

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of the 6 NYCRR §621.13(b) Petition to Modify
NYSDEC Part 360 Permit ID# 8-9908-00162/00032 and
NYSDEC Title V Permit ID#8-99908-00162/00043 held by Waste
Management of New York, LLC, for the High Acres Landfill, by

FRESH AIR FOR THE EASTSIDE, INC., et al.,
Petitioners.

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
RESPONSE to the PETITION of FRESH AIR FOR THE EASTSIDE, INC., et al.,
REQUESTING MODIFICATION of PERMITS
held by WASTE MANAGEMENT OF NY
for the HIGH ACRES LANDFILL**

Dated: March 2019

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I. BACKGROUND

The New York State Department of Environmental Conservation (“DEC”) hereby responds [hereinafter, “Response”] to the petition submitted by Linda Shaw, Esq. on behalf of certain residents of Monroe and Wayne Counties and the group Fresh Air for the East Side (“FAFE”) (collectively “Petitioners”) dated July 25, 2018. For the reasons stated herein the entirety of the relief sought by Petitioners is not warranted; however, DEC shares some of the concerns expressed in the Petition. The measures that have been or will be taken and the rationale for their implementation are described more fully below.

Since the time of the filing of the Petition, DEC has become aware that FAFE has filed a lawsuit against Waste Management (“WM”). The Response is not intended to either support or oppose the position of any party currently in litigation. Rather, it describes the results of DEC’s evaluation of available information regarding the current conditions related to odor from the High Acres landfill (“HA” or “facility”). This Response does not constitute a waiver by DEC of any of its rights of any nature whatsoever concerning any further action it may deem appropriate relative to this facility, or in response to concerns contained in the Petition.

In mid–November of 2017, DEC management was contacted by two citizens living in close proximity to HA regarding their concern that odors from the facility were at a level that was creating a problem for its neighbors. After internal review of the situation, DEC immediately responded with a demand that WM take further action (Attachment 1) and met with the company on December 13, 2017. By letter dated December 20, 2017, WM submitted a plan for implementing responsive measures (Attachment 2).

The Perinton Conservation Board (“PCB”) heard concerns from residents at a public meeting held in mid-January of 2018. Following that public meeting, in a memorandum to the Perinton Town Board dated January 24, 2018 (Attachment 3), the PCB expressed its views about the cause(s) of odor and appropriate next steps that the PCB felt should be taken. WM and the PCB essentially agreed that a series of factors occurring in a portion of the landfill, particularly in landfill cells 10 and 11, exacerbated by unfavorable (wet) weather in the summer of 2017, contributed to inadequate performance of the gas collection and control system. This performance problem resulted in the presence of landfill gas in the neighborhoods surrounding the facility which caused excessive odor. The PCB recommendations centered around on- and off-site monitoring for methane and hydrogen sulfide (“H₂S”) and on gas collection and control at the facility. DEC replied to the Town regarding its recommendations by letter dated February 12, 2018, in which this Department concurred with many of the PCB’s recommendations (Attachment 4).

The level of landfill odor present in the neighborhoods in the fall and winter of 2017 through the early spring of 2018 was unacceptable and required mitigation. WM publicly acknowledged as much, along with a stated commitment to address the situation. At the direction of DEC and in response to DEC’s February 2, 2018 Notice of Violation (“NOV”)

(Attachment 5), and resulting from discussions with the Town of Perinton, WM has undertaken a number of measures to mitigate the odor issue. These measures have been well documented and circulated to the Towns of Perinton and Macedon and their residents, and documents summarizing those efforts while underway and through September 14, 2018 are included herein as Attachments 6 through 9.

II. INFORMATION COLLECTION AND EVALUATION

In addition to the measures DEC mandated to be undertaken by WM through the fall and winter of 2017-2018, DEC prioritized the collection and analysis of information regarding off-site odor. DEC committed significant time and resources to be present in the neighborhoods, both to independently assess conditions and to respond to and support – in real time - concerned residents. This neighborhood “detail” placed various DEC staff, including Environmental Conservation Officers and program staff, in vehicles in the neighborhoods during non-business hours as well as during business hours, and on weekends, as much as 16 hours per day, seven days per week, from late February through June 13, 2018.

In an effort to further document and assess the situation beyond that information collected through the enhanced presence in the neighborhoods, on April 18, 2018, DEC established a telephone hotline (“Hotline”) for residents, seeking to better elicit details about any odor incident they experienced. From the Hotline, DEC sought the type of information its attorneys need to assess the propriety of further action against a company including e.g., the duration of the event, any impacts to the receptor, the strength of the odor, and the location of the receptor. Some residents expressed concern that the Hotline was inconvenient given work/school schedules and some advised they were unwilling to wait for a DEC response to their residence. As a result, and in an effort to accommodate those concerns, on June 13, 2018, DEC provided an electronic form (“Citizen Odor Log”) which a resident could use to provide the same information as that requested by the Hotline, and which could be submitted at a resident’s convenience. The Citizen Odor Log form was made available on the DEC website, and its availability has been made known as part of the response to any email DEC received, to help ensure that residents expressing a concern knew of its existence. During this time, WM also made an effort to assess the presence of odor and respond to information about odor, utilizing Towpath Investigative Services (“Towpath”) to both be present in the neighborhoods on a set schedule and to respond to Hotline calls.

Moreover, in addition to these extensive efforts to investigate the problem and respond to citizen concern, DEC continues to have a regular presence at the facility, and as necessary off site in the neighborhoods, through its on-site environmental monitor and its project engineers.

In addition, throughout this event and continuing currently, members of FAFE have used an app that was developed for the group which can be accessed from their phones, indicating a detection of odor, a location of the device when a notification is sent, and wind direction at that time (“App”). Emails sent from the App are forwarded to an email

account specifically set up by DEC for the HA odor issue, and can be viewed by DEC management and staff.

Overall, an extensive review of the information available, summarized in part in the Attachments, forms the basis for the determinations described herein assumes each and every complaint is verified, and thus views the position of the Petitioners in the most favorable light. Although DEC investigated many of the complaints received, for purposes of this review, DEC did not attempt to characterize or judge the notifications received from the FAFE App in any way.¹ Instead, DEC's analysis took the notifications at "face value", and considered them together with DEC staff's observations, experience, and expertise, as well as the context and environment surrounding the relationship between the litigants.

DEC also did not consider in its analysis any information received from Towpath, despite its utilization of personnel who are certified in odor detection by a third-party organization. Towpath's information was often contradictory to the information from the App, either in terms of the existence of odor, or odor intensity.

The measures taken by WM both unilaterally and in accordance with DEC directives to address the fugitive gas odor issue were essentially complete in mid-May of 2018 (except for the need to place some additional cover soil). As a result, to properly assess the current (post mitigation) situation, and more specifically to evaluate the assertions in the Petition and the propriety of granting the further relief requested therein in whole or in part, DEC focused primarily on available information generated between Friday, May 25, 2018 (Memorial Day Weekend) and October 31, 2018 ("Evaluation Period").²

¹ DEC's observations in the field, particularly during its enhanced field presence earlier this year, included numerous instances where email reports of odor could not be corroborated, despite DEC staff presence at the reporting location within a short period of time. Other reports received via the App, while counted in the totals used in this evaluation, are unreliable, because either a location is not provided, the wind direction reported is inconsistent with the reported claim of impact, or a location is not consistent with other reports received at a similar time. Duration of an impact also cannot be ascertained from the App settings. However, despite its inherent shortcomings, the App notifications, particularly on "active" days when a significant number were received from a number of different residents, gave a good indication of a level of impact occurring for some period of time. Further, in deference to the Residents' making the effort to submit them, these notifications were the primary data set used for this evaluation.

² While WM and the Town of Perinton consider that the wet weather in 2017 made a significant contribution to the problems with the landfill gas collection system, in contrast, the summer of 2018 was unusually hot and humid, with approximately 20 days exceeding 90 degrees. This created an opportunity to evaluate current conditions in as conservative (potential to be odorous) an environment as is likely to occur. Further, October 31st marked the end of the period that WM was directed to delay the deposition of waste brought in by rail until 9:30 each morning (See Attachment 11), and DEC desired to incorporate the results of that directive into this Response.

III. EFFECTIVENESS OF MITIGATION MEASURES

With respect to the concern in the Petition about vibration or tremors caused by the landfill gas-to-energy facility at the landfill site, through the NOV and the revised Operations and Maintenance (“O&M”) Manual for the HA facility, DEC required that the monitoring and vibration prevention measures put in place by WM after the January 2018 event be maintained and kept operational. These measures have proven effective, with no report of a significant incident having been received since they were implemented. DEC is taking no additional action related to this issue at this time.

The measures designed to address off site odor from landfill gas caused by issues with the collection and control system, which are listed in the Attachments, have also proven effective. From November 2017, through September 2018, landfill gas collection and control increased by approximately twenty-six percent. Also, monitoring for the presence of H₂S off site, with sampling at a nearby school and at the landfill property boundary in all directions from the landfill every 10 minutes since March 6, 2018, has shown results typically below the limits of detection. Infrequent detections of H₂S have not exceeded the associated Ambient Air Quality Standard (6 NYCRR Subpart 257-10). Two consultants, including one hired by Petitioners, have reviewed those sampling results and indicated that gas is not present off site in quantities that would constitute a health concern.³

Available information points to the geographic extent, the frequency, the duration, and the impact of fugitive gas being dramatically improved (i.e., reduced) since completion of the mitigation measures. Total notifications of all types and the frequency of “active” days are also down due to the improvements made at the facility.

Likewise, DEC staff, who are familiar with the difference between odor caused by emitted landfill gas rather than garbage handling (operating odor), consistently report that on those occasions when they do detect off site odor, they are operating odors, not odor from landfill gas. This improvement is further established by the fact that DEC staff frequently on site and at or near cells 10 and 11 report that instances of any gas issue are rare.

