 61.5 59.6 57.8	4 4 60.8
1202264.435 \$D\$4:\$D\$4 \$D\$4 \$D\$4	
11 10/23/2019 12:50 00d 00:05:00.0 61.1 85.9 67.1 56.7 92.1 64.3 63.5 60.5 58 56.1	
12 10/23/2019 12:55 00d 00:05:00.0 61.6 86.4 74.3 57 103.6 63.9 63.3 60.5 58.3 56.6	
13 10/23/2019 13:00 00d 00:05:00.0 62.8 87.6 68.1 57.4 92 65.7 65.2 62.3 59.6 57.4	
14 10/23/2019 13:05 00d 00:05:00.0 61.8 86.6 66.5 57.5 88.4 64.7 63.7 61.4 58.8 57.2	
15 10/23/2019 13:10 00d 00:05:00.0 62.7 87.5 67.1 58.3 90.8 65.8 64.8 62.3 59.5 58	
16 10/23/2019 13:15 00d 00:05:00.0 62.3 87.1 69.3 56.6 92.2 65.2 64.7 61.7 58.8 56.7	
18 10/23/2019 13:25 00d 00:05:00.0 62.6 87.4 76.9 58.3 94.1 64.2 63.7 61.6 59.8 58.1	
19 10/23/2019 13:30 00d 00:05:00.0 62.6 87.4 66.4 57 93.1 64.9 64.3 62.4 60.4 56.8	
20 10/23/2019 13:35 00d 00:05:00.0 61.6 86.4 65 58.4 93.2 63.4 63 61.5 59.7 58.4	
21 10/23/2019 13:40 00d 00:05:00.0 63.4 88.2 74.1 56.8 96.9 66.5 64.6 62.2 58.8 56.8	
22 10/23/2019 13:45 00d 00:05:00.0 62.5 87.3 76.8 57.8 95.8 64.6 63.8 61.4 58.7 57.7	
23 10/23/2019 13:50 00d 00:05:00.0 61.9 86.7 67 57.1 89.4 65 64.1 61.3 58.5 56.8	
24 10/23/2019 13:55 00d 00:05:00.0 61.8 86.6 67.6 56.7 93.1 65 64 61.3 58.9 56.5	
25 10/23/2019 14:00 00d 00:05:00.0 62.6 87.4 74.4 57.6 99 65.7 64.9 60.8 58.9 57.3	
26 10/23/2019 14:05 00d 00:05:00.0 63.4 88.2 78.2 58.4 96.7 65.9 65.1 62.1 60 58.5	
27 10/23/2019 14:10 00d 00:05:00.0 62.5 87.3 67.6 59 92 65.8 64.9 61.9 60 58.6	
28 10/23/2019 14:15 00d 00:05:00.0 62.7 87.5 69.7 59 91.4 64.8 64.3 62.5 60.6 58.8	
30 10/23/2019 14:25 00d 00:05:00.0 62.4 87.2 72.2 57.2 92.8 65.4 64.6 61.6 59.5 56.8	
31 10/23/2019 14:30 00d 00:05:00.0 62.2 87 67.4 58 95 64.9 64 61.7 59.6 57.9	
32 10/23/2019 14:35 00d 00:05:00.0 60.6 85.4 65.3 57.1 91.9 63.2 62.3 60.4 58.1 56.9	
33 10/23/2019 14:40 00d 00:05:00.0 61.8 86.6 68.5 57.9 96.8 64.1 63.6 61.2 59.2 57.4	
34 10/23/2019 14:45 00d 00:05:00.0 63 87.8 80.4 58.2 96.1 63.8 63.3 61.1 59.5 57.9	
35 10/23/2019 14:50 00d 00:05:00.0 61.2 86 70.8 57.2 94.9 63.3 62.8 60.8 59.1 57.1	
36 10/23/2019 14:55 00d 00:05:00.0 61.9 86.7 66.5 57.2 93.6 65.7 64.2 61.4 58.8 56.9	
37 10/23/2019 15:00 00d 00:05:00.0 60.7 85.5 65.8 57.5 88 63.3 62.5 60.4 58.5 57.5	
38 10/23/2019 15:05 00d 00:05:00.0 63.7 88.5 81.3 58.7 98.9 64.6 64 61.8 59.6 58.4	
39 10/23/2019 15:10 00d 00:05:00.0 63.2 88 70.8 59.4 97.4 66.6 64.6 62.4 61 59.4	
40 10/23/2019 15:15 00d 00:05:00.0 62.3 87.1 67.3 58.5 92.6 65.1 64 61.9 60.3 58.4	
40 10/23/2019 15:15 00d 00:05:00.0 62:3 81:1 07:5 58:5 92:0 65:1 64 61:9 60:5 58:4 000 00:05:00.0 63:8 88:6 70:5 58 91:3 66:7 65:8 63:3 59:8 58:1	
43 10/23/2019 15:30 00d 00:05:00.0 63.1 87.9 71.9 60.2 87.8 65 64.5 62.8 61.3 60.1	
44 10/23/2019 15:35 00d 00:05:00.0 63.3 88.1 65.8 60.2 89.6 65.2 64.9 63 61.6 60.1	
45 10/23/2019 15:40 00d 00:05:00.0 62.8 87.6 65.8 59.7 88.6 64.6 64.1 62.7 61.2 59.6	
46 10/23/2019 15:45 00d 00:05:00.0 64.1 88.9 67.7 61.9 91.7 65.9 65.3 63.9 62.7 61.6	
47 10/23/2019 15:50 00d 00:05:00.0 63.3 88.1 67.8 60.2 90.8 65 64.7 63.1 61.5 60.4	
48 10/23/2019 15:55 00d 00:05:00.0 62.9 87.7 71.1 59.6 87.5 64.7 64.3 62.4 61.2 59.5	
49 10/23/2019 16:00 00d 00:05:00.0 61.8 86.6 67.7 58.1 89.9 63.6 63 61.9 59.8 58.2	
50 10/23/2019 16:05 00d 00:05:00.0 62.4 87.2 65.8 57.3 87.2 65 64.4 62.4 59.9 57.1	

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51	10/23/2019 16:10	00d 00:05:00.0 63.8	88.6			94.7					59.4		
52	10/23/2019 16:15	00d 00:05:00.0 62.9	87.7	72.4		99.6		64.4	62.3	60.8	60		
53	10/23/2019 16:20	00d 00:05:00.0 64.2	89	73		95.2			63.4		00		
54	10/23/2019 16:25	00d 00:05:00.0 63	87.8	68.2	59.5	88.9	64.6	64.3		61.3	59.5		
55	10/23/2019 16:30	00d 00:05:00.0 64.2	89	73.5	60.4	90.8	66.7	65.8	63.5	62.3	60.3		
56	10/23/2019 16:35	00d 00:05:00.0 63.9	88.7	69.7	60.6	90.3	65.7	65.4	63.8	61.9	60.4		
57	10/23/2019 16:40	00d 00:05:00.0 62.4	87.2	71.7	58.8	88.8	64.3	63.9	62.2	60.2	58.5		
58	10/23/2019 16:45	00d 00:05:00.0 62.4	87.2	66.3	59.1	95.6	64.3	63.9	62.3	60.4	59		
59	10/23/2019 16:50	00d 00:05:00.0 62.4	87.2	70	58.5	91.8	65.2	64.3	61.7	60	58.2		
60	10/23/2019 16:55	00d 00:05:00.0 62.9	87.7	67.4	58.5	94.3		65.3		60.8	58.4		
61	10/23/2019 17:00	00d 00:05:00.0 64.9	89.7	76.9	58.4	100.7	7 69.7	68.5	62.8	60.8	58.2		
62	10/23/2019 17:05	00d 00:05:00.0 63.1	87.9	68.4	59.5	94.1	66	65	62.7	60.4			
63	10/23/2019 17:10	00d 00:05:00.0 61.7	86.5	66.7	57.8	89.6			61.6		57.7		
64	10/23/2019 17:15	00d 00:05:00.0 62.1	86.9	64.5	59.7	88.6		63.5	61.8		59.6		
65	10/23/2019 17:19	00d 00:05:00.0 62.1 00d 00:05:00.0 63.4	88.2	71.9	59.6	92.7	66.3	65.1	62.7	61.1	59.5		
66	10/23/2019 17:20	00d 00:05:00.0 63.1	87.9	73.3	60.4	90.2	64.5	63.7	62.6		60.2		
			87.7	65.8					62.8	60.9			
67	10/23/2019 17:30	00d 00:05:00.0 62.9			59.1	86.3	65.1	64.7			58.9		
68	10/23/2019 17:35	00d 00:05:00.0 63.4	88.2	72.5	58.6	92.5	66.4	64.8	62.8	60.2	58.7		
69 70	10/23/2019 17:40	00d 00:05:00.0 61.8	86.6	64.7	58.6			63	61.8	60.1	58.5		
70	10/23/2019 17:45	00d 00:05:00.0 63.9	88.7	78.5	58.3	93.4	64.5	63.9	62.2	60	58.1		
71	10/23/2019 17:50	00d 00:05:00.0 62.6	87.4	65	60.1	85.6	64.1	63.8	62.4	61.3	60		
72	10/23/2019 17:55	00d 00:05:00.0 63	87.8	66.3	60.7	89.3	64.6	64.2	62.8	61.8	60.5		
73	10/23/2019 18:00	00d 00:05:00.0 62.2	87	67.3	57.9	88.9	64.3	63.7	62.1	59.7	57.8		
74	10/23/2019 18:05	00d 00:05:00.0 66.3	91.1	83.7	60.2	96.3	66.1	64.3	62.4		60		
75	10/23/2019 18:10	00d 00:05:00.0 63.1	87.9	69	59.9	86.6	65	64.3	62.9	61.7	59.9		
76	10/23/2019 18:15	00d 00:05:00.0 62.1	86.9	65.3	60	83.8	63.6	63.2	62	60.8	59.8		
77	10/23/2019 18:20	00d 00:05:00.0 63.2	88	66.9	59.2	87.4	65.4	64.8	63	61.3	59.1		
78	10/23/2019 18:25	00d 00:05:00.0 63.6	88.4	66.2	60.7	85.4	65.3	64.8	63.6	62.1	60.7		
79	10/23/2019 18:30	00d 00:05:00.0 61.3	86.1	71.9	58.1	88.2	63.1	62.7	60.9	59.2	58.1		
80	10/23/2019 18:35	00d 00:05:00.0 61.9	86.7	64.6	59.1	83.9	63.6	63.2	61.7	60.7	58.9		
81	10/23/2019 18:40	00d 00:05:00.0 61.9	86.7	65.2	59.4	88.5	64	63.4	61.6	60.5	59.4		
82	10/23/2019 18:45	00d 00:05:00.0 62.9	87.7	65.8	59.1	85.4	65	64.7	62.9	60.1	59		
83	10/23/2019 18:50	00d 00:05:00.0 62.7	87.5	71.6	59.4	87.5	64.8	64.2	62.4	60.7	58.8		
84	10/23/2019 18:55	00d 00:05:00.0 62.4	87.2	66.3	59.7	87.1	64.2	63.9		61	59.8		
85	10/23/2019 19:00	00d 00:05:00.0 62.1	86.9	66.6	59.9	85.8	64.5	63.3					
86	10/23/2019 19:05	00d 00:05:00.0 59.5	84.3	63.9	55.8	84.6		61.4		57.2			
87	10/23/2019 19:10	00d 00:05:00.0 59.5	83	61.7	55	82.9			58.2		54.8 ·		
88	10/23/2019 19:15	00d 00:05:00.0 58.2	83.1	71.6		87.4			57.5				
89	10/23/2019 19:13	00d 00:05:00.0 58.5	83.8	64.4	55.6	87.4 89.9		60.3		57.2	55.5		
89 90	10/23/2019 19:20	00d 00:05:00.0 59 00d 00:05:00.0 59.4	84.2	64.4 63.1	55.0 57.3	89.9 86.4				57.2 58	55.5 57.2		
91 02	10/23/2019 19:30	00d 00:05:00.0 58.2	83 84 4	61.2	55.2	82	59.8	59.4		56.7	55.1		
92 02	10/23/2019 19:35	00d 00:05:00.0 59.6	84.4	72	55.8	87.8	61.6	61			55.8		
93 04	10/23/2019 19:40	00d 00:05:00.0 59.9	84.7	65.1	56.6						56.6		
94 07	10/23/2019 19:45	00d 00:05:00.0 61.3	86.1	74.4	57.6			62.9					
95	10/23/2019 19:50	00d 00:05:00.0 59.6		63		84.8		61.3		57.6			
96	10/23/2019 19:55	00d 00:05:00.0 58	82.8	62.6	53.6	83.6	60.1	59.7	57.9	55.7	53.3		
97	10/23/2019 20:00	00d 00:05:00.0 58.6	83.4	71.5	54.6			60.1	58	56.1	54.5		
98	10/23/2019 20:05	00d 00:05:00.0 63.7	88.5	76	56.8	94.3	68.2	66.5	61.8	58.1	56.7		
99	10/23/2019 20:10	00d 00:05:00.0 72.3	97.1	88.3	56.3		2 79.9			57.6			
100	10/23/2019 20:15	00d 00:05:00.0 68.6	93.4				.4 75.9		4 59.8			3	
101	10/23/2019 20:20	00d 00:05:00.0 67.5	92.3		56.4		5 74.1			57.5			
102	10/23/2019 20:25	00d 00:05:00.0 59.1	83.9	65.3	55.3	91.7	61.1	60.6	58.7	56.9	55.3		
103	10/23/2019 20:30	00d 00:05:00.0 59.1	83.9	63.5	56	89.9	61	60.5	58.9		55.9		
104	10/23/2019 20:35	00d 00:05:00.0 58.4	83.2	61.5	55.4			59.8	58.2	56.7	55.3		
105	10/23/2019 20:40	00d 00:05:00.0 57.3	82.1		54.9			58.8	57	55.6	54.8		
106	10/23/2019 20:45	00d 00:05:00.0 57.8	82.6		54.8								
107	10/23/2019 20:50	00d 00:05:00.0 58.3	83.1										
108	10/23/2019 20:55	00d 00:05:00.0 58.2		62.8			61.2						

