

Bay Area Air Quality Management District

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**Permit Evaluation
and
Statement of Basis
for
MAJOR FACILITY REVIEW PERMIT**

**for
BFI – The Recyclery and International Disposal Corporation of CA
(Newby Island Landfill)
Facility # A5472 and Facility # A9013**

Facility Address:
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Same

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Title V Statement of Basis

A. Background

The International Disposal Corporation of CA (Facility # A9013) includes the Newby Island Sanitary Landfill (S-2), a Landfill Gas Flare (A-1), and a Non-Retail Gasoline Dispensing Facility (G#9641). In addition to the landfill, BFI also owns and operates a wood waste composting facility known as BFI – The Recyclery (Facility # A5472). Because the landfill and recycling operations are on adjacent properties and under common ownership, BFI has included the recycling operations in their Title V permit application.

The Newby Island Sanitary Landfill is subject to the Operating Permit requirements of Title V of the federal Clean Air Act, Part 70 of Volume 40 of the Code of Federal Regulations (CFR), and BAAQMD Regulation 2, Rule 6, Major Facility Review because it is a designated facility as defined by BAAQMD Regulation 2-6-204. The Emission Guidelines for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart Cc) require the owner or operator of a landfill that is subject to this part and that has a design capacity of greater than or equal to 2.5 million mega grams (Mg) and 2.5 million cubic meters (m³) to obtain an operating permit pursuant to Part 70. As discussed in more detail below in Section C.IV. of this report, this facility is subject to these emission guidelines and meets the designated facility criteria listed in 40 CFR § 60.32c(c).

Major Facility Operating permits (Title V permits) must meet specifications contained in 40 CFR Part 70 as contained in BAAQMD Regulation 2, Rule 6. The permits must contain all applicable requirements (as defined in BAAQMD Regulation 2-6-202), monitoring requirements, recordkeeping requirements, and reporting requirements. The permit holders must submit reports of all monitoring at least every six months and compliance certifications at least every year.

In the Bay Area, state and District requirements are also applicable requirements and are included in the permit. These requirements can be federally enforceable or non-federally enforceable. All applicable requirements are contained in Sections I through VI of the permit.

Each facility in the Bay Area is assigned a facility number that consists of a letter and a 4-digit number. This facility number is also considered to be the identifier for the permit.

B. Facility Description

The International Disposal Corporation of CA (Facility # A9013) includes the Newby Island Sanitary Landfill (S-2), a Landfill Gas Flare (A-1), and a Non-Retail Gasoline Dispensing Facility (G#9641). This facility is owned and operated by Browning - Ferris Industries of California, Inc. (BFI), a subsidiary of Allied Waste Industries, Inc. The Newby Island Sanitary Landfill is an active municipal solid waste disposal site. It occupies approximately 342 acres, of which 313 acres are permitted for disposal. The landfill primarily accepts non-hazardous

household, commercial, agricultural, industrial, construction, and demolition wastes, but also accepts non-friable asbestos, tires, dredged soils, primary sewage sludge at 20-percent solids, secondary sludge at 15-percent solids, and petroleum contaminated soils. The landfill has a maximum design capacity of 50.8 million yd³ (38.8 million m³) and 39.0 million tons (35.4 million Mg) of waste and currently contains approximately 2.18 million tons (1.98 million Mg).

In addition to the landfill, BFI also owns and operates a wood waste composting facility known as BFI – The Recyclery (Facility # A5472). Because the landfill and recycling operations are on adjacent properties and under common ownership, BFI has included the recycling operations in their Title V permit application. BFI - The Recyclery includes a Composting Operation (S-3), a Tub Grinder (S-5), a Tub Grinder Engine (S-6), a Trommel Screen (S-7), a Water Truck (A-3), and Water Sprays (A-7).

As required by various local, state, and federal regulations, the landfill at this site is equipped with an active landfill gas collection system. Landfill gas collection systems are perforated pipes that are buried in the refuse at numerous locations. For active collection systems, the perforated pipes are connected to blowers by solid pipes (referred to as laterals and headers). The blowers maintain a vacuum in the buried refuse and draw landfill gas into the perforated pipes. The blowers then vent this collected landfill gas to control equipment.

