



DEPARTMENT OF PUBLIC HEALTH
CITY OF CHICAGO

Via Email

December 23, 2020

Mr. Hal Tolin
General III, LLC
11554 S Avenue O Avenue
Chicago, Illinois 60617

**Subject: Class IVB Large Recycling Facility Application
Deficiency Letter and Request for Additional Information**

Dear Mr. Tolin:

The Chicago Department of Public Health ("the CDPH") received General III, LLC's d/b/a Southside Recycling ("the Applicant") permit application dated November 11, 2020 ("the Application") to operate a large recycling facility at 11600 S Burley Avenue ("the Facility"). On December 10, 2020, CDPH convened a public hearing to receive community input regarding the Application. The written public comment period on the permit application remains open until January 14, 2021.

Based on CDPH review pursuant to requirements set forth in the Rules for Large Recycling Facilities ("the Rules") and the Chicago Municipal Code 11-4-2530, it has determined the Application to be incomplete and substantially deficient in meeting the Rules. Consequently, the Applicant is not authorized to operate a class IVB large recycling facility at the Facility, including any storage of recyclables on said property.

This letter is not a request for a new application; however, because of the magnitude of the information requested, for ease of review please submit an entirely new application document incorporating the requested information. The relevant timeframes in the CDPH Guidelines Regarding Permitting Process for Consequential Large Recycling Facilities will continue to be referenced based on your initial application. You must resubmit your updated application in full conformance with the Rules and ordinance and addresses the deficiencies described below.

1. Pursuant to section 3.8 of the Rules, provide a copy of the Findings of the Zoning Board of Appeals, CAL 178-19-S & 179-19-Z, and any plans and drawings referenced therein.
2. Pursuant to paragraph 3.9.1.4 of the Rules, verify the proposed boundaries of the Facility. CDPH understands the Facility constitutes the Leased Area described in the plat of survey. If the Applicant intends to conduct barge loading of recyclable materials, the Facility boundaries must be extended to the Calumet River, and such activity must be explicitly and clearly incorporated into the Application.
3. To determine the suitability of the proposed 12-inch gravel pavements, describe the

operations that will occur over the proposed graveled areas and provide detailed specifications such as the aggregate material type and gradation, installation lift thicknesses, and the compaction and compaction-testing methods.

In addition, pursuant to 3.9.6.2, provide a pavement maintenance plan describing how and at what frequency the Applicant will inspect, repair, and maintain all pavements at the Facility to minimize ponding, dust, and mud. This information was not provided in the drawing included in Attachment L of the Application.

4. Pursuant to paragraphs 3.9.7.2 and 3.9.7.3 of the Rules, provide detailed calculations showing the peak electrical demands at the Facility and demonstrate that adequate services are available to meet the calculated loads. A One-Line Diagram and a Site Power Plan drawing were included as Attachment M of the Application. However, neither sheets provided the required calculations or information. The Facility's electrical loading should be in kilovolt-ampere (kVA) and assessed in relation to the rated transformer capacities at the 122nd Street switchyard substation. Alternatively, an approval letter or permit from the utility provider may be provided.
5. Pursuant to paragraph 3.9.8, provide the following information:
 - a. Backup calculations and a breakdown (fire suppression, dust control cooling, cleaning, irrigation, and employee facilities) of the estimated 50-million-gallon annual water usage;
 - b. A list and specifications (i.e., pump rating curves) of all water pumps used for fire and dust control and suppression at the site. Sheet FP-0.1 in Attachment N included a fire pump schedule listing two pumps. The first pump is sized at 1,500 gallons per minute (gpm) for the non-ferrous building sprinkler system. The second pump appears much smaller at ten gpm. Provide a similar pump schedule for the shredder building deluge system and other site process water needs; and
 - c. Demonstrate that Pump Package 3 depicted in sheet P-1.1, 1st Floor Shredder Plumbing Plans, of Attachment K can provide adequate pressure and water flow for yard hydrants, Dust Bosses, and shredder nozzles. Such demonstration may include, but not be limited to, hydraulic calculations, actual flow, and pressure readings, and vendor cut sheets.
6. Pursuant to paragraphs 3.9.10.1 and 3.9.10.3 of the Rules, provide the handling capacity and detailed specifications of all structures and fixed equipment including but not limited to, all shredders, fixed material handlers, sorting equipment, conveyors, and air pollution control devices. Provide specifications and process rates for each powered equipment identified in the One-Line Diagram of Attachment M and the process rates and descriptions of all manually operated processing areas and sorting stations.
7. Pursuant to paragraph 3.9.10.2 of the Rules, provide an operations and maintenance (O&M) plan for all structures and fixed equipment identified in item 6 above. Specify if any welding will be conducted at the Facility as part of the O&M and any repairs. In addition, provide an estimate with backup calculations of liquid and solid waste generation associated with these devices.