109	10/23/2019 21:00	00d 00:05:00.0				56.7							
110	10/23/2019 21:05	00d 00:05:00.0		84	71.9	55.4	86.7	61.4	60.4	58.6	57.2	55.3	
111	10/23/2019 21:10	00d 00:05:00.0		82.5	61.2	55.1	84.7	59.9	59.2	57.6	55.9	55	
112	10/23/2019 21:15	00d 00:05:00.0		83.2	67.7	54.8	87.1	62.5	59.8	57	55.5	54.7	
113	10/23/2019 21:20	00d 00:05:00.0		84.3	71	52.7	95.2	63.1	62.6	56.6	53.8	52.5	
114	10/23/2019 21:25	00d 00:05:00.0	56.6	81.4	70.2	53.8	84.5	57.4	56.7	55.1	54.3	53.5	
115	10/23/2019 21:30	00d 00:05:00.0	57.1	81.9	71.3	53.6	87.9	58.1	57.7		55.3	53.6	
116	10/23/2019 21:35	00d 00:05:00.0	61.5	86.3	75	55.5	90.7	64.8	59.9	58	56.6	55.5	
117	10/23/2019 21:40	00d 00:05:00.0	56.8	81.6	67.5	54.2	85.6	58.4	57.9	56.4	55.1	54.1	
118	10/23/2019 21:45	00d 00:05:00.0	63.5	88.3	75.5	55.1	89.1	72.4	62.8	57.4	56	54.7	
119	10/23/2019 21:50	00d 00:05:00.0	62.4	87.2	71.8	55.8	96	66.5	65.9	59.9	56.7	55.6	
120	10/23/2019 21:55	00d 00:05:00.0	66.2	91	74.9	54.6	94.4	72.6	70.9	57.8	55.6	54.5	
121	10/23/2019 22:00	00d 00:05:00.0	62.2	87	77.8	55.2	93.3	65.6	64.7	57.6	56.1	55.1	
122	10/23/2019 22:05	00d 00:05:00.0	67.7	92.5	76.3	55.6	94.4	74.1	71.9	63.9	56.8	55.5	
123	10/23/2019 22:10	00d 00:05:00.0	56	80.8	59.3	53.6	84.1	58	57.4	55.7	54.3	53.6	
124	10/23/2019 22:15	00d 00:05:00.0	59.3	84.1	72.1	52.1	88	63.7	62.7	57	53.8	52.1	
125	10/23/2019 22:20	00d 00:05:00.0	63.1	87.9	70.7	52.4	91.1	67.3	66.3	62.6	54	52.3	
126	10/23/2019 22:25	00d 00:05:00.0	58	82.8		52.5	90.3	62.3	60.7	54.9	53.6	52.5	
127	10/23/2019 22:30	00d 00:05:00.0		84.6	73.3	52.2	97.5	64.1	62.2		53.4		
128	10/23/2019 22:35	00d 00:05:00.0	63.1	87.9	72.1	52.6	90	67.5	66.6	60.6	53.7	52.6	
129	10/23/2019 22:40	00d 00:05:00.0	58.3	83.1	72.8	51.4	94.6	62.3	61.6	53.8		51.3	
130	10/23/2019 22:45	00d 00:05:00.0	58.9	83.7	73	51.6	100	63.5	61.8	55.9	52.6	51.5	
131	10/23/2019 22:50	00d 00:05:00.0	60.9	85.7	67.2	52.5	91.6	64.5	63.4	61	54.1	52.4	
132	10/23/2019 22:55	00d 00:05:00.0	66	90.8	71.6	58.6	99.2	69.5	68.8	65.3	60	58.6	
133	10/23/2019 23:00	00d 00:05:00.0	61.5	86.3	73.1	53.4	96	64.3	62.8	61.2	54.6	53.3	
134	10/23/2019 23:05	00d 00:05:00.0		80.7	65.6	52.5	89.4	59.4	57	54.8	53.5	52.5	
135	10/23/2019 23:10	00d 00:05:00.0	54.8	79.6	62.7	51.9	87.2	58.6	55.9	54	52.7	51.8	
136	10/23/2019 23:15	00d 00:05:00.0	58	82.8	71.2	51.7	96.6	63.5	61.2	54.3	52.7	51.6	
137	10/23/2019 23:20	00d 00:05:00.0	55.8	80.6	65.7	51.1	91.7	60.9	59.6	53.7	52.2	51	
138	10/23/2019 23:25	00d 00:05:00.0		80.7	71.3	51.3	87.4	59.2	56.8	54	52.4	51.2	
139	10/23/2019 23:30	00d 00:05:00.0		77.9	56.9	51	83.9	55.4	54.7	52.7	51.5	51	
140	10/23/2019 23:35	00d 00:05:00.0		78	58.1	50.8	88.2	56.3			51.4		
141	10/23/2019 23:40	00d 00:05:00.0		77.8	57.2	50.7	84.2	55			51.2		
142	10/23/2019 23:45	00d 00:05:00.0		91.8	79.2	51.7	97.3			55.9		51.5	
143	10/23/2019 23:50	00d 00:05:00.0		93.8	79.6	54.5	103.1		73.8	62.9	56.5	54.3	
144	10/23/2019 23:55	00d 00:05:00.0				53.9			58.9	56.1	54.5		
145	10/24/2019 0:00 00					91.8		65.7	56	52.9			
146	10/24/2019 0:05 00		87.8	74.6				66.2		52.9			
147	10/24/2019 0:10 00						62.4			52.4			
148	10/24/2019 0:15 00												-
		00d 00:05:00.0	67.7 9										
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100	10/24/2017 1.45 0	00.05.00.0	J7.2 0	+ /1.	2 55.1	12.9 02	2.0 00.0	. 0.0.	-+.1 33	.0			