Landfill gas produced at the Newby Island Landfill enters one of two gas collection and control systems. The first system located on the northeast/northern perimeter of the site was installed in 1992 and consists of (80) gas collection wells. Gas collected by this system is piped off-site to Gas Recovery Systems (Facility #B1670) to be used for electrical power generation. The second gas collection and control system, located in the southwest portion of the site, was completed in 1998, modified in 2002, and now consists of (43) gas collection wells. Gas collected by this system is combusted on-site at the flare. All gas collection system components from both systems and the flare are included in this Title V permit, the off-site sources associated with the end use of the gas collected by the first gas collection system are included in the Title V permit for Facility # B1670 and referenced in this permit.

C. Permit Content

The legal and factual basis for the permit follows. The permit sections are described in the order that they are presented in the permit.

I. Standard Conditions

This section contains administrative requirements and conditions that apply to all facilities. If the Title IV (Acid Rain) requirements for certain fossil-fuel fired electrical generating facilities or the accidental release (40 CFR § 68) programs apply, the section will contain a standard condition pertaining to these programs. Many of these conditions derive from 40 CFR § 70.6, Permit Content, which dictates certain standard conditions that must be placed in the permit. The language that the District has developed for many of these requirements has been adopted into the BAAQMD Manual of Procedures, Volume II, Part 3, Section 4, and therefore must appear in the permit.

The standard conditions also contain references to BAAQMD Regulation 1 and Regulation 2. These are the District’s General Provisions and Permitting rules.

Condition I.J has been added to clarify that the capacity limits shown in Table II-A are enforceable limits.

II. Equipment

This section of the permit lists all permitted or significant sources. Each source is identified by an S and a number (e.g., S-2).

Permitted sources are those sources that require a BAAQMD operating permit pursuant to BAAQMD Regulation 2-1-302.

Significant sources are those sources that have a potential to emit of more than 2 tons of a “regulated air pollutant,” as defined in BAAQMD Regulation 2-6-222, per year or 400 pounds of a “hazardous air pollutant,” as defined in BAAQMD Regulation 2-6-210, per year.

All abatement (control) devices that control permitted or significant sources are listed. Each abatement device whose primary function is to reduce emissions is identified by an A and a number (e.g., A-1). If a source is also an abatement device, such as when an engine controls VOC emissions, it will be listed in the abatement devices table but will have an “S” number. A abatement device that is also a source (such as a thermal oxidizer that burns fuel) will have an “A” number.

The equipment section is considered to be part of the facility description. It contains information that is necessary for applicability determinations, such as fuel types, contents or sizes of tanks, etc. This information is part of the factual basis of the permit.

Each of the listed sources has previously been issued an authority to construct and/or permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits. These permits are issued in accordance with state law and the District’s regulations. The capacities in the permitted sources table are the maximum allowable capacities for each source, pursuant to Standard Condition I.J and Regulation 2-1-403.

III. Generally Applicable Requirements

This section of the permit lists requirements that generally apply to all sources at a facility including insignificant sources and portable equipment that may not require a District permit. If a generally applicable requirement applies specifically to a source that is permitted or significant, the standard will also appear in Section IV and the monitoring for that requirement will appear in Sections IV and VII of the permit. Parts of this section apply to all facilities (e.g., particulate, architectural coating, odorous substance, and sandblasting standards). In addition, standards that apply to insignificant or unpermitted sources at a facility (e.g., refrigeration units that use more than 50 pounds of an ozone-depleting compound) are placed in this section.

Unpermitted sources are exempt from normal District permits pursuant to an exemption in BAAQMD Regulation 2, Rule 1. They may, however, be specifically described in a Title V permit if they are considered a significant source pursuant to the definition in BAAQMD Regulation 2-6-239. This facility does not have any significant sources that do not have District Permits to Operate.