8. Pursuant to paragraphs 3.9.11.2 through 3.9.11.3 of the Rules, provide the following:
 - a. A drawing showing the size and location of the area dedicated to the screening of inbound loads, including the unloading and inspection of atypical loads and the inspection of random loads. Include detailed calculations of the volume in cubic yards exclusively available for the storage and staging of unauthorized materials, residual waste, and materials requiring special handling as described in Attachment W of the Application. Such calculations may use data from the Applicant's operations at 1909 N. Clifton Avenue ("Existing Facility"). Highlight on a drawing the location where such staging and storage occur.
 - b. Verify the area used to calculate the available staging space for inbound material. The Application used a value of 80,855 square feet (sf). However, the CDPH's measurement of the one and one-half ellipse-shaped shredder feedstock areas and the triangular peddler drop off area were cumulatively about 67,500 sf. Either recalculate the storage volume or modify the drawings to reflect the larger footprint used in your calculation. In addition, the volumes should be computed using the average-end method, conic formulas, or similar methods that can account for the angle of repose of the stored material.
 - c. Verify the storage areas corresponding to the processed ferrous material areas and the processed shredder residue area per 8(b) above.
 - d. Provide a drawing highlighting the locations of all storage bins. In addition, provide plan and elevation drawings of the covered post-processed ASR storage enclosure.
9. Pursuant to 3.9.12.2 of the Rules, provide a copy of the Facility's NPDES permit for industrial stormwater discharge (ILR00) into the Calumet River. A copy of this NPDES permit was previously supplied by RMG to CDPH as part of the permit renewal for the South Shore Recycling RMG facility. The NPDES permit should be updated to reflect operations of the new Facility.

In addition, provide a copy of the Notice of Intent (NOI) for construction activity or a copy of the NPDES construction general permit issued by the IEPA Bureau of Water (BOW).
10. Pursuant to paragraph 3.9.12.4 of the Rules, provide the treatment effectiveness of the proposed stormwater treatment unit at removing total suspended solids (TSS) and fats, oil, and greases (FOG). Specifically, provide the treatment efficiency at 1.62 cubic feet per second (cfs), the authorized release rate to the city sewer system. Also, explain the purpose of the caustic additive used by the treatment unit and provide Safety Data Sheets (SDS) for this chemical. In addition, include an O&M plan for the treatment unit and the stormwater detention ponds. Finally, provide detailed drawings and specifications for the triple basin located inside the Office and Maintenance Building.
11. Pursuant to paragraph 3.9.13.2 of the Rules, provide a stacking plan of all trucks and vehicles during the Facility's peak AM and PM traffic hours.
12. Pursuant to paragraphs 3.9.13.4 to 3.9.13.7 of the Rules, provide a traffic study in conformance with the requirements of said paragraphs. A traffic study was previously submitted to CDPH for initial review but was not included in the Application.