	10/24/2019 1:50	00d 00:05:00.0	55.5 80.3 59.2 54.2 82.9 58.2 56.7 55.1 54.5 54.1
168	10/24/2019 1:55	00d 00:05:00.0	57.6 82.4 71.9 54.7 88.8 57.8 57 55.8 55.1 54.7
169	10/24/2019 2:00	00d 00:05:00.0	57.3 82.1 71.2 53.6 88.5 59.6 57.5 55.8 54.2 53.5
170	10/24/2019 2:05	00d 00:05:00.0	57.8 82.6 70.3 53.5 89.9 61.1 59.6 56.3 54.3 53.4
171	10/24/2019 2:10	00d 00:05:00.0	57.8 82.6 70.5 53.5 93.6 61.3 59.6 55.4 54.3 53.3
172	10/24/2019 2:15	00d 00:05:00.0	56.6 81.4 67.5 54.1 87.3 59.3 57.7 55.3 54.6 54
173	10/24/2019 2:20	00d 00:05:00.0	55.1 79.9 57.2 53.9 86.9 56.4 56 55 54.3 53.8
174	10/24/2019 2:25	00d 00:05:00.0	56.5 81.3 71.7 53.8 87.9 58.8 57.8 55.4 54.5 53.8
175	10/24/2019 2:30	00d 00:05:00.0	56.1 80.9 61.4 53.8 83.8 59.3 58 55.4 54.3 53.8
176	10/24/2019 2:35	00d 00:05:00.0	56.6 81.4 71.7 53.9 86.5 57.5 56.3 55.2 54.3 53.8
177	10/24/2019 2:40	00d 00:05:00.0	56.8 81.6 67 53.7 89.4 59.6 57.2 55.5 54.5 53.8
178	10/24/2019 2:45	00d 00:05:00.0	55.8 80.6 61.9 53.9 84.1 57.9 57.4 55.2 54.4 53.9
179	10/24/2019 2:50	00d 00:05:00.0	56.3 81.1 71 53.8 88.4 58 57.5 55.3 54.4 53.8
180	10/24/2019 2:55	00d 00:05:00.0	55.3 80.1 60.2 53.3 86.1 57.3 56.6 55.1 54.1 53.3
181	10/24/2019 3:00	00d 00:05:00.0	62.3 87.1 84.6 53.2 105.6 58.3 57.3 55 53.6 53.2
182	10/24/2019 3:05	00d 00:05:00.0	56.8 81.6 66.6 53.6 88.7 60.7 58.1 55.6 54.2 53.5
183	10/24/2019 3:10	00d 00:05:00.0	56.1 80.9 71.3 53.6 87 57 56.5 55 54.3 53.6
184	10/24/2019 3:15	00d 00:05:00.0	55.6 80.4 60 53.4 81.8 57.6 57 55.4 54.2 53.5
185	10/24/2019 3:20	00d 00:05:00.0	55 79.8 62.1 53.7 84.5 56.2 55.9 54.8 54.1 53.6
186	10/24/2019 3:25	00d 00:05:00.0	56 80.8 63.1 53.2 83.6 59.8 57.6 55 53.7 53
187	10/24/2019 3:30	00d 00:05:00.0	54.4 79.2 58.8 51.6 86.2 56.9 56.3 53.8 52.6 51.6
188	10/24/2019 3:35	00d 00:05:00.0	54.6 79.4 71.4 50.7 86 56.7 56 52.9 51.4 50.7
189	10/24/2019 3:40	00d 00:05:00.0	57 81.8 77.2 50.1 94.1 56.4 55.6 53 51.4 50
190	10/24/2019 3:45	00d 00:05:00.0	55.4 80.2 70.3 52.7 88.9 56.3 55.7 53.9 53.1 52.5
191	10/24/2019 3:50	00d 00:05:00.0	55.1 79.9 60.1 52.8 85.7 57.5 56.9 54.6 53.6 53
192	10/24/2019 3:55	00d 00:05:00.0	55.4 80.2 70.7 52.2 90.7 57.6 55.8 54.3 52.8 52
193	10/24/2019 4:00	00d 00:05:00.0	55.9 80.7 67.8 51.8 86.3 59.5 57.2 53.6 52.6 51.7
194	10/24/2019 4:05	00d 00:05:00.0	53.9 78.7 57.7 51.9 84.9 55.8 55.2 53.6 52.6 52
195	10/24/2019 4:10	00d 00:05:00.0	54.5 79.3 58.8 52.4 86.7 57.1 56.2 53.9 53 52.4
196	10/24/2019 4:15	00d 00:05:00.0	54.3 79.1 58.7 52.2 85.1 56.9 55.6 53.9 52.9 52.2
197	10/24/2019 4:20	00d 00:05:00.0	55.6 80.4 71.4 52 87 57.9 56.7 54.2 52.7 52
198	10/24/2019 4:25	00d 00:05:00.0	55.5 80.3 59.1 52.3 86.7 57.7 57.5 55.3 53.4 52.3
199	10/24/2019 4:30	00d 00:00:20.0	53.8 66.8 55.6 52.3 82 56 55.5 53.8 52.4 52.3

METROSONICS db-308 SN 3392 V3.0 4/88 REPORT PRINTED 10/31/19 @ 14:35:17

DOUBLING RATE: 3dB FILTER: A WGHT DOSE CRITERION: 90dB RESPONSE: SLOW PRE-CALIBRATION TIME: 10/14/19 @ 14:56:30 PRE-CALIBRATION RANGE: 40.4dB TO 140.4dB POST-CALIBRATION TIME: 10/31/19 @ 14:04:44 POST-CALIBRATION RANGE: 40.4dB TO 140.4dB

CALIBRATOR TYPE & SERIAL # : _____

CALIBRATOR CALIBRATION DATE: _____

TEST BEGAN 10/23/19 @ 12:00:03 TEST LENGTH: 0DAYS 17:29:47 TEST ENDED 10/24/19 @ 5:29:50 TEST INTERRUPTIONS: 1

Lav = 67.0dB Lav (80)= 62.0dB SEL =114.8dB Lav (90)= 57.1dB Lmax =101.8dB ON 10/23/19 @ 16:30:56 Lpk =119.5dB ON 10/23/19 @ 16:30:56 TIME OVER 66dB 0D 2:11:26.43

8 HR DOSE (80dB CUTOFF)= 0.34% 8 HR DOSE (90dB CUTOFF)= 0.10% "TIME HISTORY REPORT

"# OF PERIODS: 210 MODE: CONTINUOUS "PERIOD LENGTH: 0:05:00 "TIME HISTORY CUTOFF: NONE "Ln(1): 10.0% Ln(2): 99.9%

"DATE: 10/23/19 TAG #: 0

"INT" "TIME" "Lav" "Lmx" "Lpk" "L1" "L2" 1 "12:00:03" 65.5 82.1 109.8 65 59 2 "12:05:03" 64.9 82.5 "UNR" 63 57 3 "12:10:03" 64.2 81.4 109.2 62 58 4 "12:15:03" 61.7 73.1 "UNR" 63 57 5 "12:20:03" 65.0 82.2 "UNR" 64 58 6 "12:25:03" 64.1 82.9 "UNR" 63 57 7 "12:30:03" 65.4 83.3 110.2 67 59 8 "12:35:03" 65.8 81.6 "UNR" 65 59 9 "12:40:03" 66.0 83.0 "UNR" 67 59 10 "12:45:03" 64.9 79.8 "UNR" 67 59 11 "12:50:03" 66.0 81.6 109.2 67 59 $12 \ "12:55:03" \ 67.0 \ 83.2 \ 109.2 \ \ 67 \ \ 58$ 13 "13:00:03" 66.1 81.8 112.0 66 58 14 "13:05:03" 64.5 73.3 114.7 67 58 15 "13:10:03" 65.7 81.3 "UNR" 66 59 16 "13:15:03" 66.8 82.8 111.2 67 59

17 "13:20:03" 65.8 82.5 110.2 67 57 18 "13:25:03" 61.9 70.4 "UNR" 64 55 19 "13:30:03" 62.0 69.7 109.8 64 58 20 "13:35:03" 59.9 62.9 "UNR" 61 56 21 "13:40:03" 61.6 68.7 "UNR" 63 55 22 "13:45:03" 66.0 82.1 114.1 66 59 23 "13:50:03" 64.9 80.4 109.8 64 57 24 "13:55:03" 66.2 83.1 "UNR" 65 58 25 "14:00:03" 64.4 79.5 "UNR" 66 57 26 "14:05:03" 63.5 80.1 110.7 64 56 27 "14:10:03" 61.4 67.1 "UNR" 63 56 28 "14:15:03" 60.8 64.3 "UNR" 62 56 29 "14:20:03" 59.9 66.0 "UNR" 62 55 30 "14:25:03" 65.7 83.0 110.2 65 57 31 "14:30:03" 65.5 84.8 109.2 64 59 32 "14:35:03" 64.4 81.8 "UNR" 62 58 33 "14:40:03" 63.5 80.4 114.7 63 59 34 "14:45:03" 66.2 83.2 111.2 66 58 35 "14:50:03" 66.1 82.5 109.8 65 59 36 "14:55:03" 62.0 67.4 109.2 63 59 37 "15:00:03" 65.5 80.8 110.2 65 60 38 "15:05:03" 67.8 80.3 117.0 70 60 39 "15:10:03" 69.9 84.6 118.0 72 59 40 "15:15:03" 67.4 83.3 116.0 69 59 41 "15:20:03" 65.2 80.4 "UNR" 64 59 42 "15:25:03" 65.9 81.3 "UNR" 64 59 43 "15:30:03" 65.3 82.3 "UNR" 64 60 44 "15:35:03" 63.4 68.7 "UNR" 65 61 45 "15:40:03" 65.3 80.8 111.2 65 61 46 "15:45:03" 65.3 80.3 "UNR" 65 61 47 "15:50:03" 62.6 70.9 109.8 63 60 48 "15:55:03" 65.3 81.5 "UNR" 63 60 49 "16:00:03" 65.9 81.7 109.2 64 60 50 "16:05:03" 65.2 81.5 109.2 63 60 51 "16:10:03" 62.8 67.2 "UNR" 63 60 52 "16:15:03" 66.1 80.6 111.6 66 60 53 "16:20:03" 66.1 81.2 "UNR" 65 60 54 "16:25:03" 66.5 84.4 114.4 65 60 55 "16:30:03" 78.6 101.8 119.5 67 59 56 "16:35:03" 68.6 87.2 "UNR" 70 59 57 "16:40:03" 61.5 65.2 "UNR" 62 58 58 "16:45:03" 61.2 64.8 "UNR" 62 58 59 "16:50:03" 71.7 84.4 "UNR" 76 58 60 "16:55:03" 74.0 88.6 "UNR" 79 58 61 "17:00:03" 62.1 72.2 "UNR" 63 58 62 "17:05:03" 62.3 70.8 "UNR" 64 57 63 "17:10:03" 70.8 87.0 "UNR" 73 61 64 "17:15:03" 72.0 89.7 "UNR" 73 58 65 "17:20:03" 73.0 88.5 109.2 75 62 66 "17:25:03" 73.0 91.5 "UNR" 73 60 67 "17:30:03" 65.2 79.5 "UNR" 68 59 68 "17:35:03" 70.9 91.7 113.8 69 58 69 "17:40:03" 61.9 65.3 "UNR" 63 59 70 "17:45:03" 62.0 67.8 "UNR" 63 58