³ Regarding one such consultant, the report included in Attachment 13 to this Response was produced on behalf of the Town of Perinton by an entity that, at Knauf Shaw’s request and with their participation, earlier this year discussed with DEC matters related to air monitoring about the landfill. The second consultant is CPF Associates, Inc., who produced a study titled, “Evaluation of Ambient Air Monitoring Data Collected in Vicinity of High Acres Landfill,” dated May 29, 2018, on behalf of WM.

IV. ASSESSMENT

A. LEGAL THRESHOLD AND CONTEXT

Odor, unlike readily measurable contaminants with established emission standards or clear legal limits, is challenging to assess. People have different levels of tolerance; a change in wind speed or direction can influence who is impacted, how severely, and for how long; and the standard for legal action by DEC is not whether there is an impact or whether odor is detected, and not even whether there is an annoyance created. Rather, the standard is whether there is an unreasonable interference with the comfortable enjoyment of life or property⁴ - and what constitutes “unreasonable” is not clearly defined by any numerical standard or formula. This challenge is exacerbated when there is conflicting information about the presence of odor and the overall impact experienced over time.

In the instant case, the “margin for error” for the company has also been significantly reduced by the construction of homes in areas that once were agricultural lands, placing new residents much closer to the facility’s expanding footprint than was the case previously. Figures 1, 2, and 3, are aerial depictions of the area in 2006, 2011, and 2016, respectively. As can be readily seen, the Magnolia Manor subdivision has only recently been constructed, with other residences northwest of the facility being built not long before that. The residents most frequently expressing a concern reside in that immediate area. See Tables 1, 2 and 3, and Figures 4, 5, and 6. As with any type of facility that can produce occasional odors, the proximity of receptors influences impact.

Regardless of location, residents are entitled to expect that any recurring problems associated with a neighboring business are mitigated to the extent practicable. The proliferation of the construction of nearby homes makes it imperative that WM continue to explore and implement all reasonable measures to reduce the likelihood and frequency of off-site odor.

B. RESULTS OF ANALYSIS

1. The geographic (areal) extent of the residents asserting that a continuing significant problem exists is limited to areas close to the facility, primarily to a single neighborhood to the northwest; and the number of residences asserting that a continuing issue exists post-mitigation is small compared to the number of residences in the area.

The above conclusions are based on staff’s review of available information in accordance with the methodology described above. While it is impractical to describe herein each relevant piece of information received, the following summaries represent the primary basis for the conclusions.

⁴ See 6 NYCRR 211.1, as well as the regulation pertaining to odor nuisance at 6 NYCRR 360.19(i).

Tables 1, 2, and 3, and Figures 4, 5, and 6, present tabular and aerial depictions of the number and locations of residences from which most notifications are received, and provide information about the relative number of homes expressing that an impact exists versus the number of existing homes in those neighborhoods (taken from Town Assessment roles).

The first chart in Figure 7 shows the number of days the corresponding number of such notifications were received, for the period January 31, 2018 through May 24, 2018, and the second chart depicts like information for the Evaluation Period. See also Figures 8 and 9.

In short, the improvement in odor control is demonstrated not only by DEC staff observation, but also by assessment of all other data including the email notifications from the FAFE App. Both the reduction in overall numbers and the reduction in notifications attributed to fugitive gas are evident from a full assessment of all information and data available to DEC.

The number of notifications from greater distances from the facility is drastically down as well. For example, notifications from residents of Macedon, from areas south of Route 31 or north of Whitney Road, and from the Village of Fairport, all areas from which significant numbers of notifications were routinely received earlier in 2018, have become rare. As can be seen from the Attachments and the less frequently occurring “active” days, odors from the landfill have diminished in the surrounding neighborhoods, with very few, if any, notifications being received on most days, the lone exception being when the wind is from the south/southeast. This reduction in overall notifications and impact is further telling given that residents have been sensitized due to the 2017 -2018 issues and are organized and energized relative to this issue. If the improvement in conditions was not significant, the notifications from those residents and from more distant locations, consistent with the pre-mitigation experience, would be continuing. The Town of Perinton, which earlier in the year declared WM to be in violation of its local permit, has reached agreement and taken no enforcement action (see Attachment 12), and the Town of Macedon has expressed its satisfaction to DEC for the action taken by DEC and the current conditions in the Town. In fact, a letter dated November 6, 2018 sent to DEC by the Town of Macedon attorney advises that “Town records show relatively few complaints from Macedon residents”. See Attachment 14.

A typical effort to determine the existence of an unreasonable interference would count the number of times the agency is contacted by residents detecting some level of odor and assess any impacts to those people detecting an odor. The Petition recites a series of impacts at Paragraphs 3 through 7 to support the Petitioners’ view that an unreasonable interference has or is occurring. In addition to the Petition lacking specificity about the people experiencing the listed impacts and when they were experienced in relation to the improved conditions, other than some indications about going indoors or closing windows on certain days for an indeterminate period of time, DEC has not been provided information about the impacts listed in the Petition. As a

result, there is no ability to consider the majority of those assertions in formulating this Response.

DEC carefully considered all notifications in its overall evaluation of the current situation. However, the totality of the information available to DEC refutes the Petition's assertion that there is a continuing, widespread, and significant impact to a large number of residents which would justify the full extent of the relief requested. The areal extent and number of affected residents described in the Petition may have been more representative of conditions at certain times and under certain conditions prior to the mitigation measures being implemented. A simple tabulation of App notifications internal to the FAFE group as described in the Petition, without consideration of the intervening measures taken by WM, does not productively inform the analysis necessary now to consider the propriety of the further and significant action requested by the Petitioners.

2. Analysis and comparison of the time of day notifications are received with the time of day waste brought to HA by rail ("rail waste") is deposited at the working face does not clearly demonstrate that rail waste is a cause of a significant incremental increase in off-site odor.

Petitioners' assertions that form the basis for much of the relief requested center around issues associated with the rail transport of waste from New York City ("NYC") to HA, and whether odor is incrementally more problematic in the neighborhood due to the nature, volume, or transport time associated with that waste stream. The concern about the NYC waste was expressed by FAFE and its counsel to DEC well before the Petition was submitted. As a result, rail transport of waste to HA has been an issue of the agency's focus for several months.

The total amount of waste authorized to be accepted at HA pursuant to the Part 360 permit has not changed since 2000, although in several years the amount of waste actually received at the landfill was less than the maximum allowed. Rail transport of waste to HA began in mid-2015, with 284,393 tons delivered by rail that year, or 60% of the total MSW (municipal solid waste) accepted in 2015. During 2016, the amount of waste brought in by rail increased to 559,214 tons, or 74% of the total MSW accepted in 2016. In 2017, the amount of waste delivered by rail again increased, this time slightly, to 567,712 tons, but the percentage dropped, to 71%.

In summary, rail waste acceptance began then increased significantly in 2015-2016, but more or less levelled off in 2017, while increased reporting of neighborhood concern about odor to either WM or DEC commenced no earlier than mid to late 2017, with no resident contact to DEC management until November 2017. On its own, this information is insufficient to demonstrate that rail waste acceptance caused the odor complaints. Additionally, the task of assessing a causal correlation between the increase in rail volume and the concerns expressed by neighbors in the fall and winter of 2017-2018 is rendered more difficult when one considers concurrently occurring deficiencies in the gas collection and control system (latter part of 2017) and the mitigation construction activity that uncovered previously disposed waste (late 2017 and early part of 2018).

The Department also assessed citizen complaints in relationship to rail waste acceptance and found no causal connection. More specifically, to evaluate the relationship between waste hauled by truck and waste hauled by rail, and the Petitioners' claim that the odor issue is primarily related to NYC rail waste, DEC separated the notifications received by time of day, and for comparison purposes, the total notifications minus the early (pre- 9:30 a.m.) notifications. See Table 4. Rail waste constituted most of the total MSW deposited at HA prior to and during the Evaluation Period and is consistently deposited at the landfill's working faces throughout the operating portion of the day, almost every day the facility operates. However, despite the continued deposition of rail waste throughout the day, on many days the notifications from residents ceased or dramatically fell off by mid-morning.

In a further attempt to analyze this relationship, by letters dated September 24, 2018 and October 5, 2018 (Attachments 10 and 11), DEC directed WM to delay the deposition of rail waste for the month of October. Table 5 shows the time WM began rail waste deposition together with the pre-rail and post rail notifications received from residents.⁵

If rail waste was a distinct and primary reason for odor generation as claimed by Petitioners, then there should be a clear correlation between hours of the day when rail waste was deposited and the number of odor detections reported. Instead, the Tables show a mixed result, with some days showing as many or more notifications prior to rail waste deposition as during rail waste deposition. Even assuming that a number of potential receptors leave their residence for school or work by 9:00 a.m., there should be far fewer pre-rail notifications than post rail notifications if rail waste was, in fact, the main "culprit". Similarly, on different days a significant number of notifications were received after 9:30 in the morning. Therefore, we cannot conclude that the lack of notifications from mid-morning to the end of the operating day, when that occurs, is solely attributable to residents not being at home during the day.

⁵ While not specifically directed by DEC, upon learning that WM had delayed rail on other days during the Evaluation Period on its own initiative, DEC requested that information, and the days when rail waste was delayed until at least 9:00 a.m. are included in Table 5 along with the October information.

3. DEC fully supports the commitment by WM to the Town of Perinton for an analysis of waste brought to HA by both rail and truck, and has required expedited submission of the study.

While the notification pattern, taken together with DEC staff observations, does not support granting the full extent of the relief sought by Petitioners with respect to rail volume, DEC has concluded that a valid avenue of inquiry remains with respect to the origin and transport logistics associated with rail waste versus waste brought in via truck, the volumes received via each transport method, and any other issues that could result in excessive odor.

On September 20, 2018, DEC acquired from the Town of Perinton website a letter from WM to the Town dated September 14, 2018, containing, inter alia, a commitment to conduct “a study of materials delivered by both truck and rail to the Facility to determine the nature and extent of undue odors, if any, contributed to by the same; identify additional mitigative measures to reduce as feasible undue odors and implement those measures, to the extent practical and effective, to control odors”(Attachment 12).