13. Pursuant to paragraphs 3.9.14.1 and 3.9.14.2 of the Rules, provide backup calculations on the supplied annual liquid and solid waste generation rates. In addition, give an estimate with backup calculations on the amount of refrigerants anticipated to be recovered each month, and provide the make and model of the EPA-certified device that will be used to recover refrigerants at the Facility. The estimates may be based on the amounts currently collected and recovered at the Existing Facility.
14. Pursuant to paragraph 3.9.18 of the Rules, provide a stormwater pollution prevention plan (SWPPP). Although the Facility predominantly drains into detention ponds discharging into the city's combined sewer system, CDPH found in the grading plan that the western perimeter of the property is graded towards the river at 4.5%. CDPH assumes this area is where barge loading may occur. Finally, the Facility sits on a property subject to an NPDES permit, as noted in item 9 above.
15. Pursuant to paragraph 3.9.19.4 of the Rules, provide a noise monitoring plan to continuously record sound pressure levels at the Facility and to collect the data required in 4.6.1 of the Rules.
16. Pursuant to 3.9.20, indicate on a plan drawing the location of all storage tanks listed under Table G-2 of the SPCC Plan. Provide drawings and specifications of the hydraulic oil storage tank area located inside the Office and Maintenance Building.
17. Pursuant to paragraph 3.9.21.1 of the Rules, provide the following information relating to the emissions and air dispersion modeling study ("Air Study"):
 - a. Provide the layout drawings for the ferrous material and non-ferrous material processing systems. These layouts were included in the metals modeling report submitted to IEPA. However, these drawings were both redacted in CDPH's copy of said IEPA report.
 - b. Provide calculation of dust emissions due to vehicle travel over paved and unpaved surfaces.
 - c. The emission rate for the Fines Processing System of .0086 should be in pounds per minute (lbs./min), not pounds per hour (lbs./hr.). In addition, this value was not computed using the dry standard cubic feet (dscf) value. Show that: i) the correct emission rate was used in the dispersion modeling; ii) the loss of accuracy in not using the dscf value in calculating the emission rate out of the Fines Processing System stack is insignificant.
 - d. Describe emission sources near the west PM 10 monitor that may preclude its use as an upwind monitor in determining RAL episodes.
18. Pursuant to 3.10.1.3 of the Rules, provide detailed specifications, including maintenance and calibration requirements, of the radiation detectors depicted in sheet TM-01 of Attachment R. Describe procedures that will be followed upon detection of high radiation levels, including, but not limited to, the identification of source isotopes, notification to regulatory agencies, and the handling or storage of radioactive materials, as necessary.

19. Pursuant to 3.10.2.2 of the Rules, provide detailed calculations estimating the peak daily quantities of material that can be accepted at the Facility, taking into consideration the process flow rates in 3.10.3.1, the staging and storage volumes in 3.9.11.3, truck stacking capacity in 3.9.13.2, the emission limits imposed by IEPA, and other pertinent factors. The estimated material quantities shall be provided on a tons per day basis and include all assumptions used in the calculation.
20. Pursuant to 3.10.2.3 of the Rules, provide documentation that the Facility can determine and record the amounts of material in tons entering and exiting the Facility and the quantities of materials processed at the Facility. Such documentation may include sample reports from the Existing Facility and must show the facility can track all inbound and outbound loads, and generate reports summarizing hourly, daily, weekly, and monthly material deliveries and shipments broken down by material type and by mode of transportation (trucks, peddler vehicles, barges, etc.).
21. Pursuant to 3.10.3.1 of the Rules, demonstrate that the peak capacity determined in item 19 above can process the anticipated peak-season maximum daily quantities. The peak-season maximum daily quantities may be determined based on historical data from the Applicant's Existing Facility.
22. Pursuant to 3.10.2 of the Rules, provide a health and safety plan that includes all job hazards assessment. The health and safety plan and hazards assessment from the Existing Facility may be submitted to satisfy this requirement.
23. Pursuant to 3.10.3 of the Rules, provide a description and results of any OSHA-required worker air and noise exposure sampling for the Facility. Such information from the Existing Facility may be submitted to satisfy this requirement. The CDPH may request new personal monitoring and analysis as part of the permit conditions. Such monitoring plan must be prepared by an appropriate professional under OSHA regulations.
24. Pursuant to 3.10.4.2 and 3.10.4.3 of the Rules, provide a list of all flammable or explosive materials used in the day-to-day operation of the Facility and their amounts. This information may be derived from operations at the Existing Facility. In addition, provide specifications for the explosion-proof containers/cabinets and their locations at the Facility.
25. Pursuant to 3.10.4.4 of the Rules, provide a description of the devices and measures that will be implemented to prevent explosion and damage to the regenerative thermal oxidation (RTO) unit.
26. Pursuant to 3.10.4.5 of the Rules, provide specifications and locations of all fire extinguishers at the Facility.
27. Pursuant to 3.10.4.7 of the Rules, provide specifications and the locations of the thermal infrared detection devices used for monitoring stockpile hotspots. For each designated location, show the spatial extent that is covered by the detector. Provide standard operating procedures on their use, including protocols when a potential hot spot is detected.
28. Pursuant to 3.10.7 of the Rules, provide a vector control plan for the effective prevention and control of rodents, mosquitos, and other Vectors. The vector control plan serviced by a vector control special at the Existing Facility may be provided to satisfy this requirement.