71 "17:50:03" 62.1 64.7 "UNR" 63 59 72 "17:55:03" 62.5 65.0 "UNR" 63 59 73 "18:00:03" 62.2 66.2 "UNR" 64 57 74 "18:05:03" 63.4 67.9 "UNR" 64 61 75 "18:10:03" 65.6 79.1 "UNR" 65 61 76 "18:15:03" 63.3 66.0 "UNR" 60 64 77 "18:20:03" 62.5 66.8 "UNR" 59 64 78 "18:25:03" 63.2 66.2 "UNR" 64 60 79 "18:30:03" 60.8 64.1 "UNR" 62 58 80 "18:35:03" 61.5 66.1 "UNR" 62 59 81 "18:40:03" 61.5 65.7 "UNR" 62 58 82 "18:45:03" 62.3 66.6 "UNR" 64 58 83 "18:50:03" 62.1 66.8 "UNR" 58 63 84 "18:55:03" 67.0 78.9 "UNR" 70 -59 85 "19:00:03" 62.0 66.0 "UNR" 63 58 86 "19:05:03" 60.6 65.8 "UNR" 62 56 87 "19:10:03" 60.6 64.6 "UNR" 62 56 88 "19:15:03" 61.7 65.6 "UNR" 63 - 58 62 58 89 "19:20:03" 61.1 64.4 "UNR" 90 "19:25:03" 60.7 65.8 "UNR" 62 57 91 "19:30:03" 59.3 62.9 "UNR" 60 56 92 "19:35:03" 59.4 62.8 "UNR" 60 56 93 "19:40:03" 60.7 70.4 "UNR" 62 57 94 "19:45:03" 60.0 64.3 "UNR" 57 61 95 "19:50:03" 59.7 65.2 "UNR" 61 55 96 "19:55:03" 58.7 61.2 "UNR" 60 55 97 "20:00:03" 68.6 87.5 "UNR" 61 -54 98 "20:05:03" 67.1 81.0 "UNR" 72 54 99 "20:10:03" 64.0 82.1 "UNR" 65 57 100 "20:15:03" 61.4 74.5 "UNR" 61 55 101 "20:20:03" 67.8 83.7 "UNR" 68 57 102 "20:25:03" 68.6 83.3 "UNR" 69 59 103 "20:30:03" 65.8 82.7 "UNR" 62 59 104 "20:35:03" 67.1 83.1 "UNR" 64 58 105 "20:40:03" 57.2 61.5 "UNR" 58 53 106 "20:45:03" 57.9 64.5 "UNR" 59 55 107 "20:50:03" 59.8 70.2 "UNR" 60 55 108 "20:55:03" 63.2 80.4 "UNR" 65 56 109 "21:00:03" 69.2 80.9 "UNR" 73 55 110 "21:05:03" 60.4 72.3 "UNR" 62 56 111 "21:10:03" 58.4 71.2 "UNR" 58 54 112 "21:15:03" 59.5 72.9 "UNR" 60 55 113 "21:20:03" 61.0 72.2 "UNR" 65 54 114 "21:25:03" 57.2 66.6 "UNR" 58 54 115 "21:30:03" 57.8 60.4 "UNR" 59 53 116 "21:35:03" 60.3 72.9 "UNR" 60 55 117 "21:40:03" 56.9 66.7 "UNR" 57 54 118 "21:45:03" 63.1 75.9 "UNR" 65 54 119 "21:50:03" 58.7 63.9 "UNR" 60 54 120 "21:55:03" 71.5 82.2 "UNR" 75 53 121 "22:00:03" 64.4 74.7 "UNR" 70 54 122 "22:05:03" 76.8 86.1 "UNR" 80 54 123 "22:10:03" 56.0 60.2 "UNR" 57 53 124 "22:15:03" 71.3 84.3 "UNR" 74 53

125 "22:20:03" 70.8 79.7 "UNR" 73 53 126 "22:25:03" 64.3 73.8 "UNR" 69 52 127 "22:30:03" 66.9 82.1 "UNR" 70 51 128 "22:35:03" 77.6 95.1 "UNR" 77 51 129 "22:40:03" 64.3 76.2 "UNR" 68 53 130 "22:45:03" 67.2 79.1 "UNR" 72 55 131 "22:50:03" 71.3 79.9 "UNR" 75 52 132 "22:55:03" 56.2 62.4 "UNR" 58 53 133 "23:00:03" 56.2 63.0 "UNR" 58 51 134 "23:05:03" 60.6 76.7 "UNR" 58 52 135 "23:10:03" 55.5 62.4 "UNR" 57 52 136 "23:15:03" 64.6 82.1 "UNR" 66 52 137 "23:20:03" 65.9 82.9 "UNR" 66 57 138 "23:25:03" 65.0 82.5 "UNR" 63 57 139 "23:30:03" 67.5 83.2 "UNR" 67 51 140 "23:35:03" 59.0 69.8 "UNR" 61 50 141 "23:40:03" 55.0 67.1 "UNR" 56 50 142 "23:45:03" 59.7 73.6 "UNR" 64 50 143 "23:50:03" 77.8 90.7 "UNR" 80 53 144 "23:55:03" 68.9 79.2 "UNR" 72 55 145 " 0:00:03" 68.3 79.3 "UNR" 72 55 146 " 0:05:03" 73.7 81.7 "UNR" 76 57 147 " 0:10:03" 67.6 82.2 "UNR" 70 61 148 " 0:15:03" 71.8 81.0 "UNR" 76 56 149 " 0:20:03" 71.4 83.2 108.7 77 57 150 " 0:25:03" 64.7 82.3 "UNR" 60 57 151 " 0:30:03" 65.4 81.4 "UNR" 68 58 152 " 0:35:03" 64.9 82.6 "UNR" 61 - 58 153 " 0:40:03" 66.3 82.8 "UNR" 63 57 154 " 0:45:03" 63.7 83.4 "UNR" 61 58 155 " 0:50:03" 70.0 82.6 "UNR" 73 57 156 " 0:55:03" 73.5 86.2 109.8 77 57 157 " 1:00:03" 55.1 61.0 "UNR" 57 50 158 " 1:05:03" 55.6 65.7 "UNR" 58 49 159 "1:10:03" 58.4 67.1 "UNR" 61 50 160 "1:15:03" 70.6 82.4 109.2 75 58 161 " 1:20:03" 68.7 82.7 "UNR" 70 63 162 "1:25:03" 70.2 87.2 110.2 72 61 163 "1:30:03" 67.4 85.8 "UNR" 66 48 164 "1:35:03" 57.9 65.6 "UNR" 62 48 165 "1:40:03" 57.3 65.2 "UNR" 58 54 166 "1:45:03" 59.6 70.8 "UNR" 61 55 167 " 1:50:03" 54.4 61.7 "UNR" 57 48 168 " 1:55:03 " 52.1 59.7 "UNR" 54 48 169 " 2:00:03" 52.6 56.4 "UNR" 54 49 170 " 2:05:03" 61.7 78.2 "UNR" 62 48 171 " 2:10:03" 69.1 87.7 "UNR" 67 51 172 " 2:15:03" 57.8 62.4 "UNR" 58 56 173 " 2:20:03" 64.0 81.8 "UNR" 58 56 174 " 2:25:03" 64.5 82.3 "UNR" 61 50 175 " 2:30:03" 54.7 61.0 "UNR" 57 49 176 " 2:35:03" 55.3 63.9 "UNR" 58 49 177 " 2:40:03" 53.6 58.7 "UNR" 55 49 178 " 2:45:03" 61.2 80.1 "UNR" 59 51

179 " 2:50:03" 62.3 82.0 "UNR" 60 57 180 " 2:55:03" 64.4 82.3 "UNR" 59 57 181 " 3:00:03" 64.9 82.1 "UNR" 60 56 182 " 3:05:03" 64.3 81.9 "UNR" 60 56 183 " 3:10:03" 58.4 61.2 "UNR" 59 57 184 " 3:15:03" 64.3 82.0 "UNR" 59 57 185 " 3:20:03" 65.2 81.8 "UNR" 60 57 186 " 3:25:03" 64.4 82.0 "UNR" 61 57 187 " 3:30:03" 65.2 82.1 "UNR" 61 57 188 " 3:35:03" 64.4 82.0 "UNR" 60 57 189 " 3:40:03" 59.0 62.2 "UNR" 60 57 190 " 3:45:03" 66.0 82.0 "UNR" 66 57 191 " 3:50:03" 67.8 82.1 "UNR" 67 62 192 " 3:55:03" 67.0 82.0 "UNR" 63 66 193 "4:00:03" 66.8 82.0 "UNR" 66 63 194 " 4:05:03" 65.0 76.3 "UNR" 66 63 195 " 4:10:03" 68.4 81.8 "UNR" 65 68 196 " 4:15:03" 68.1 83.0 "UNR" 67 64 197 " 4:20:03" 68.3 82.2 "UNR" 67 64 198 " 4:25:03" 66.0 68.6 "UNR" 66 64 199 " 4:30:03" 67.3 82.7 "UNR" 66 64 200 " 4:35:03" 67.5 81.9 "UNR" 67 64 201 " 4:40:03" 66.4 82.4 "UNR" 65 59 202 "4:45:03" 61.0 63.7 "UNR" 62 59 203 " 4:50:03" 65.3 82.2 "UNR" 62 59 204 " 4:55:03" 65.6 82.1 "UNR" 62 59 205 " 5:00:03" 65.3 82.0 "UNR" 62 59 206 " 5:05:03" 66.5 82.2 "UNR" 65 59 207 " 5:10:03" 61.4 76.6 "UNR" 62 58 208 " 5:15:03 " 56.2 61.2 "UNR" 57 52 209 " 5:20:03" 59.4 70.5 "UNR" 62 52 210 " 5:25:03 " 61.3 72.5 "UNR" 63 56 **** AMPLITUDE DISTRIBUTION REPORT ****