DEC was not part of the discussions which resulted in the September 14th letter. However, DEC agrees that there is merit to such a study, and to that end, directed that the study be expedited, with submission by February 15, 2018, to be supplemented later with the information and analysis which depends on warm weather. See Attachment 11. (Subsequently, upon WM’s request, DEC extended the February deadline for submission of the study to March 15, 2019, to allow additional field data gathered in January to be included.) DEC looks forward to receipt of the study and reserves the right to take further action associated with the information contained therein.

4. WM’s gas collection operations in cells 10 and 11 prior to the mitigation measures did not permanently impair gas collection and control in these cells, and do not justify permanent closure of these cells.

The Petition’s request that cells 10 and 11 be permanently closed is not justified by WM’s decision, prior to the mitigation measures, to collect gas in those cells via a different vertical gas extraction well design than had been used in the past, and to decrease the use of horizontal gas extraction wells (“horizontal collectors”), albeit to a limited degree, in concert with those vertical wells. The mitigation measures have significantly improved gas collection and control in those cells. (See section III herein.) Furthermore, the manner in which WM used horizontal collectors in cells 10 and 11 did not permanently compromise gas collection and control in those cells and complied with the Part 360 permit. See Attachment 15.

Additionally, although WM will not dispose of waste on top of cells 10 or 11 immediately (see below at VI.a), if they are authorized to do so in the future, new regulatory requirements for horizontal collectors will apply. Until the end of 2017, Part 360 did not provide specific spacing requirements for horizontal collectors in landfill operation. With

the advent of the new Part 363 regulations effective on November 4, 2017, the operational requirements in Part 363-7.1(e) mandate the installation of horizontal collectors at specific vertical intervals and with specific horizontal spacing. At DEC's direction, WM has incorporated these requirements into the facility's updated July 2018 O&M Manual, which applies to any future landfill operation in cells 10 and 11. In fact, WM already complies with these more stringent requirements for cells 12A and 12B.

5. The DEC staff decision to authorize the use of 30 mil geo-membrane was sound professional judgement under the circumstances.

The Petition criticizes the use of 30 mil geo-membrane as intermediate cover, apparently and illogically concluding that DEC's authorization to use it demonstrated "too cozy" a relationship with the company it regulates (Petition, p. 37). Contrary to that assertion, the decision to avoid the delay associated with waiting for the delivery of 40 mil geo-membrane was sound. Upon being advised by WM that vendors did not stock enough 40 mil material to cover the required approximately 9 acres, and that it would take weeks to have 40 mil material available, the choice was to either install the 30 mil material, or wait several weeks. Given the desire to move forward with all reasonable mitigation measures as quickly as possible for the benefit of the residents, the authorization was given. The magnitude of the wind storm (50+ mph winds) could not be predicted at the time the decision was made, and given the impact of that wind event, the logical course of action was to repair and replace the geo-membrane, which was expeditiously done. DEC technical staff made a sound and unbiased technical determination.

V. STATUS: POST-EVALUATION PERIOD

The overall odor situation has not changed since the end of the period upon which this Response focuses, from Memorial Day weekend through October 31, 2018, in a way that would alter the conclusions reached herein in any significant way, despite an unfortunate but limited odor event caused by severe weather and rail infrastructure problems in mid-December. Department staff continues to detect odor in nearby residential neighborhoods infrequently, despite staff's routine presence at the landfill. Also, the total number of odor notifications received by the Department from both the Hotline and FAFE App generated emails in November was lower than any monthly total received during the entire Department evaluation period, and about a third less than the number received in October, and the positive trend continues. See Figures 10 and 11. Even the odor event in December did not raise the number of notifications received by the Department in that month to levels anywhere near the numbers of the Winter / Spring of 2018, prior to the mitigation measures being taken by the company. Furthermore, the geographic extent of notifications continues to be limited mainly to the same areas close to the facility, and from a relatively small percentage of the overall residences in those areas, all consistent with the circumstances occurring during the Evaluation period as described elsewhere in this response.

Furthermore, the incoming waste study by WM remains pending, and DEC will review it prior to reaching any final conclusions about the contribution of the means of transport to any operating odors. However, the Department remains concerned about that aspect of rail transport which appears to be outside the full control of WM, i.e. the potential impact at the facility from delays in waste transport due to problems in the CSX system. WM acknowledged, via letter dated December 29, 2018, that waste received in mid to late December 2018, was as much as 3 weeks old, due to a variety of factors in the transport of that waste. While this event may be non-routine, it highlights the fact that the facility, particularly given that receptors live in close proximity to it, is susceptible to having issues if CSX has problems in transport.

While the mid-December event may be among the most impactful occurrence caused by CSX, DEC's staff observations, confirmed in discussions with WM, reveal that CSX's transport system can create circumstances where deliveries are uneven in terms of the number of cars received on any given day or week. This in turn creates a need for the operators at the facility to adjust to handling greater waste volumes when more rail cars are delivered in order to "catch up". Although the volumes of waste received are within permitted capacities, DEC believes that any circumstance that can result in an uneven operating pace has the potential to cause problems.

As a result, in late 2018, discussions about this issue held with WM resulted in the company's commitment, starting in mid-January and continuing for the remainder of 2019, to re-direct to other facilities a portion of the waste stream received by rail from the NYC transfer stations. This change will result in the volume of waste arriving at HA by rail to approximate that initially accepted by rail beginning in mid-2015. This will allow for an opportunity to assess, through all weather conditions, whether a more consistent delivery and handling of a reduced number of rail cars helps the facility avoid operational issues, and for consideration in the waste study that must rely on warm weather conditions to complete the study.

VI. RESPONSES TO REQUESTS FOR RELIEF

DEC's determination with respect to the specific relief requested at paragraph 9 on page 5 of the Petition follows:⁶

- a. The request that the Department permanently close all landfill cells in Perinton is denied. Permitted operations are currently at or near the town line and will continue to "cross into" Perinton for the near term. In addition, the landfill is one facility, and is permitted as such. Moreover, the position of the town line does not in any way determine the existence or prevention of off-site odor. However, the Department does share the Petitioners' concern about re-opening the top of cells 10 and 11 for waste disposal in the near term, considering the consensus view that those cells were the location of the gas collection and control inefficiencies.

⁶ Similar or identical requests for relief appear later in the Petition but the responses are contained herein and need not be repeated.

Significant effort and resources were devoted to address the gas and odor emitted from those areas, including the placement of additional geo-membrane cover, additional cover soil, and the excavation into old waste to place gas collection infrastructure. In addition, there are readily available alternatives that can be (and have been) constructed and used for waste disposal in accordance with the requirements of the new Part 360 series regulations and the WM permit. Therefore, effective immediately, WM shall not use the top of cells 10 and 11 for the placement of waste for the duration of the Part 360 permit, currently set to expire on July 8, 2023. After that time (and assuming the Part 360 permit is renewed), placement of waste in those areas will only be allowed upon a demonstration to the DEC that it may occur without causing undue concern about exacerbating odor once the interim cover is removed, and only upon the written approval of the Department in response to that demonstration. By copy of this Response to WM, DEC directs WM to submit to the Department by no later than April 30, 2019, a revision to the O&M Manual to include these requirements. Upon approval by DEC, the revised O&M Manual will be an enforceable part of the company's Part 360 permit.

- b. The request to reduce the permitted height in Macedon is denied. No compelling correlation between height of the facility in Macedon and future impacts from odor on the Petitioners has been demonstrated. In addition, the Town of Macedon, while aware of the Petition and this request for relief, has not acquiesced to it, made no such request on its own, and would be significantly impacted by such a decision by DEC.
- c. The request to permanently reduce the allowable volume by rail is denied at this time, subject to a review of the waste study described above. The correlation between rail waste and off-site odor remains unclear at this point, as discussed above. In addition, reducing rail waste without such a clear correlation, the results of the study, a more comprehensive analysis of its impact, and the need to implement any related changes to the operation of the facility, could foreseeably lead to an increase in truck traffic, replacing rail volume. Possibly, as was the case in prior years, this could create traffic problems in Macedon and Palmyra, and perhaps other communities along the truck routes, as well as increase the carbon footprint of the transportation of that waste. See also the letter referred to in paragraph g below (Attachment 14). However, as described above, WM will keep its commitment to reduce rail volume through calendar 2019.
- d. The request to require Community Air Monitoring during all mitigation measure events, including ambient air monitoring for all sulfides found in the raw landfill gas and for volatile organic compounds ("VOCs"), is denied. A Community Air Monitoring Plan ("CAMP") is not generally used at, or applicable to, a 6 NYCRR Part 360 permitted solid waste management facility. Rather, DEC requires a CAMP for certain sites in remedial programs administered by DEC pursuant to 6 NYCRR Part 375 (e.g., programs for inactive hazardous waste disposal sites or

brownfields) to protect the public from exposure to site contaminants during intrusive remedial activities. For example, DEC would typically require a CAMP for a brownfield in immediate proximity to possible receptors if hazardous waste excavation could release significant dust, particulate matter or VOCs into the air. The DEC Division of Environmental Remediation's CAMP guidance (included in DER-10) requires the monitoring of mass VOC concentrations at the downwind perimeter of a work area.

Moreover, at the Department's direction, and with the Town of Perinton's encouragement, High Acres has implemented real-time community air monitoring for H₂S in all four directions around the landfill. The industrial hygienist retained by the Town of Perinton analyzed this monitoring (Attachment 12), and provided the following findings:

"The concentration of hydrogen sulfide [in a sample of landfill gas] is significantly higher than the individual VOC levels. This supports the concept that low or non-detected hydrogen sulfide levels would also signify much lower VOC concentrations." (Letter from MEH Consulting to Perinton Town Supervisor Barker, Page 2)

and

"The identified hydrogen sulfide levels and therefore, the associated individual VOCs show the concentrations below the potential for health risks." (Letter from MEH Consulting to Perinton Town Supervisor Barker, Page 5)

DEC concurs with these findings and therefore is not requiring any additional air monitoring, for VOCs or otherwise, beyond what WM has already undertaken for H₂S.