29. Pursuant to 3.10.8.3 of the Rules, provide an operating plan for each vehicle listed in section 3.8 of the Application and the mobile fuel truck listed in Table G-2 of the SPCC Plan. The operating plan shall include the specific use of the vehicle and its location at the Facility, licenses and certifications required, and a schedule of preventive maintenance checks and services (PMCS).
30. Pursuant to 3.10.8.5 of the Rules, provide the process rate or capacity for each vehicle in item 29 above.
31. Pursuant to 3.10.9 of the Rules, provide the waste characterization profile of the shredder fluff currently generated at the Existing Facility. Describe any treatment that may be necessary to render the shredder fluff a non-hazardous waste prior to its shipment offsite. Finally, indicate the disposition of the shredder fluff at the landfill (used as daily cover, disposed of as waste, etc.). All information and documentation of landfill approval must be supported by the waste characterization provided. Any additional sampling and landfill approval for waste generated at the facility must be provided, including any changes in the sample profile, waste manifesting, and disposal criteria.
32. Pursuant to 3.10.9 of the Rules, provide the Fugitive Particulate Operating Program that was submitted to the IEPA. Said operating program must be supplemented as necessary to provide all the information required under 3.10.10.1 through 3.10.10.6 of the Rules. In addition, provide the following additional information:
 - a. The rated effectiveness of the proposed street sweeper at removing fine particulates such as PM10;
 - b. Plans and specifications of the Shaker structure as depicted in the One-Line Diagram, the onsite vehicle movement drawing in Attachment R, and other drawings;
 - c. A plan drawing showing the spatial coverage of each Dust Boss equipment.
 - d. A detailed plan and schedule for patrolling and cleaning adjacent areas for litter and ASR Fiber.
33. Pursuant to 3.10.11 of the Rules, revise the hours of operation, taking into consideration the restrictions imposed under the IEPA construction air permit ID No. 031600SFX ("IEPA Air Permit"). For example, the IEPA Air Permit limited facility vehicle traffic to 14 hours per day on weekdays and 12 hours per day on weekends. These hours conflict with the 24/7 operation proposed in the Application. Other conflicting hours between the IEPA Air Permit and the Application include the non-ferrous system operation hours and barge loading hours.
34. Pursuant to 1-4-2530(I), provide an odor control plan that addresses the potential odors at the Facility. Such plan shall include, but may not be limited to, the following:
 - a. An inventory of odor-emitting activities;
 - b. The location, time, and duration of each odor-emitting activity;

- c. An odor mitigation plan that includes specific administrative and/or engineering controls and best management practices for each odor-emitting activity;
- d. Routine odor inspections around the Facility and nearby adjacent Sensitive Areas; and
- e. Protocols for investigating odors discovered during routine inspections or as reported in an odor complaint.

The CDPH may request additional information based on information submitted in the new application and pertinent public comments received over the public comment period. To expedite permit review, provide backup calculations to all stated values and provide narrative discussions to all attachments explaining in detail what information is provided, where the information is located, and how it satisfies the Rule requirements.

If you have any questions regarding this deficiency letter, please call me at (312) 745-3136.

Sincerely,



Renante Marante
Environmental Engineer III