TOTAL SAMPLES = 1007807

dB SAMPLES

% OF TOTAL

483.	.05	
2112 +	.21	
5479 *	.54	
10276 *	1.02	
12946 *	1.28	
17774 **	1.76	
23012 **	2.28	
27780 ***	2.76	
42044 ****	4.17	
69339 ******	6.88	
82719 *******	8.21	
89415 ********	8.87	
112814 **********	11.19	
118083 **********	11.72	
105202 *********	10.44	
65961 ******	6.55	
	2112 + 5479 * 10276 * 12946 * 17774 ** 23012 ** 27780 *** 42044 **** 69339 ****** 82719 ****** 89415 ******* 112814 ********* 118083 ***********************************	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

64	58081 ****		5.76
65	38104 ****		3.78
66	24500 **		2.43
67	13798 *		1.37
68	10610 *		1.05
69	9584 *		.95
70	9713 *		.96
71	9209 *		.91
72	7334 *		.73
73	6898 *		.68
74	6426 *		.64
75	5658 *		.56
76	4766 +		.47
77	4257 +		.42
78	3678 +		.36
79	3444 +		.34
80	2556 +		.25
80 81	2330 + 1471 +		.15
82	788.		.08
83	445.		.04
84	270.		.03
85	229.		.02
86	162.		.02
87	129.		.01
88	57.		.01
89	37		.00
90	39		.00
91	34		.00
92	17		.00
93	23		.00
94	15		.00
95	7		.00
96	3		.00
97	5		.00
98	4		.00
99	6		.00
dB	SAMPLES		% OF TOTAL
100	5		.00
101	6		.00
Ln(0.	0) = 101 dB		
Ln(10	(.0) = 67 dB		
Ln(50	0.0) = 61 dB		
Ln(99	(.9) = 49 dB		
	NO 80	.0dB 90.	.0dB
	CUTOFF	CUTOFF	CUTOFF
_			
Ldod	64.5dB	53.6dB	43.6dB
Losha			
Leq(6) 63.0dB	45.3dB	40.6dB
¢			

[Setting] [Property] System Version, 2.0 NX-42EX Version,1.9 NX-42WR Version, 1.7 NX-42RT Version, 1.9 NX-42FT Version, 1.3 Serial Number,133002 [NL-42] Store Name,0508 Type,NL-42 Index Number,1 Frequency Weighting,A Time Weighting,S Output Level Range Upper, 120 Output Level Range Lower,40 Delay Time,Off Windscreen Correction, WS-10 Diffuse Sound Field Correction,Off LN Mode,Lp Display Leq,On Display LE,Off Display Lmax,On Display Lmin,On Display Ly,Off Display LN1,Off Display LN2,Off Display LN3,Off Display LN4,On Display LN5,Off Display Time Level, On Percentile 1,5 Percentile 2,10 Percentile 3.50 Percentile 4,90 Percentile 5,95.0 Ly Type,Off AC OUT,Z DC OUT, Main Comparator,Off Comparator Level,70 Comparator Channel, Main Battery Type, Alkaline Communication Interface, USB Baud Rate.9600 Language, English

CSV

[NX-42EX] Lp Store Interval,Off Leq Calculation Interval,5 m Timer Auto Start Time,2019/10/23 12:00:00 Timer Auto Stop Time,2019/10/24 12:00:00 Timer Auto Interval,Off Sleep Mode,Off

[Status] Measurement Start Time,2019/10/23 12:00:00 Measurement Stop Time,2019/10/24 04:27:13 Lp Data Number,-Leq Data Number,198 Measure Time,00d 16:27:13.8

Address Start Time Measurement Time Leq LE Lmax Lmin Ly LN1 LN2 LN3 LN4 LN5 Over Under	
$1 10/23/2019 \ 12:00 00d \ 00:05:00.0 \ 62.4 87.2 74.3 57.3 65 64.1 61.6 58.8 58.1 \text{test} \ 1 (10/23/19) - (10/24-19)$	
2 10/23/2019 12:05 00d 00:05:00.0 62 86.8 70.7 57.5 64 63.3 61.5 59.1 58.5 row row 2 10/22/2010 12:10 00d 00:05:00.0 60 02.8 82.0 57.2 74.0 72.2 62.0 50.1 58.5 Time Einich Stort Stor LAEO	
3 10/23/2019 12:10 00d 00:05:00.0 69 93.8 82.9 57.3 74.9 72.2 63.9 59.1 58.5 Time Finish Start Stop LAEQ 4 10/23/2019 12:15 00d 00:05:00.0 68 92.8 79.6 63.3 72.5 70.3 66.2 64.4 64 """12:00-18:00""" 2 74	
4 10/23/2019 12:15 00d 00:05:00.0 68 92.8 79.6 63.3 72.5 70.3 66.2 64.4 64 """"12:00-18:00""" 2 74 65.43135584 3492493.318 \$D\$2:\$D\$74 \$D\$2 \$D\$74	
5 10/23/2019 12:20 000 00:05:00.0 66.5 91.3 70.8 64 67.8 67.3 66.4 65.4 64.9 """18:00-24:00""" 74 146	
60.79753139 1201581.24 \$D\$74;\$D\$146 \$D\$74 \$D\$146	
$6 10/23/2019 \ 12:25 00d \ 00:05:00.0 \ 72.3 \ 97.1 \ 91.9 \ 65.1 \ \ 76 73.2 \ 66.8 \ 66.1 \ 65.9 \ \ 00:00-04:25 \ 146 \ 199 \ 62.98334212$,
1987623.907 \$D\$146:\$D\$199 \$D\$146 \$D\$199	-
7 10/23/2019 12:30 00d 00:05:00.0 67.9 92.7 77.7 65 69.9 68.7 66.5 65.7 65.6 4 4 69 7943282.347	
\$D\$4:\$D\$4 \$D\$4 \$D\$4 \$D\$4	
8 10/23/2019 12:35 00d 00:05:00.0 66.2 91 69.4 64.5 67.3 67 66.2 65.4 65.2 14.5 hr avg 2 291 61.88363108	
1542989.988 \$D\$2:\$D\$291 \$D\$2 \$D\$291	
9 10/23/2019 12:40 00d 00:05:00.0 66.7 91.5 74.6 64.8 67.7 67.3 66.5 65.6 65.4 4 4 69 7943282.347	
\$D\$4:\$D\$4 \$D\$4 \$D\$4	
10 10/23/2019 12:45 00d 00:05:00.0 65.2 90 75.1 57.1 70.7 68.9 62.7 58.4 58.1 4 4 69 7943282.347	
\$D\$4:\$D\$4 \$D\$4 \$D\$4	
11 10/23/2019 12:50 00d 00:05:00.0 61.6 86.4 72.9 56.7 65.1 64 60.5 57.8 57.3	
12 10/23/2019 12:55 00d 00:05:00.0 61.5 86.3 74 57.1 64.4 62.1 59.5 58.3 58	
13 10/23/2019 13:00 00d 00:05:00.0 67.3 92.1 81.1 56.4 73.9 66.5 59.2 58.1 57.9	
14 10/23/2019 13:05 00d 00:05:00.0 69.7 94.5 85 59.6 75.5 71.8 63.4 61.2 60.9	
15 10/23/2019 13:10 00d 00:05:00.0 62.5 87.3 67.8 60.1 64.9 63.9 62 61.1 60.8	
16 10/23/2019 13:15 00d 00:05:00.0 65.9 90.7 72.6 62.2 70 67 65.1 64.1 63.8	
17 10/23/2019 13:20 00d 00:05:00.0 67.4 92.2 79.5 59.6 73.7 70.1 64.1 60.5 60.2	
18 10/23/2019 13:25 00d 00:05:00.0 67.3 92.1 77.9 63.1 70.2 68.5 66 64.5 64.3	
19 10/23/2019 13:30 00d 00:05:00.0 64.5 89.3 71 61.8 66 65.5 64.1 63 62.7	
20 10/23/2019 13:35 00d 00:05:00.0 73.3 98.1 93.2 64.2 75.9 75.2 66 65 64.7	
21 10/23/2019 13:40 00d 00:05:00.0 67.4 92.2 79.6 58.5 73.4 70 64.4 61.9 60.4	
22 10/23/2019 13:45 00d 00:05:00.0 64.7 89.5 72.3 63.2 65.7 65.2 64.6 63.7 63.5	
23 10/23/2019 13:50 00d 00:05:00.0 62.9 87.7 69 58.3 66.4 65.6 62.1 59.8 59.4	
24 10/23/2019 13:55 00d 00:05:00.0 65.2 90 76.9 61.4 66.3 66 64.5 63.6 63.3	
25 10/23/2019 14:00 00d 00:05:00.0 67.5 92.3 82.7 57.5 71.8 69 63.7 59.3 58.8	
26 10/23/2019 14:05 00d 00:05:00.0 68.9 93.7 78.9 60.9 74 71.7 65.8 62 61.5	
27 10/23/2019 14:10 00d 00:05:00.0 63.9 88.7 68.3 60.4 66 65.5 64.1 61.5 61.3	
28 10/23/2019 14:15 00d 00:05:00.0 62.4 87.2 68.7 60.3 64.1 63.5 61.9 61.1 60.9	
29 10/23/2019 14:20 00d 00:05:00.0 66.4 91.2 78.3 61.6 71.3 68.4 63.6 62.2 61.9	
30 10/23/2019 14:25 00d 00:05:00.0 67.5 92.3 78.7 57.8 74 70.5 63.5 61.3 59.5	
31 10/23/2019 14:30 00d 00:05:00.0 63.4 88.2 77.6 55 69.8 65.5 59 56.4 55.8	
32 10/23/2019 14:35 00d 00:05:00.0 62.7 87.5 74.5 52.9 70.3 66.9 57.3 54.5 54	
33 10/23/2019 14:40 00d 00:05:00.0 74 98.8 90.5 57.9 80.1 72.6 64.2 59.9 59.5	
34 10/23/2019 14:45 00d 00:05:00.0 64.3 89.1 76.5 58.4 70 67 61.4 59.4 59.1	
35 10/23/2019 14:50 00d 00:05:00.0 59.5 84.3 65 56.3 62.3 61.4 59 57 56.8	
36 10/23/2019 14:55 00d 00:05:00.0 63.1 87.9 76.7 57.2 67.9 64.8 60.8 58.8 58.3 37 10/23/2019 15:00 00d 00:05:00.0 64.4 89.2 78 59.4 69.4 64.9 61.6 60.5 60.1	
37 10/23/2019 15:00 00d 00:05:00.0 64.4 89.2 78 59.4 69.4 64.9 61.6 60.5 60.1 38 10/23/2019 15:05 00d 00:05:00.0 66.1 90.9 79.3 59 70.9 69.4 62.4 59.9 59.6	
39 10/23/2019 15.00 000 00.05.00.0 00.1 90.9 19.5 59 10.9 09.4 02.4 59.9 59.0	
40 10/23/2019 15:15 00d 00:05:00.0 61.9 86.7 69.7 57.2 66.2 64.2 60.5 58.1 57.8	
40 10/23/2019 15.13 000 00.05.00.0 01.9 80.7 09.7 97.2 -1 00.2 04.2 00.5 50.1 97.8 -10 -100	
41 10/23/2019 15.20 000 00.05.00.0 00.0	
43 10/23/2019 15:20 00d 00:05:00.0 59.5 04.1 00:2 55.2 60.9 59.8 58.5 57.4 57.3	
44 10/23/2019 15:35 00d 00:05:00.0 61.7 86.5 75.2 55 66.6 63.7 57.7 55.9 55.6	
45 10/23/2019 15:50 00d 00:05:00.0 57.9 82.7 67.3 55.3 60.4 59.6 57.3 56.1 55.9	
46 10/23/2019 15:45 00d 00:05:00.0 59 83.8 65.2 55.9 62.7 61.1 58.1 57.1 56.8	
47 10/23/2019 15:50 00d 00:05:00.0 59.7 84.5 70.3 55 64 62.4 57.7 56.3 56.1	
48 10/23/2019 15:55 00d 00:05:00.0 55.8 80.6 61.9 53.9 58 57.2 55.3 54.6 54.3	
49 10/23/2019 16:00 00d 00:05:00.0 64.5 89.3 79.3 53.6 70.3 66.3 56.8 54.8 54.4	