- e. The request to impose mandatory timeframes related to receipt of rail waste is denied. See the discussion regarding rail waste above. As DEC advised by letter dated September 24, 2018 (Attachment 10), this agency supports the plan to study rail traffic contained in WM's commitment to the Town of Perinton (Attachment 12). DEC already has directed that the study be submitted by March 15, 2019, to be supplemented later with information and analysis dependent on warm weather. DEC looks forward to receiving that study and continues to reserve the right to take further action associated with the information it contains.
- f. The request to impose additional daily cover requirements is denied. Daily cover requirements are designed to minimize odor as well as potential vectors during off hours at a facility, not just for rail waste but for the entirety of the waste deposited each day. WM is expected to comply with these requirements, and there is no demonstration in the Petition that the measures used are insufficient for the rail waste as compared with any other waste stream. In addition, since all the waste streams are comingled during normal operation, attempting to design a

different daily cover requirement for a particular waste stream is not practicable. Also, in 2018 WM updated the landfill O&M Manual, adding new daily and intermediate cover requirements intended to improve containment of landfill gas and reduce the potential for odor. While Petitioner's specific request is denied, other operational requirements designed to assist in overall waste management and odor control have been imposed since the time of the filing of the Petition. Notably among these is the requirement to have at least 18 months of surplus cell capacity constructed to allow for options for waste placement based, in part, on weather conditions, as well as the submission of a Comprehensive Odor Control Study. See Attachment 11. By copy of this Response to WM, DEC directs WM to submit to the Department by no later than April 30, 2019, a revision to the O&M Manual to include this 18-month surplus cell capacity requirement. Upon approval by DEC, the revised O&M Manual will be an enforceable part of the company's Part 360 permit.

- g. The request to re-open the SEQRA review conducted by the Town of Macedon as Lead Agency is denied. On November 8, 2018, DEC received correspondence from Anthony J. Villani, Esq. on behalf of the Town of Macedon. See Attachment 14. This correspondence expresses, inter alia, the Town's confidence in its prior SEQRA review and its continuing view that rail transport of waste is in the best interests of the communities located on truck routes because rail replaces a significant amount of truck traffic. DEC also believes that the measures being adopted pursuant to this Response can be implemented without re-opening SEQRA.
- h. The request to direct WM to stop accepting rail waste if it becomes a nuisance in the future is denied. This request is speculative and assumes a future scenario that is not before us at this time, so no commitment about future action will be made.

VII. CONCLUSION

The above determinations are appropriate under the circumstances as they now exist. However, there remains an ongoing obligation by WM to minimize any significant off-site impact to its neighbors, and DEC retains all of its authority to take any necessary action in the future should circumstances change or should the waste study produce information warranting such action.

The Hotline will remain active, and the Citizen Odor Log Forms also remain available should residents decide to use them. DEC again encourages Petitioners to use these more comprehensive formats if formal complaint is warranted.

Some residents have chosen to rely on the FAFE App as the primary means to submit their concerns to DEC. Going forward, those using the App generated email process to report odor should be consistent by using the subject line "High Acres Odor Complaint", and the App email system should delete all individual DEC recipients and instead use

the address for the email box established for this purpose, dec.sm.HighAcresLandfill@dec.ny.gov. This will ensure that all emails are captured in the system, are not misrouted or ignored, and will expedite future efforts to review the notifications by staff and DEC management. Both the Regional Director and DEC Executive staff in Albany have access to the notifications in that account, as do the regional managers in the Solid Waste program. Consistent use of that address will also expedite, and provide more accurate responses to, any FOIL requests or other requests for information received by the Department.

Finally, DEC wishes to express its appreciation to those residents who have provided accurate and useful information over the past several months. Citizen input has assisted in the evaluation of the odor issue, and resulted in operational changes, other requirements, and renewed DEC and WM focus on the need to ensure that all reasonable steps are implemented at HA to reduce the occurrence and frequency of objectionable off-site odor and any other negative impacts to the community.

EXHIBITS

Table 1: Residences From Which 2 or More Hotline Calls Were Received During the Evaluation Period

Name	Address	Hotline Calls
Chris & Gretchen Ogden	22 Copper Beech Run Fairport	17
Jerry Caira	38 Tea Olive Lane Fairport	11
David & Brittany Messina	52 Copper Beech Run Fairport	9
Heidi Vanhalle	36 Tea Olive Lane Fairport	9
Matt Houck	26 Tea Olive Lane Fairport	9
Samantha Anderson & Marc Anderson	8 Schoolmaster Circle Fairport	8
Amy Savoie	88 Howell Road Fairport	6
Michael Collins	53 Copper Beech Run Fairport	5
Bethany Marcaitis	78 Winchester Drive Fairport	4
Joseph Dinolfo	10 Carolina Cherry Court Fairport	4
Ken Jentzen	18 Roscommon Crescent Fairport	4
Nate Bubb	5 Nandia Pass Fairport	4
Rebecca Koppmann	5 Dickinson Xing Fairport	4
Tom Diosy	44 Copper Beech Run Fairport	4
Amy Pasley	3 Springvale Pass Fairport	3
Bryan Gardner	7 Grimsby Gate Fairport	3
Charles O'Neill	25 Tea Olive Lane Fairport	3
Jerry & Lynette Smith	2360 West Walworth Road Macedon	3
Kimberly Hagen	83 Chadwick Manor Fairport	3
Maureen Morse	12 Princeton Lane Fairport	3
Stephanie & Tom Delgado	54 Copper Beech Run Fairport	3
Tony Rounding	3 Kerry Hill Fairport	3
Arielle Rosenfeld	9 Brookside Drive Fairport	2
Brittany Shaughnessy	47 Copper Beech Run Fairport	2
Debbie Bradstreet	17 Winchester Drive Fairport	2
Debra Archer	355 Canal E Drive Macedon	2
Gary & Jennifer McNeil	11 Golden Bell Court Fairport	2
Lauren Moravec	42 Princeton Lane Fairport	2
Michael Henry	14 Kerry Hill Fairport	2
Michael Merlo & Heather Macarthur	7 Tea Olive Lane Fairport	2

Note regarding Tables 1 and 2: Given that the Petition seeks a very aggressive result in terms of impact to facility operations, and the legal basis for DEC to pursue such a result is based upon a showing of an unreasonable interference with the comfortable enjoyment of life or property, in DEC counsel's judgement no administrative tribunal or court of competent jurisdiction would find a violation of that threshold from infrequent and undefined, in terms of duration or significant impact, email notifications. Consequently, staff's initial screen (reflected in Table 2) focused on residences submitting a notification at least 10 times during the 160 day-long Evaluation Period to determine locations where residents claimed a more frequent detection of odor. Similarly, receipt of only one Hotline call during the 160 day-period does not indicate a significant problem for that residence. Thus, those residences from which only one call was made are not included in Table 1 although DEC acknowledges and maintains records of these calls.

Table 2: Residences From Which 10 or More Notifications Were Received During the Evaluation Period

Name	Address	Totals
Gary & Jennifer McNeil	11 Golden Bell Court Fairport	81
Michael Merlo & Heather Macarthur	7 Tea Olive Lane Fairport	51
Mark Laskoski & Cheryl Schmidt	10 Patera Avenue Fairport	43
Chris & Gretchen Ogden	22 Copper Beech Run Fairport	41
Justin & Kaitlyn Foley	24 Tea Olive Lane Fairport	38
Ann Moffitt	3 Tea Olive Lane Fairport	30
Rob Freemantle & Catherine Kane	3 Nandia Pass Fairport	29
Samantha Anderson & Marc Anderson	8 Schoolmaster Circle Fairport	29
David & Brittany Messina	52 Copper Beech Run Fairport	27
Nate Bubb	5 Nandia Pass Fairport	26
Jennifer Amadori	64 Chadwick Manor Fairport	25
Mai Phung	6 Carolina Cherry Ct	25
Matt Houck	26 Tea Olive Lane Fairport	24
Paula Bourgeois Marasco	92 Aldrich Road Fairport	24
Jennifer Jackson	44 Tea Olive Lane Fairport	23
Nick & Alecia Romano	9 Cedarwood Drive Fairport	22
Joseph Dinolfo	10 Carolina Cherry Court Fairport	21
Chris & Mallory Williams	34 Waterford Way Fairport	17
Erinne Selim & Bryan Reinicke	545 Macedon Center Rd Fairport	17
Jonathan Zaffer & Jenny Sciolino	42 Copper Beech Run Fairport	17
Rebecca Koppmann	5 Dickinson Xing Fairport	17
Jerry Caira	38 Tea Olive Lane Fairport	16
Michael Collins	53 Copper Beech Run Fairport	16
Tara Saucier	32 Copper Beech Run Fairport	16
Arielle Rosenfeld	9 Brookside Drive Fairport	14
Brittany Shaughnessy	47 Copper Beech Run Fairport	14
Brian Miller	36 Copper Beech Run Fairport	13
Frieda Hollway	12 Golden Bell Court Fairport	13
Malissa Beckwith	5 Springvale Pass Fairport	13
Beth Reisinger	1 Vanderberg Drive Fairport	12
John Strachan	23 Ironwood Drive Fairport	12
Bill & Ferni Kinnaw	10 Breezewood Court Fairport	11
Julie Stuver	34 Copper Beech Run Fairport	11
Krystina Clark	20 Ironwood Drive Fairport	11
Scott Miga	32 Teal Drive Fairport	11
Gerald & Traci Totslie	48 Stonewood Drive Fairport	11
Douglas Willard	7 Chadwell Circle Fairport	11
Donna Dimaria	5 Golden Bell Court Fairport	10
Paula Mencucci	417 Macedon Center Road Macedon	10

Table 3: Tabulation of Numbers of Homes in Neighborhoods and List of Residences From Tables 1 and 2

*Neighborhood	Notification Residences	Total Residences
Magnolia Manor	29	112
Devonshire Hills	3	118
Country Creek Estates	2	105
Thomas Creek Estates	5	155
Trails End	2	80
Country Downs East	3	110
Howell Road	1	20
Rolling Hill	1	241
Avian Landing	1	29
Breezewood	1	16
Black Watch Hill	1	311
Canal Drive East	1	31
West Walworth Rd	1	76
Aldrich Road	1	32
County Clare	2	213
Whitney Country	1	296
State Route 31F (Perinton)	1	27
State Route 31F (Macedon)	1	25
Brentwood Estates	1	203

*Neighborhoods are described below:

Magnolia Manor neighborhood includes Copper Beech Run, Tea Olive Lane, Nandia Pass, Golden Bell Court, Camellia Rise, Springvale Pass, and Carolina Cherry Court.