-							<0 0				
50	10/23/2019 16:05	00d 00:05:00.0 57.9	82.7	66.6	53.4	61.3	60.3	57.2	54.6	54.2	
51	10/23/2019 16:10	00d 00:05:00.0 62.5	87.3	75.3	57	68.4	64.5	59.3	58.2	57.8	
52	10/23/2019 16:15	00d 00:05:00.0 60.3	85.1	67.5	56.7	63.1	61.8	59.7	57.9	57.5	
53	10/23/2019 16:20	00d 00:05:00.0 63.1	87.9	78.8	56.8	67.5	64.9	59.5	57.8	57.6	
54	10/23/2019 16:25	00d 00:05:00.0 61	85.8	67.6	57.2		62.3		59.2	58.7	
55	10/23/2019 16:30	00d 00:05:00.0 61.2	86	72.1	57.3	65.3	63.2	59.3	58.5	58.3	
56	10/23/2019 16:35	00d 00:05:00.0 58.8	83.6	64.7	56.8	60.6	59.9	58.5	57.5	57.2	
57	10/23/2019 16:40	00d 00:05:00.0 65.9	90.7	81.7	54.5	70.8	68.3	59.8	56.1	55.2	
58	10/23/2019 16:45	00d 00:05:00.0 58.6	83.4	62.1	55.5	60.9	60.5	58.4	56.4		
59	10/23/2019 16:50	00d 00:05:00.0 59.7	84.5	70.5	55.5	63.3	61.8	58.4	57	56.8	
60	10/23/2019 16:55	00d 00:05:00.0 62.2	87	68.2	55.4	66.1	65.8	59.9	57.2	56.9	
61	10/23/2019 17:00	00d 00:05:00.0 60.7	85.5	73.5	57.9	63.2	61.8	59.9	58.6	58.4	
62	10/23/2019 17:05	00d 00:05:00.0 62.2	87	74.2	54.8	67.4	65.3	59.1	56.1	55.7	
63	10/23/2019 17:10	00d 00:05:00.0 66.1	90.9	80	56.1	72.7	69.5	60	57.4		
64	10/23/2019 17:15	00d 00:05:00.0 59.9	84.7	68.6	56.5	62.6	61.3		57.6		
65	10/23/2019 17:20	00d 00:05:00.0 60.7	85.5	68.2	57.3	62.7	62.1	60.1	58.8	58.5	
66	10/23/2019 17:25	00d 00:05:00.0 62.9	87.7	74.6	57.1	68.9	66.4	59.3	57.8	57.7	
67	10/23/2019 17:30	00d 00:05:00.0 67.3	92.1	83	56.4	71.7	66.6	63	58.2	57.6	
68	10/23/2019 17:35	00d 00:05:00.0 63.4	88.2	67.1	56.7	66.4	66.2	61.1	58		
				81.5		70.1				56.6	
69	10/23/2019 17:40	00d 00:05:00.0 65.8	90.6		55.9		66.3	59.5			
70	10/23/2019 17:45	00d 00:05:00.0 59.2	84		57.2	61.1				57.9	
71	10/23/2019 17:50	00d 00:05:00.0 63.7	88.5	79.9	57.2	66	61.5	58.9	57.8	57.7	
72	10/23/2019 17:55	00d 00:05:00.0 59.2	84	69.8	55.9	63.2	61.2	57.8	56.6	56.5	
73	10/23/2019 18:00	00d 00:05:00.0 59	83.8	62.4	56.8	60.4	60.2	58.7	57.6		
74				75.1						56.8	
	10/23/2019 18:05	00d 00:05:00.0 61	85.8		56.4	65.6	62.6	58.9	57		
75	10/23/2019 18:10	00d 00:05:00.0 63.1	87.9	77.4	55.4	69.1	62.8	57.3	56.5	56.2	
76	10/23/2019 18:15	00d 00:05:00.0 58.9	83.7	69.1	56.2	61.6	60.5	58.1	57.1	56.9	
77	10/23/2019 18:20	00d 00:05:00.0 63.8	88.6	76.9	57.3	66.3	64.5	63.2	58.5	57.9	
78	10/23/2019 18:25	00d 00:05:00.0 61.5	86.3	64.2	57.7	63.4	63.2	62	58.9	58.5	
79	10/23/2019 18:30	00d 00:05:00.0 59.9	84.7	63.4	58.1	61.6	61	59.7	58.7	58.6	
80	10/23/2019 18:35	00d 00:05:00.0 61.7	86.5	74.6	57.5	65.2	63.3	59.6	58.2	58.1	
81	10/23/2019 18:40	00d 00:05:00.0 61.4	86.2	69.9	56.5	65.8	64.5	59.3	57.8	57.4	
82	10/23/2019 18:45	00d 00:05:00.0 59.3	84.1	65.3	56.2	62.4	60.7	58.8	57.1	56.8	
83	10/23/2019 18:50	00d 00:05:00.0 59.1	83.9	62.3	56.9	60.7	60.2	58.9	57.8	57.6	
84	10/23/2019 18:55	00d 00:05:00.0 59.3	84.1	62.2	57.5	61	60.4	59.1	58.1	58	
85	10/23/2019 19:00	00d 00:05:00.0 58.7	83.5	62.8	56.7	61	59.9	58.4	57.5	57.2	
86	10/23/2019 19:05	00d 00:05:00.0 58.1	82.9	65.6	55.5	60.6	59.6	57.6	56.2	56	
87	10/23/2019 19:10	00d 00:05:00.0 58.2	83	64.4	55.4	60.4	59.2	57.9	56.7	56.2	
88	10/23/2019 19:15	00d 00:05:00.0 61	85.8	75.4	55.2	65.3	63.1	57.4	56.2	55.9	
89	10/23/2019 19:20	00d 00:05:00.0 57.3	82.1	62.7	54.3	60	59.3	56.8	55.5	54.9	
90	10/23/2019 19:25	00d 00:05:00.0 62.9	87.7	77.2	56	67.7	65.1	58.1	56.6	56.4	
91	10/23/2019 19:30	00d 00:05:00.0 64.6	89.4	82.3	56	69.3	64.3	58.9	56.9	56.5	
92	10/23/2019 19:35	00d 00:05:00.0 59.7		75.4	56.5	61.8	60.1		57.3		
93	10/23/2019 19:40	00d 00:05:00.0 58.5									
94	10/23/2019 19:45	00d 00:05:00.0 59.2	84	71.9		61.9				56.9	
95	10/23/2019 19:50	00d 00:05:00.0 63	87.8	78	54.2	67.7	63.7	57.2	55.5	55.1	
96	10/23/2019 19:55	00d 00:05:00.0 59.6	84.4	73.5	54.1	63.8	62.2	56.4			
97	10/23/2019 20:00	00d 00:05:00.0 60.8	85.6	66.3	56.7	64.2		58.6	57.3	57.2	
98	10/23/2019 20:05	00d 00:05:00.0 58.1	82.9	63.9	55.6	60.2	59.5	57.8	56.8	56.6	
99	10/23/2019 20:10	00d 00:05:00.0 57.8	82.6	63.8	55.7	59.6		57.5	56.3	56.2	
100	10/23/2019 20:15	00d 00:05:00.0 57.7	82.5	68.3	54.6	61.9	59.9	56.3	55.5	55.2	
101	10/23/2019 20:20	00d 00:05:00.0 60.5	85.3	75.4	54	64.5	62.8	57.1	54.7	54.5	
102	10/23/2019 20:25	00d 00:05:00.0 62.2	87	76.7	54.9	67.1	62.7	58.6	57.5	56.9	
102	10/23/2019 20:30	00d 00:05:00.0 59.9	84.7		58.6	60.8	60.6	59.8	59	58.9	
		00d 00:05:00.0 53.5									
104	10/23/2019 20:35		87.8	67.3	58.2	66.8	66.6	60	59.1	58.9	
105	10/23/2019 20:40 10/23/2019 20:45	00d 00:05:00.0 61.3	86.1	70.9	58.5	63.7			59.2		
106		00d 00:05:00.0 58.7	075	64.7	56.5	60.2	50.8	58.6	57.1	57	

107	10/23/2019 20:50	00d 00:05:00.0) 58.5	83.3	66.6	56.6		60.8	60	57.9	56.9	56.8	 	
108	10/23/2019 20:55	00d 00:05:00.0) 63.6	88.4	77.7	55.7		69.4	65.7	58.4	56.5	56.3	 	
109	10/23/2019 21:00			83.3	63.1	54.8		60.6	60.2	58.4	55.6	55.4	 	
110	10/23/2019 21:05			86.7	76.6	57		65.7	61.8	59.1	57.9		 	
111	10/23/2019 21:10		59.3	84.1	70.7	56.4		61.8	60.7	58.5	57.1	57	 	
112	10/23/2019 21:15	00d 00:05:00.0) 62.4	87.2	75.7	57.4		67.1	63	58.9	58	57.9	 	
113	10/23/2019 21:20	00d 00:05:00.0) 61.3	86.1	64.7	57		63.9	63.4	61.4	58.4	57.7	 	
114	10/23/2019 21:25			86.1	66.5	55.1		64.8	64.2	61.2	56.4	55.7	 	
115	10/23/2019 21:30			83	67.1	55.8		60.9	59.6	57.3	56.4	56.2	 	
116	10/23/2019 21:35	00d 00:05:00.0) 61.6	86.4	78.4	55.1		64.4	61.5	57	55.9		 	
117	10/23/2019 21:40	00d 00:05:00.0) 61.6	86.4	78.9	54.2		65.1	62.6	56.4	54.9	54.7	 	
118	10/23/2019 21:45	00d 00:05:00.0) 58.6	83.4	62.6	56.7		61.4	60.5	57.9	57.3	57.1	 	
119	10/23/2019 21:50			86.6	74.4	57.2		65.3	62.8	60.1	58	57.9	 	
120	10/23/2019 21:55			87.3	75.3	56.2		66	63.2	60.3	57.6	57.2	 	
121	10/23/2019 22:00	00d 00:05:00.0) 60.5	85.3	68.7	56.1		64.7	63.2	58.6	57	56.9	 	
122	10/23/2019 22:05	00d 00:05:00.0) 61.7	86.5	75.6	54.6		64.4	63.5	58.7	56.5	56	 	
123	10/23/2019 22:10			89.7	78.9	55.6		68.6	66.8	58.9	56.7	56.2	 	
123	10/23/2019 22:10			89.9	75.4	57		66.7	66.5	65.9	57.8	57.6	 	
125	10/23/2019 22:20			83.2	68.2	56.6		60.5	60	57.8	57.2	57.1	 	
126	10/23/2019 22:25	00d 00:05:00.0) 61.2	86	71.1	55.9		66.9	63.8	58.3	56.8	56.5	 	
127	10/23/2019 22:30	00d 00:05:00.0) 58.3	83.1	62.5	55.3		61.1	59.4	58	56.3	56	 	
128	10/23/2019 22:35			82	61.7	55.3		58.8	58.1	56.9	56.2	56		
129	10/23/2019 22:40			84.7	73.8	54.5			62.6	56.8	55.3	55.2	 	
130	10/23/2019 22:45	00d 00:05:00.0) 56.4	81.2	62.8	54.7		58.3	57.2	56	55.2	55.1	 	
131	10/23/2019 22:50	00d 00:05:00.0) 62.2	87	76.1	55.2		65.8	63.1	58.6	56.2	56	 	
132	10/23/2019 22:55			83.7	63.5	57.1			59.6	58.7	58	57.8	 	
132	10/23/2019 23:00			84.3	64	57.1		61.9	61.3	59				
134	10/23/2019 23:05			84.2	62.9	57.2		61.1	60.6	59.1	58.2	57.9	 	
135	10/23/2019 23:10	00d 00:05:00.0) 58.5	83.3	62.4	55.8		60.1	59.6	58.4	57	56.7	 	
136	10/23/2019 23:15	00d 00:05:00.0) 56.7	81.5	60.6	54.8		59	57.8	56.6	55.4	55.3	 	
137	10/23/2019 23:20			83.1	66.7	55.6			59.8	57.8	56.4	56.1	 	
					63.7					58.1	57.5	57.4		
138	10/23/2019 23:25			83.2		56.7		60.6	59.5				 	
139	10/23/2019 23:30			85.6	75	55.3		65.8	61.3	57	56.4	56.2	 	
140	10/23/2019 23:35	00d 00:05:00.0) 57.3	82.1	62.5	55.1		58.5	58	57	56.3	56.1	 	
141	10/23/2019 23:40	00d 00:05:00.0) 57.2	82	59.4	55.2		58.2	57.9	57.2	56.4	56.1	 	
142	10/23/2019 23:45			82.2	60	55.5		58.5	58.3	57.4	56.5	56.3	 	
				89.8				68.4	65.5			55.7		
143	10/23/2019 23:50				85.1	55.1				58.6	56.2		 	
144	10/23/2019 23:55			86.9	73.3	56.4		67.6	64.6	58.9	57.4	57.2	 	
145	10/24/2019 0:00 0	00d 00:05:00.0 62.4	4 87.2	2 74	56.1		66.6	66.2	59.7	57.8	57.4			
146	10/24/2019 0:05 (00d 00:05:00.0 68	92.8	77.5	58.6		75.5	74.2	62.2	59.5	59.3			
147	10/24/2019 0.10 (00d 00:05:00.0 61.3								58.5 58				
		00d 00:05:00.0		5.8 65.										
		00d 00:05:00.0		6.1 68.										
150	10/24/2019 0:25	00d 00:05:00.0	61.98	6.7 75.	2 56.9	66	5 63.	.2 58.2	57.5 5	57.4				
		00d 00:05:00.0		4.2 74.										
				2.5 63.										
		00d 00:05:00.0												
		00d 00:05:00.0		2.6 64										
154	10/24/2019 0:45	00d 00:05:00.0	63 8	7.8 76.	8 55.9	68	8.1 64.	.8 57.8	56.7 5	56.4				
		00d 00:05:00.0		2.9 62.										
		00d 00:05:00.0		2.7 64.										
		00d 00:05:00.0		5.1 65.										
		00d 00:05:00.0		3.7 65.										
159	10/24/2019 1:10	00d 00:05:00.0	57.7 8	2.5 64.	6 55.9	58	8.5 58.	.2 57.5	56.8 5	56.6				
160	10/24/2019 1:15	00d 00:05:00.0		2.8 60.										
		00d 00:05:00.0		2.3 60.										
		00d 00:05:00.0		2.3 60.						56.4				
163	10/24/2019 1:30	00d 00:05:00.0	57.18	1.9 59.	5 55.3	58	3.2 58	57.1	56.2 5	56				

164	10/24/2019 1:35	00d 00:05:00.0	56.9	81.7	61.8	55.5	 58.4	57.8	56.8	56	55.9	 	
165	10/24/2019 1:40	00d 00:05:00.0	56.3	81.1	57.5	55.2	 57	56.8	56.3	55.8	55.7	 	
166	10/24/2019 1:45	00d 00:05:00.0	57	81.8	59.4	55.7	 58	57.7	57	56.3	56.2	 	
167	10/24/2019 1:50	00d 00:05:00.0	57.2	82	61.4	55.7	 58.6	58	57	56.3	56.2	 	
168	10/24/2019 1:55	00d 00:05:00.0	57.9	82.7	69.6	55.1	 61.5	58.8	56.5	55.9	55.8	 	
169	10/24/2019 2:00	00d 00:05:00.0	56.5	81.3	64.8	54.6	 58.6	57	55.8	55.2	55	 	
170	10/24/2019 2:05	00d 00:05:00.0	56.6	81.4	64.7	54.5	 57.6	57	56.3	55.3	55.1	 	
171	10/24/2019 2:10	00d 00:05:00.0	56.8	81.6	58.2	55.5	 57.4	57.3	56.8	56.3	56.2	 	
172	10/24/2019 2:15	00d 00:05:00.0	57.9	82.7	69.8	55.6	 60	58.6	56.8	56.4	56.2	 	
173	10/24/2019 2:20	00d 00:05:00.0	64.6	89.4	80.6	55.8	 70.1	66.6	57.1	56.4	56.2	 	
174	10/24/2019 2:25	00d 00:05:00.0	64.4	89.2	77.7	56.6	 72	66.8	60.8	57.5	57	 	
175	10/24/2019 2:30	00d 00:05:00.0	65.8	90.6	81.3	58.2	 70.2	64.4	61.2	59.3	59	 	
176	10/24/2019 2:35	00d 00:05:00.0	63.7	88.5	74.5	60.2	 65.8	65.1	63	60.9	60.7	 	
177	10/24/2019 2:40	00d 00:05:00.0	65.5	90.3	74.9	61.4	 69.3	66.9	64.7	62.4	62.1	 	
178	10/24/2019 2:45	00d 00:05:00.0	67.4	92.2	80.8	59	 73.1	69.3	63.4	59.9	59.6	 	
179	10/24/2019 2:50	00d 00:05:00.0	66.2	91	78.6	60.3	 71.1	67.5	62.7	61.1	60.9	 	
180	10/24/2019 2:55	00d 00:05:00.0	61.5	86.3	70.2	58.7	 63.2	62.5	61.2	60.5	60	 	
181	10/24/2019 3:00	00d 00:05:00.0	63.4	88.2	75.2	57.6	 68.4	68.1	60.9	58.8	58.3	 	
182	10/24/2019 3:05	00d 00:05:00.0	62.5	87.3	74.4	58.1	 65.4	62.6	60.2	59.2	58.8	 	
183	10/24/2019 3:10	00d 00:05:00.0	60.8	85.6	67.3	56.5	 63.9	63	60	58	57.5	 	
184	10/24/2019 3:15	00d 00:05:00.0	67.5	92.3	83	56.7	 71.7	69.9	62.3	57.7	57.5	 	
185	10/24/2019 3:20	00d 00:05:00.0	61	85.8	72	55	 64.8	63.1	59.8	56.2	56	 	
186	10/24/2019 3:25	00d 00:05:00.0	61.9	86.7	78.3	55.3	 67.2	62.2	57.3	56.3	56.1	 	
187	10/24/2019 3:30	00d 00:05:00.0	57.8	82.6	65.6	56	 59.8	58.8	57.4	56.7	56.5	 	
188	10/24/2019 3:35	00d 00:05:00.0	59.4	84.2	72	55.1	 62.2	61.3	57.7	56.1	55.8	 	
189	10/24/2019 3:40	00d 00:05:00.0	66.4	91.2	68.6	60.1	 67.7	67.6	67.1	61.1	60.7	 	
190	10/24/2019 3:45	00d 00:05:00.0	65.5	90.3	70.3	60.2	 67.6	67.2	65.2	62.1	61	 	
191	10/24/2019 3:50	00d 00:05:00.0	67.1	91.9	76.3	58.8	 73	70.7	65	62	60.5	 	
192	10/24/2019 3:55	00d 00:05:00.0	61.4	86.2	67.7	58.1	 63.6	62.9	61	59.6	59.3	 	
193	10/24/2019 4:00	00d 00:05:00.0	65.1	89.9	79.6	57.2	 71	67.5	60.3	58.8	58.5	 	
194	10/24/2019 4:05	00d 00:05:00.0	67.2	92	79.1	59.6	 69.6	67.7	67	61.2	61	 	
	10/24/2019 4:10	00d 00:05:00.0	62.3	87.1	75.5	59.7	 64.4	63.4	61.5	60.3	60.2	 	
196	10/24/2019 4:15	00d 00:05:00.0	64.5	89.3	76.6	59.2	 70.8	67.5	61.2	59.7	59.6	 	
197	10/24/2019 4:20	00d 00:05:00.0	66	90.8	80.1	57.9	 72.8	69.5	59.8	58.7	58.5	 	
198	10/24/2019 4:25	00d 00:02:13.8	68	89.3	80	58.1	 76.3	71.3	60.2	58.8	58.6	 	