Devonshire Hills neighborhood includes Chadwick Manor, Dickinson Crossing, and Emory Rise.

Country Creek Estates neighborhood includes Princeton Lana, Stanford Way, and Hobart Court.

Thomas Creek Estates neighborhood includes Cedarwood Drive, Ironwood Drive, Patera Avenue, Stonewood Drive, Dearfield Court, Sunburst Circle, Triton Court, Dorado Drive, and Tucana Drive.

Trails End neighborhood includes Enwright Drive, Schoolmaster Circle, and Vanderberg Drive.

Country Downs East neighborhood includes Winchester Drive, Roscommon Crescent, and Cameron Court

Howell Road includes the residences on Howell Road.

Rolling Hill neighborhood includes Ayrault Road, Knapps Circle, Larkspur Lane, Lyndon Road, Matthew Drive, Rolling Hill Drive, Starlight Circle, Stony Brook Lane, Valley Brook Drive, Waterford Way, and Windy Hill Circle.

Avian Landing neighborhood includes only Teal Drive.

Breezewood neighborhood includes one residence on Whitney Road East and Breezewood Court.

Black Watch Hill neighborhood includes, Aldwick Rise, Black Watch Trail, Boxwood Lane, Briggsboro Lane, Buttonwood Circle, Canon Ridge, Chesham Way, Crow Hill Drive, Grimsby Gate, Hannans Court, South Ridge Trail, Timber Lane, Walnut Run, Waterworks Lane, Wellington Circle, and Wincanton Drive.

Canal Drive East neighborhood includes only Canal Drive East.

West Walworth Road neighborhood includes West Walworth Road (Rt 31F to Quaker Road), Cornwall Drive, Timberline Drive, and Murphy Lane.

County Clare neighborhood includes Bingham Wood, Castle Gate, Cambridge Court, County Clare Crescent, Dona-Lea, Dunmore Lane, Kerry Hill, Kilkenny Court, and Shannon Glen.

Whitney Country neighborhood includes Beckenham Lane, Camden Court, Chadwell Circle, Galley Hill Lane, Jeffrey Circle, Lambeth Loop, Little Briggins Circle, Michael Lane, Quinton Hill Circle, Squirrels Heath Road, Thomas Circle, and Timway Court.

State Route 31F (Perinton) includes the residences on Macedon Center Road (NYS 31F) from Squirrels Heath Road to Monroe Wayne County Line Road.

State Route 31F (Macedon) includes the residences on Macedon Center Road (NYS 31F) from Monroe Wayne County Line Road to West Walworth Road.

Aldrich Road includes all residences on Aldrich Road.

Brentwood Estates includes Brentwood Lane, Brookside Drive, Fairfield Drive, Shadowmoor Drive, and Southern Court.

Table 4: Notifications – Hotline and FAFE App by Time of Day– 5/25/18 Through 10/31/18

Date	before 9:30		9:30-12:00		12:01-17:00		after 17:00		Totals			
	Hotline Calls	App Notif.	Hotline Calls	App Notif.	Hotline Calls	App Notif.	Hotline Calls	App Notif.	Total App	Total Hotline	Total Notif.	Total Notif. After 9:30AM
5/25/2018		3		2					5		5	2
5/26/2018		2	1	1				2	5	1	6	4
5/27/2018		1		3		1		2	7		7	6
5/28/2018												
5/29/2018		1						2	3		3	2
5/30/2018	4	25	2	7	1	5		2	39	7	46	17
5/31/2018	1	3	2	1	1	2	1	2	8	5	13	9
6/1/2018		4							4		4	
6/2/2018				1		1			2		2	2
6/3/2018		1				1		1	3		3	2
6/4/2018						1		1	2		2	2
6/5/2018		1							1		1	
6/6/2018							1			1	1	1
6/7/2018	1	13				1			14	1	15	1
6/8/2018		2							2		2	
6/9/2018	1	2						1	3	1	4	1
6/10/2018		1				2			3		3	2
6/11/2018		2		1					3		3	1
6/12/2018						1		2	3		3	3
6/13/2018	3	9							9	3	12	
6/14/2018								3	3		3	3
6/15/2018		1						1	2		2	1
6/16/2018	2	7							7	2	9	
6/17/2018		1							1		1	
6/18/2018			1	2					2	1	3	3
6/19/2018												
6/20/2018	4	8	7	7				1	16	11	27	15
6/21/2018		2							2		2	
6/22/2018	1	9	1	4			1	1	14	3	17	7
6/23/2018	1	3	1	3				1	7	2	9	5
6/24/2018				1					1		1	1
6/25/2018								1	1		1	1
6/26/2018	4	10	2	4		1		2	17	6	23	9
6/27/2018		1		9	2	12		1	23	2	25	24
6/28/2018												
6/29/2018								3	3		3	3
6/30/2018												
7/1/2018												
7/2/2018		2		2					4		4	2
7/3/2018												
7/4/2018		3						3	6		6	3
7/5/2018		1				1			2		2	1
7/6/2018					1	2		2	4	1	5	5
7/7/2018		1		5					6		6	5
7/8/2018		6							6		6	
7/9/2018		2						2	4		4	2
7/10/2018												
7/11/2018												
7/12/2018		1							1		1	
7/13/2018	6	23			1	1			24	7	31	2
7/14/2018				1		3			4		4	4
7/15/2018												
7/16/2018	1	4						2	6	1	7	2
7/17/2018			1			2			2	1	3	3
7/18/2018		1		1					2		2	1

	before 9:30		9:30-12:00		12:01-17:00		after 17:00		Totals			
Date	Hotline Calls	App Notif.	Hotline Calls	App Notif.	Hotline Calls	App Notif.	Hotline Calls	App Notif.	Total App	Total Hotline	Total Notif.	Total Notif. After 9:30AM
7/19/2018	10	29	2	3					32	12	44	5
7/20/2018	1	11	1	5	4	5		1	22	6	28	16
7/21/2018		3	3	9					12	3	15	12
7/22/2018				1				4	5		5	5
7/23/2018	2	1	2	7	4	25			33	8	41	38
7/24/2018	1		2	3		13		1	17	3	20	19
7/25/2018		1						3	4		4	3
7/26/2018		1							1		1	
7/27/2018		1							1		1	
7/28/2018		1		2					3		3	2
7/29/2018						1	1		1	1	2	2
7/30/2018	5	32	3	8		4		5	49	8	57	20
7/31/2018		1		3		7	1	1	12	1	13	12
8/1/2018		7							7		7	
8/2/2018								1	1		1	1
8/3/2018	2	18	1	10	1	5			33	4	37	17
8/4/2018		1		2					3		3	2
8/5/2018		1							1		1	
8/6/2018		1	1	2				3	6	1	7	6
8/7/2018			1							1	1	1
8/8/2018	3	15	1	4		1		1	21	4	25	7
8/9/2018		1		1					2		2	1
8/10/2018				1					1		1	1
8/11/2018		1		2		1			4		4	3
8/12/2018												
8/13/2018		1		1					2		2	1
8/14/2018												
8/15/2018		1		1				1	3		3	2
8/16/2018		1							1		1	
8/17/2018	4	13		9					22	4	26	9
8/18/2018						1			1		1	1
8/19/2018		4		1		1		3	9		9	5
8/20/2018	5	13	5	10	1	10		5	38	11	49	31
8/21/2018	2	12	1	8	1	3	1	5	28	5	33	19
8/22/2018		4		1					5		5	1
8/23/2018												
8/24/2018				5		1		5	11		11	11
8/25/2018	1	10		5		2	1	8	25	2	27	16
8/26/2018												
8/27/2018		3		3		4		1	11		11	8
8/28/2018			1	1		2		1	4	1	5	5
8/29/2018		1							1		1	
8/30/2018								1	1		1	1
8/31/2018		8		5				3	16		16	8
9/1/2018		1						2	3		3	2
9/2/2018												
9/3/2018												
9/4/2018		2		1				1	4		4	2
9/5/2018		17		1	1	11			29	1	30	13
9/6/2018	1	4				3			7	1	8	3
9/7/2018								1	1		1	1
9/8/2018		2				2		1	5		5	3
9/9/2018		1						1	2		2	1
9/10/2018		3		1	1	4	1	2	10	2	12	9
9/11/2018		4						4	8		8	4
9/12/2018	3	14		3		1		3	21	3	24	7
9/13/2018	1	4		1		3		2	10	1	11	6
9/14/2018	3	20		1		4		4	29	3	32	9