Attachment H

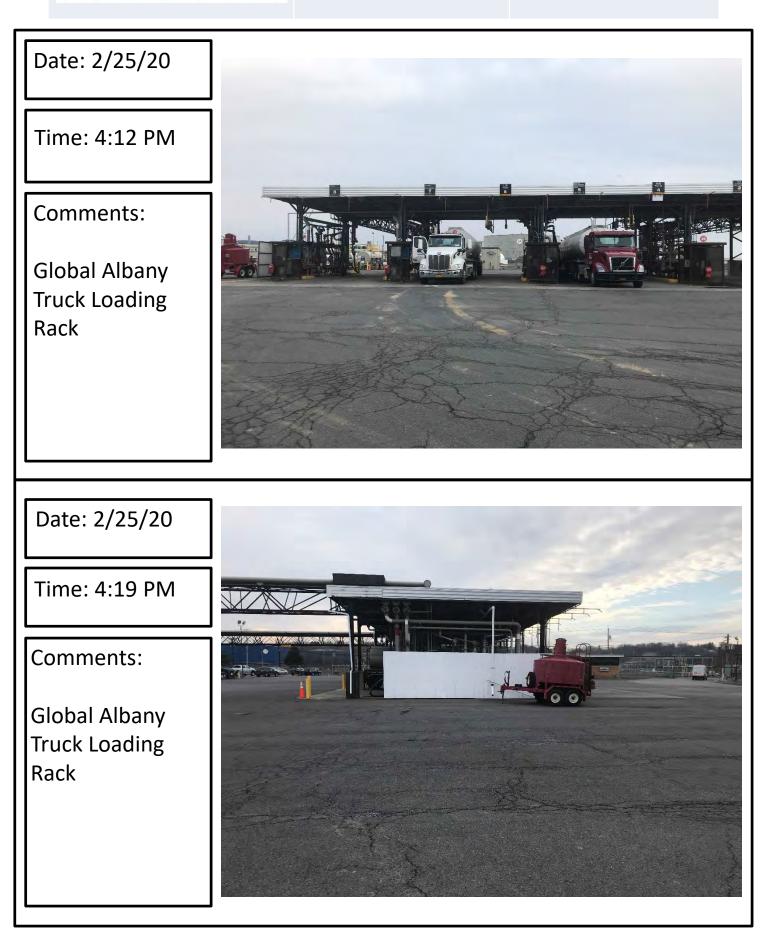
Photographs/Rendering of Truck Rack



 JOB NAME___Global Albany SEQR

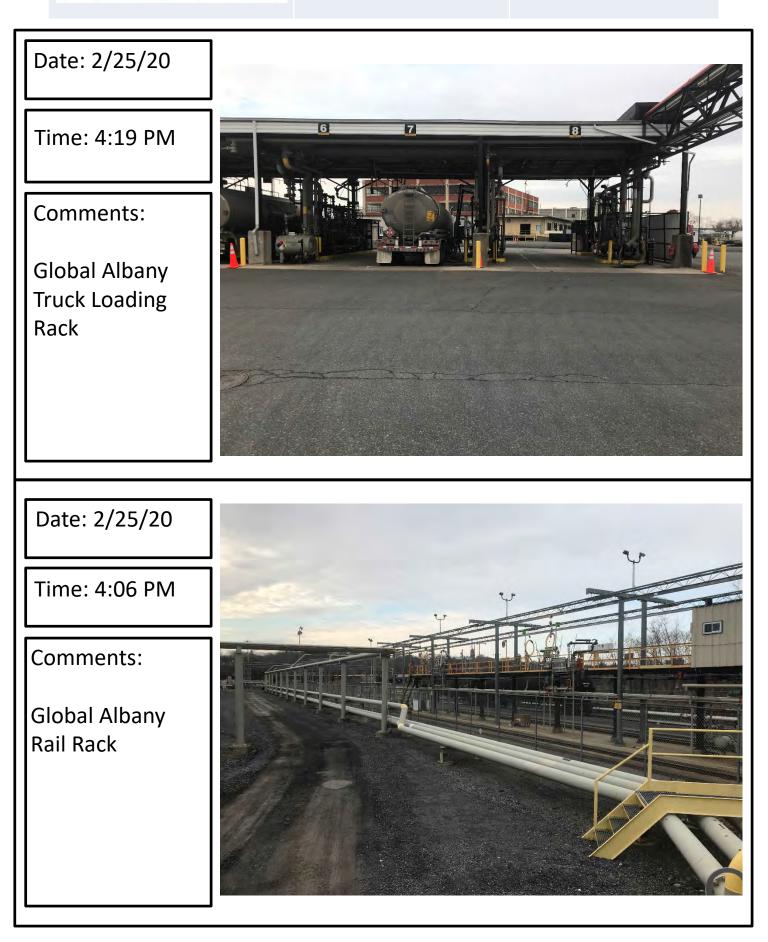
 JOB #___E19-2191_____

 LOCATION____Albany, NY______





JOB NAME <u>South Island Apartments</u> JOB # <u>E17-1600</u> LOCATION <u>Green Island, NY</u>





JOB NAME <u>South Island Apartments</u> JOB # <u>E17-1600</u> LOCATION <u>Green Island, NY</u>



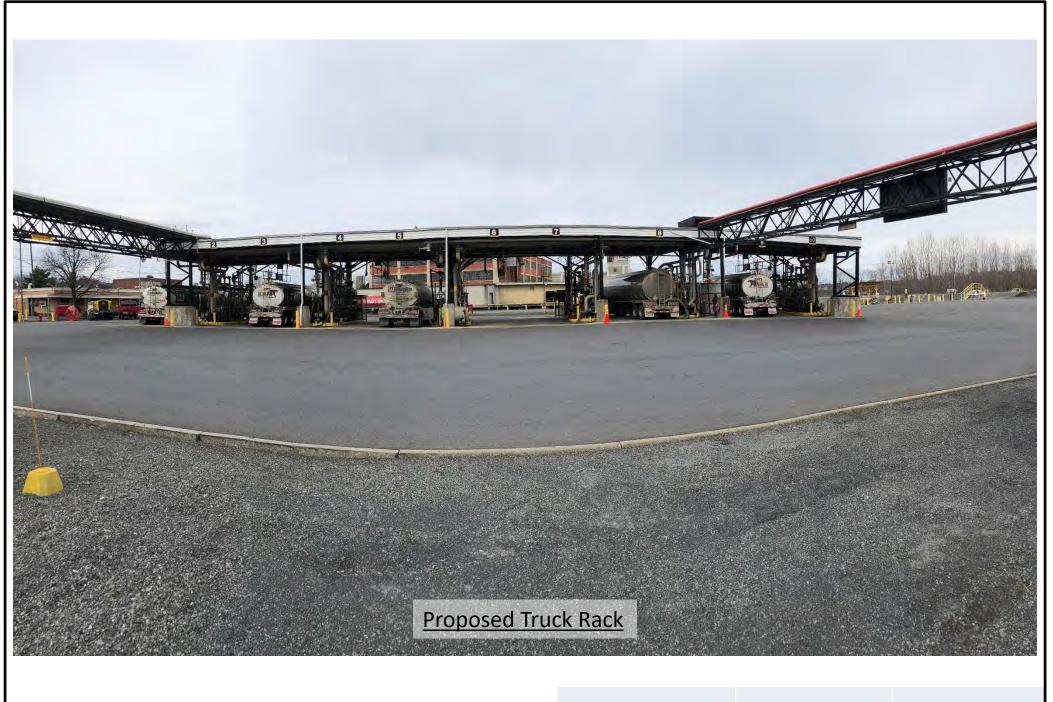
Date: 2/25/20

Time: 4:08 PM

Comments:

Global Albany Rail Rack







Attachment H – Rendering of Truck Rack JOB NAME <u>Global Albany SEQR</u> JOB # <u>E19-2191</u>

LOCATION Albany, NY