	before 9:30		9:30-12:00		12:01-17:00		after 17:00		Totals			
Date	Hotline Calls	App Notif.	Hotline Calls	App Notif.	Hotline Calls	App Notif.	Hotline Calls	App Notif.	Total App	Total Hotline	Total Notif.	Total Notif. After 9:30AM
9/15/2018	2	7		2		1			10	2	12	3
9/16/2018		2				1			3		3	1
9/17/2018	5	30	1	5		1		5	41	6	47	12
9/18/2018								1	1		1	1
9/19/2018			1					2	2	1	3	3
9/20/2018	3	30	1	6		2		1	39	4	43	10
9/21/2018		1				2			3		3	2
9/22/2018												
9/23/2018		6		4		1		5	16		16	10
9/24/2018	1	8	2	8	3	9		9	34	6	40	31
9/25/2018		4		1		6		6	17		17	13
9/26/2018		4						1	5		5	1
9/27/2018	1	10		5				3	18	1	19	8
9/28/2018	2	15				1		4	20	2	22	5
9/29/2018		3							3		3	
9/30/2018	2	5		1			1	9	15	3	18	11
10/1/2018		3			1	3			6	1	7	4
10/2/2018		9	3	8		1		4	22	3	25	16
10/3/2018		1		3		2		21	27		27	26
10/4/2018		1							1		1	
10/5/2018		2	1			3		6	11	1	12	10
10/6/2018	1	15	1	12		2		4	33	2	35	19
10/7/2018		1						1	2		2	1
10/8/2018			1	5	4	13	1	4	22	6	28	28
10/9/2018	1	5		1				3	9	1	10	4
10/10/2018		9	1	5	1	1		7	22	2	24	15
10/11/2018				1				1	2		2	2
10/12/2018					1			2	2	1	3	3
10/13/2018												
10/14/2018		2				1		3	6		6	4
10/15/2018		2		9		1			12		12	10
10/16/2018		4					1	5	9	1	10	6
10/17/2018								1	1		1	1
10/18/2018		1							1		1	
10/19/2018		1							1		1	
10/20/2018												
10/21/2018												
10/22/2018		10				4		3	17		17	7
10/23/2018		1							1		1	
10/24/2018												
10/25/2018						1			1		1	1
10/26/2018		2			1	2			4	1	5	3
10/27/2018		1						1	2		2	1
10/28/2018						1			1		1	1
10/29/2018						1			1		1	1
10/30/2018		2						3	5		5	3
10/31/2018		4		1					5		5	1

Table 5: Delayed Rail Waste Deposition by Date, With Pre- and Post- Rail Notifications

Date	Rail Start Time	Pre-Rail Notifications	Post Rail Notifications
27-Jun	9:00	1	24
13-Jul	10:30	29	2
16-Jul	9:00	5	2
20-Jul	10:00	12	16
23-Jul	10:00	3	38
31-Jul	10:00	1	12
1-Aug	10:00	7	0
1-Oct	10:15	3	4
2-Oct	10:15	11	14
3-Oct	10:15	2	25
4-Oct	10:15	1	0
5-Oct	10:15	2	10
6-Oct	9:30	16	19
8-Oct	9:30	0	28
9-Oct	9:30	6	4
10-Oct	9:30	9	15
11-Oct	9:30	0	2
12-Oct	9:30	0	3
15-Oct	9:30	2	10
16-Oct	9:30	4	6
17-Oct	9:30	0	1
18-Oct	9:30	1	0
19-Oct	9:30	1	0
20-Oct	9:30	0	0
22-Oct	9:30	10	7
23-Oct	9:30	1	0
24-Oct	9:30	0	0
25-Oct	9:30	0	1
26-Oct	9:30	2	3
27-Oct	9:30	1	1
29-Oct	9:30	0	1
30-Oct	9:30	2	3
31-Oct	9:30	4	1

Figure 1: Aerial View – 2006

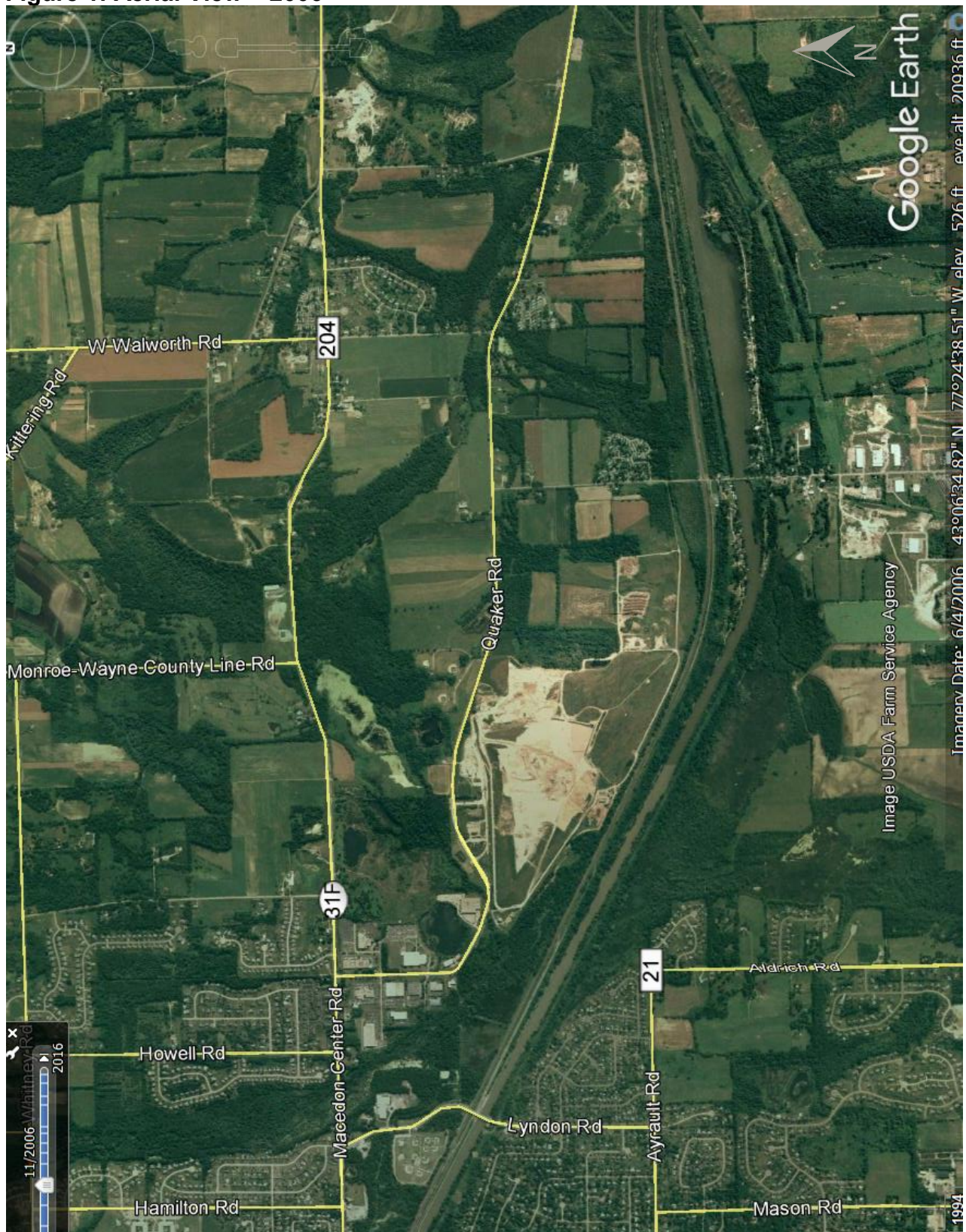


Figure 2: Aerial View – 2011

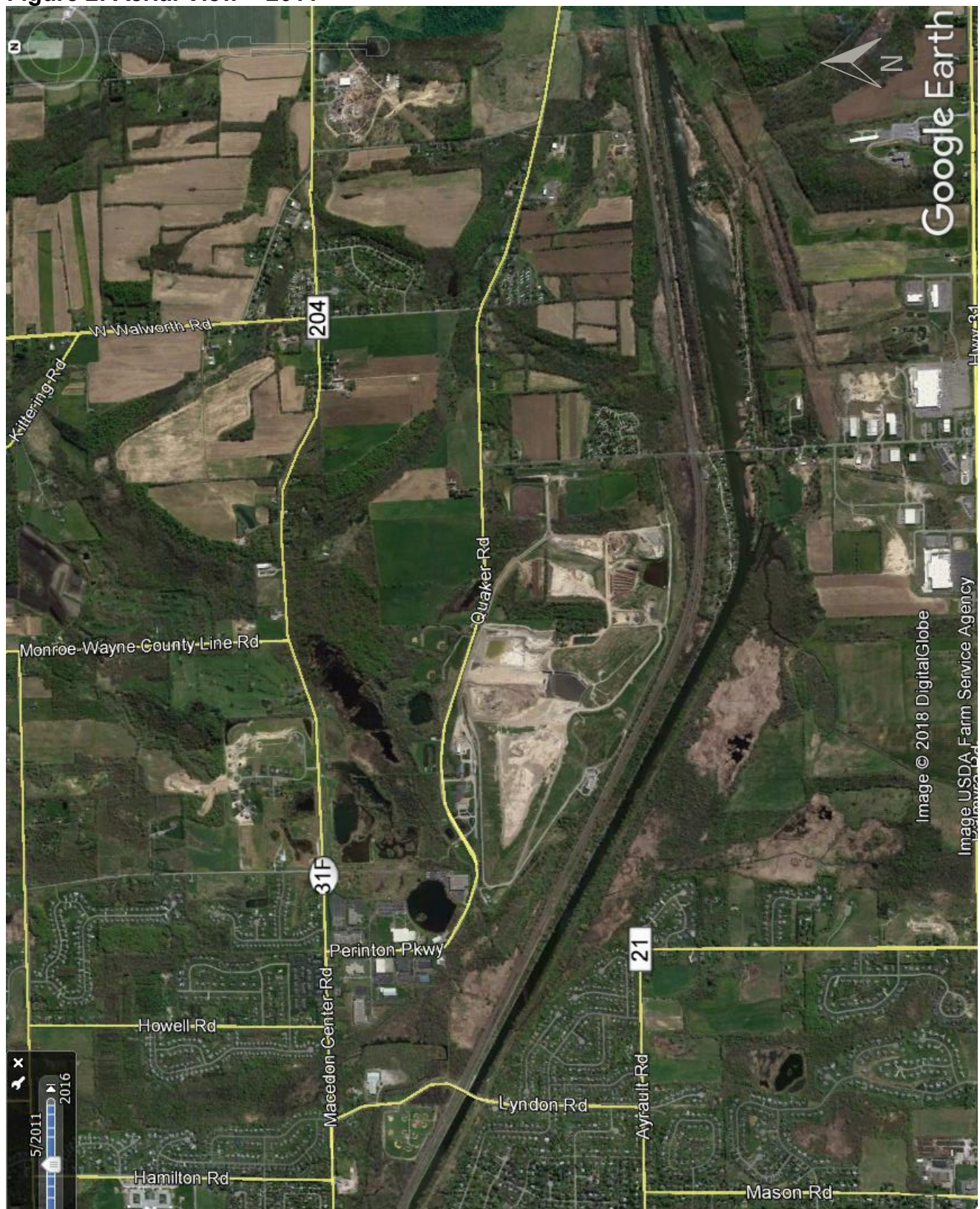


Figure 3: Aerial View – 2016

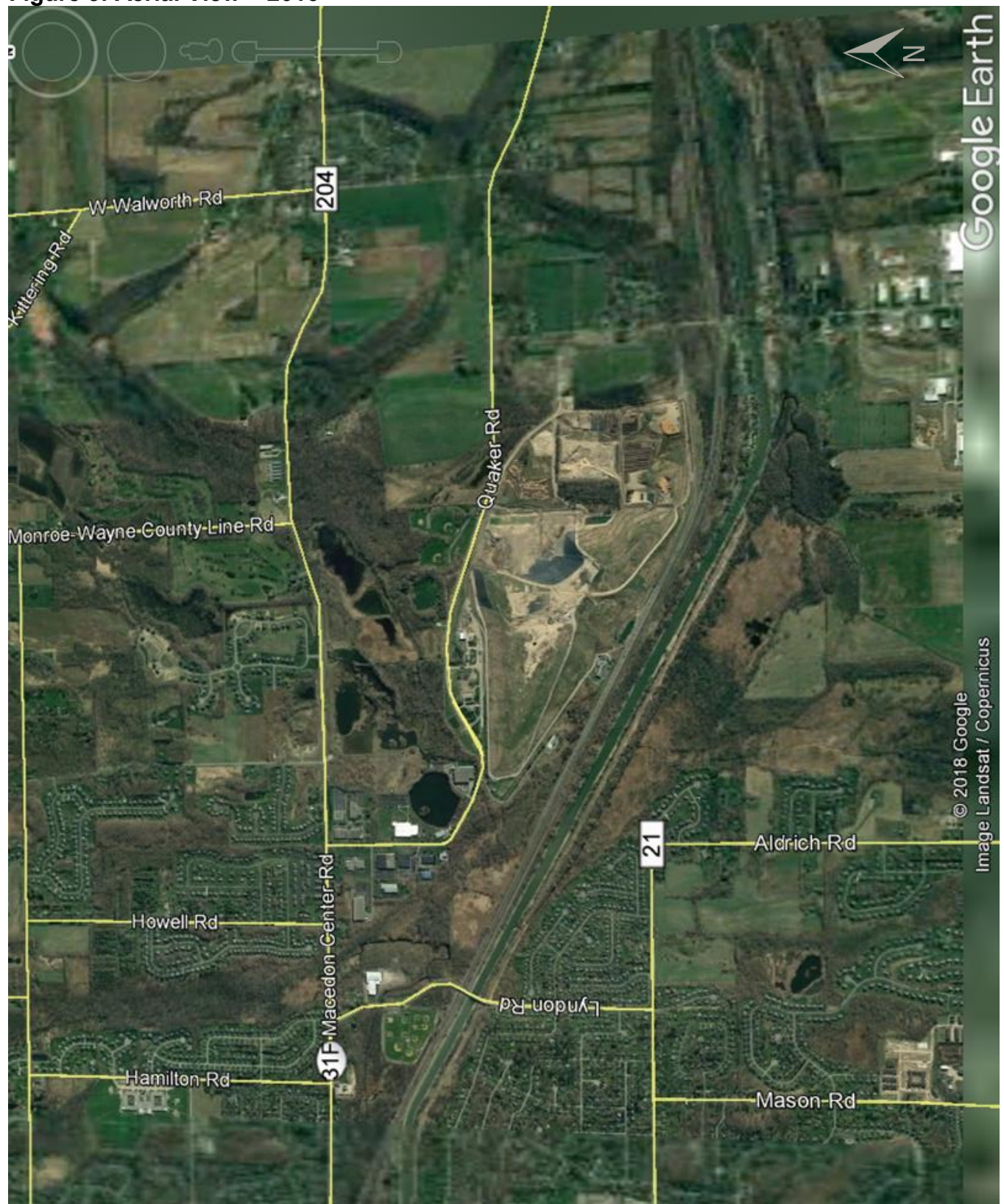


Figure 4: Aerial View – Residences Using Hotline More Than Once – 5/25/18 – 10/31/18

Hotline Calls from Residents High Acres Landfill



Figure 5: Aerial view – Residences With 10 or More Notifications – 5/25/18 - 10/31/18

Residences 10 or More Odor Notifications High Acres Landfill



Figure 6: Neighborhoods Listed on Table 3

Neighborhoods Listed on Table 3

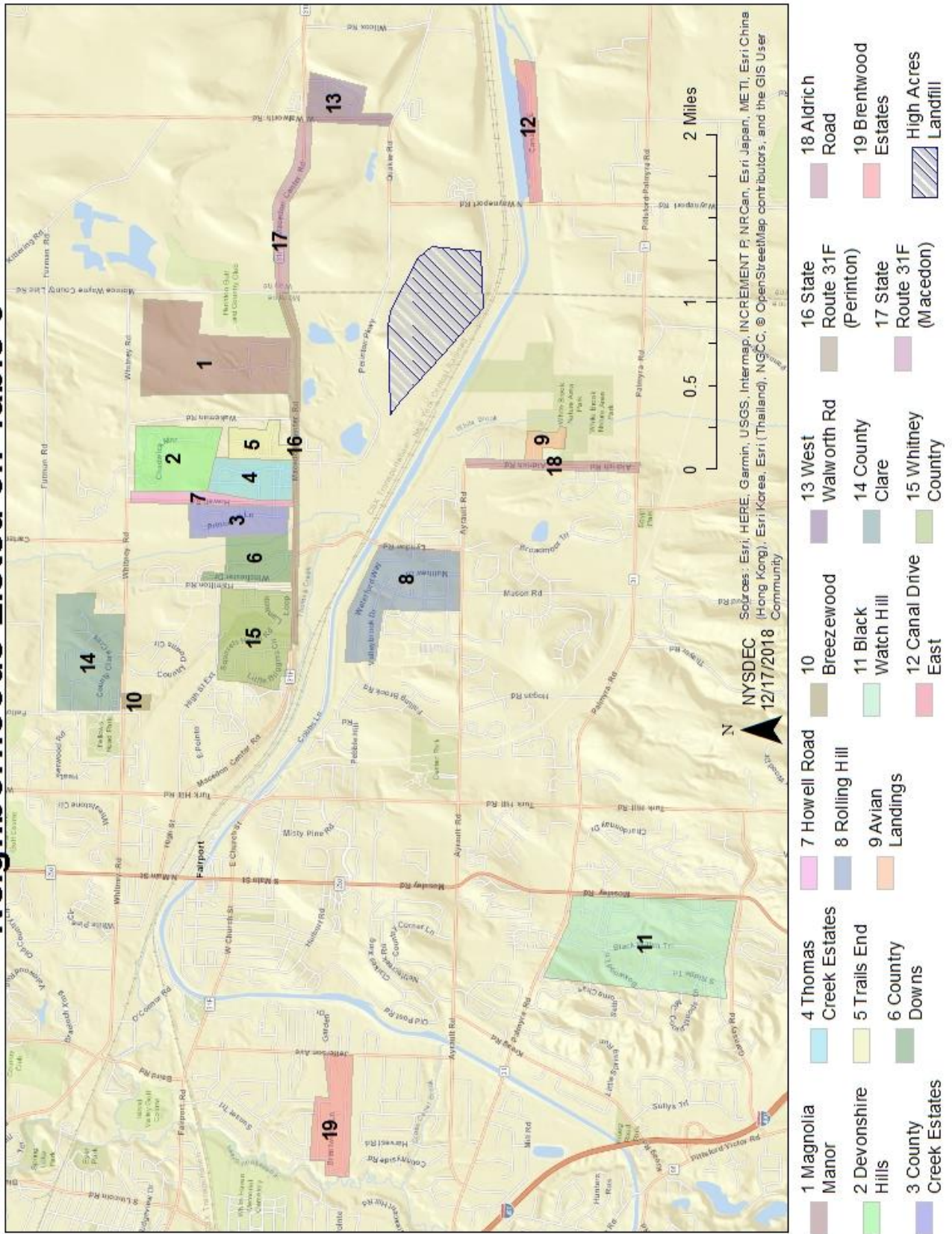


Figure 7: Notifications Before and After Mitigation Measures

Chart 1:

1/31/2018 - 5/24/2018		
Notifications	# of Days	% of Days
0	2	1.8
1 - 10	54	47.4
11 - 20	20	17.5
21 - 30	8	7.0
31 - 40	4	3.5
41 - 50	8	7.0
51 - 100	15	13.2
101 +	3	2.6
Total Days	114	

Chart 2:

5/25/2018 - 10/31/2018		
Notifications	# of Days	% of Days
0	20	12.5
1 - 10	93	58.1
11 - 20	20	12.5
21 - 30	14	8.8
31 - 40	6	3.8
41 - 50	6	3.8
51 - 100	1	0.6
101 +	0	0.0
Total Days	160	

Figure 8: Notifications Per Day, January 31, 2018 – May 24, 2018

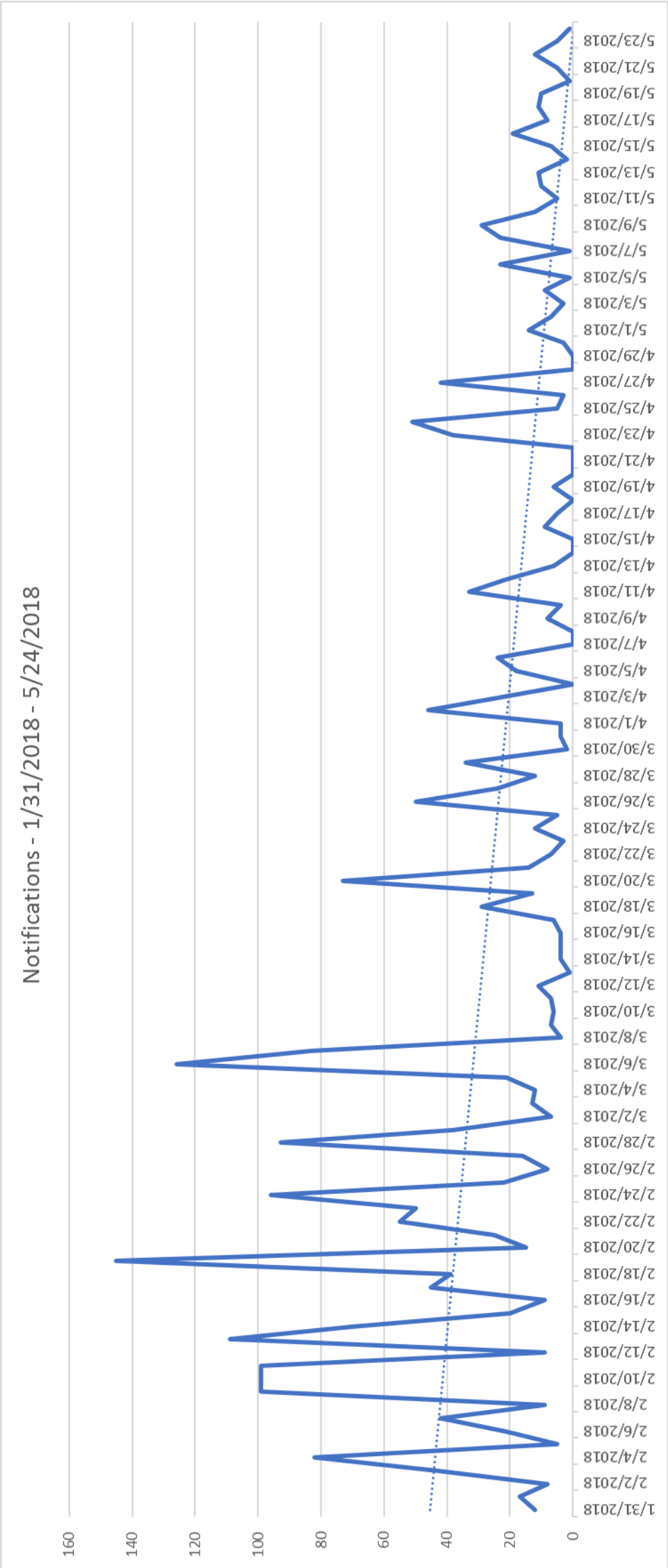


Figure 9: Notifications Per Day, May 25, 2018 – October 31, 2018

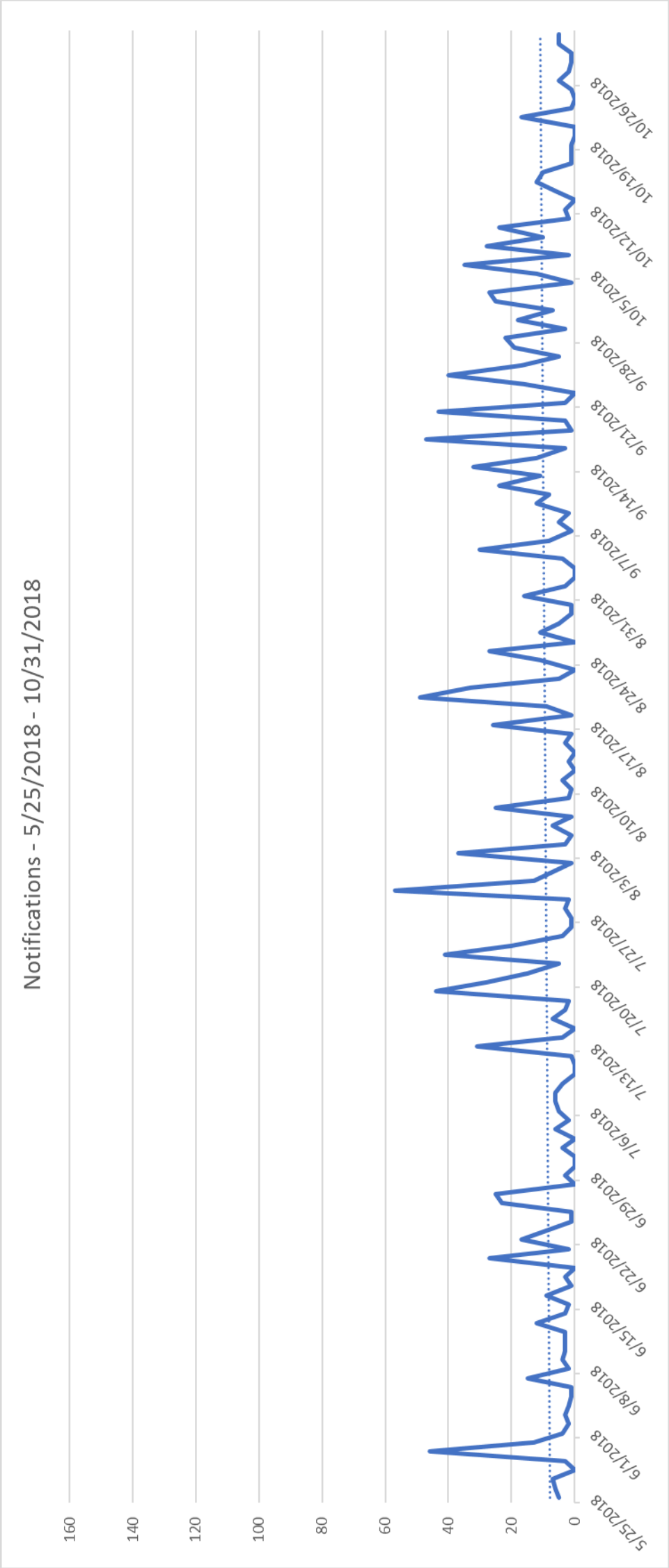


Figure 10: Notifications Per Day, November 1, 2018 – March 7, 2019

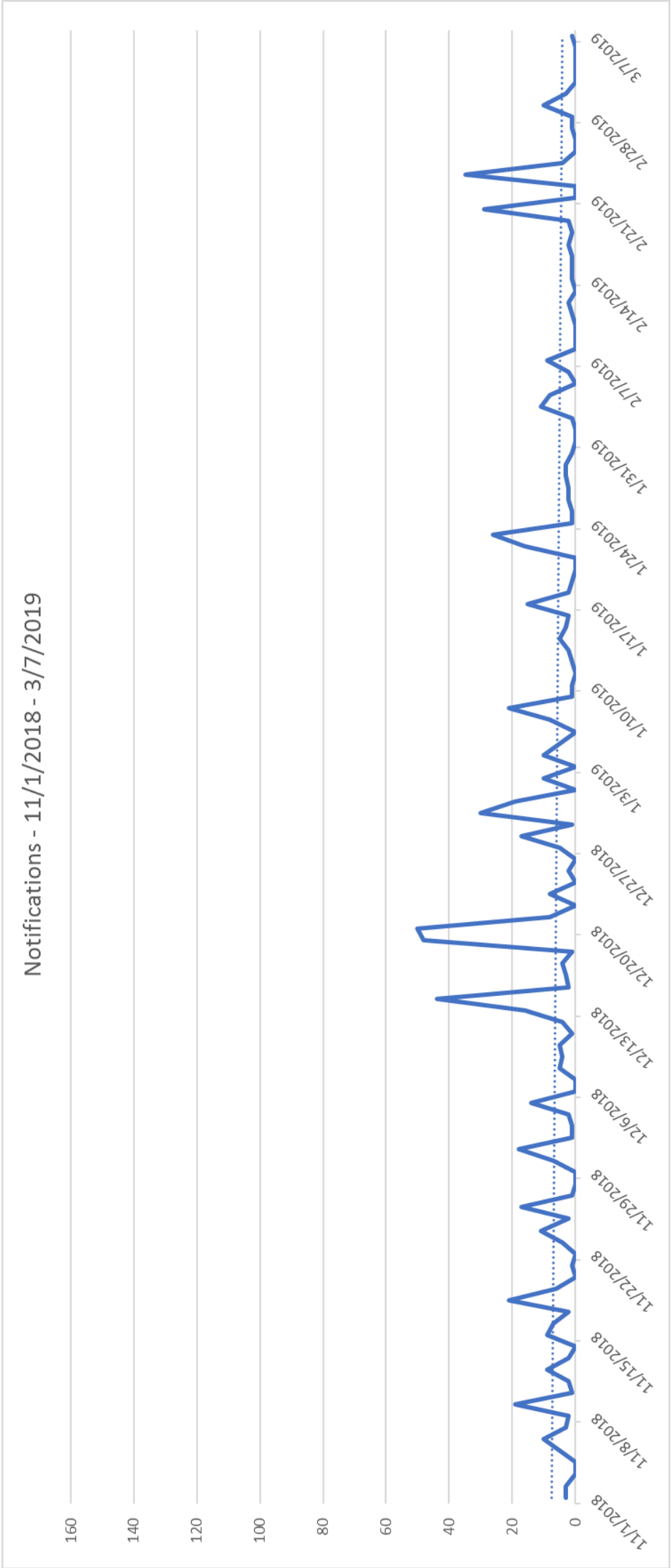


Figure 11: Notifications Post Evaluation Period to Present

11/1/2018 - 3/7/2019		
Notifications	# of Days	% of Days
0	33	26.0
1 - 10	74	58.3
11 - 20	11	8.7
21 - 30	5	3.9
31 - 40	1	0.8
41 - 50	3	2.4
51 - 100	0	0.0
101 +	0	0.0
Total Days	127	