IV. Source-Specific Applicable Requirements

This section of the permit lists the applicable requirements that apply to permitted or significant sources. These applicable requirements are contained in tables that pertain to one or more sources that have the same requirements. The order of the requirements is:

- District Rules and Regulations
- SIP Rules (if any) listed following the corresponding District regulations. SIP rules are District regulations that have been approved by EPA into the California State Implementation Plan. SIP rules are federally enforceable and a “Y” (yes) indication will appear in the “Federally Enforceable” column. If the SIP rule is the current District rule, separate citation of the SIP rule is not necessary and the “Federally Enforceable” column will have a “Y” for “yes”. If the SIP rule is not the current District rule, the SIP rule or the necessary portions of the SIP rule are cited separately after the District rule. The SIP portions will be federally enforceable; the non-SIP versions will not be federally enforceable, unless EPA has approved them through another program.
- Other District requirements, such as the Manual of Procedures, as appropriate.
- Federal requirements (other than SIP provisions)
- BAAQMD permit conditions. The text of BAAQMD permit conditions is found in Section VI of the permit.
- Federal permit conditions. The text of Federal permit conditions, if any, is found in Section VI of the permit.

Section IV of the permit contains citations to all of the applicable requirements. The text of the requirements is found in the regulations, which are readily available on the District’s or EPA’s websites, or in the permit conditions, which are found in Section VI of the permit. All monitoring requirements are cited in Section IV. Section VII is a cross-reference between the limits and monitoring requirements. A discussion of monitoring is included in Section C.VII of this permit evaluation/statement of basis.

Complex Applicability Determinations

Landfills and landfill gas combustion equipment are subject to BAAQMD Regulation 8, Rule 34. This regulation requires landfills that have more than 1 million tons of refuse in place to collect and control the landfill gas that is generated by waste decomposition and specifies numerous operating, monitoring, and reporting requirements for subject operations. Regulation 8, Rule 34 has required that the landfill at this site be controlled by an active landfill gas collection system and a landfill gas control system since 1994.

Landfills and landfill gas combustion equipment may also be subject to either the federal New Source Performance Standards (NSPS) for Municipal Solid Waste (MSW) Landfills or the Emission Guidelines (EG) for MSW Landfills. The federal NSPS for MSW Landfills (40 CFR Part 60, Subpart WWW) applies to landfills that have had a design capacity modification after May 30, 1991. The EG for MSW Landfills (40 CFR Part 60, Subpart Cc) applies to landfills that have had no design capacity modification since May 30, 1991 but that have accepted waste since November 8, 1987. The Newby Island Landfill had no design capacity modifications since May 30, 1991, but waste was accepted after November 8, 1987. Therefore the EG regulations are applicable to this landfill.

The BAAQMD implemented the EG by amending Regulation 8, Rule 34 on October 6, 1999. Initially, all Bay Area landfills were subject to the Federal Plan for MSW Landfills (40 CFR, Part 62, Subpart GGG) until EPA incorporated the October 1999 amendments to Regulation 8, Rule 34 in to the California State Plan for MSW Landfills (40 CFR §62.1115). On September 20, 2001, EPA amended the California State Plan to include the BAAQMD's October 1999 amendments and amended the Federal Plan to remove Bay Area landfills from the Federal Plan, effective November 19, 2001. Therefore, BAAQMD Regulation 8, Rule 34, as amended on October 6, 1999, is federally enforceable. The October 1999 amendments were adopted into the SIP, effective August 30, 2002.

In accordance with the EG, BAAQMD Regulation 8, Rule 34 requires landfills with a design capacity of more than 2.5 million Mg and more than 2.5 million m³ to be equipped with landfill gas collection control systems. The design capacity of the Newby Island Landfill exceeds these applicability criteria. Subject landfills and the associated collection and control systems are required to meet numerous operating, monitoring, and reporting requirements. These requirements are specified in detail in Section IV of the permit.

Landfill operations and landfill gas combustion devices are also subject to numerous other BAAQMD regulations and permit conditions. All applicable requirements are described in Section IV of the permit.

Facility # A9013 has a Non-Retail Gasoline Dispensing Facility that includes an above ground storage tank and one dispensing nozzle. In addition to BAAQMD and SIP Regulation 8, Rules 5 and 7, this operation is subject to a California Air Resources Board Executive Order (CARB EO) that describes specific equipment standards and operating procedures that must be followed. However, there are no applicable federal requirements. All applicable District and state requirements are described in Section IV of the permit.

The wood waste recycling operations (S-3, S-5, S-6, S-7, A-3, and A-5) are not subject to any federal requirements. These operations are subject to BAAQMD Regulation 6 and BAAQMD Permit Conditions. The S-6 Tub Grinder Engine is also subject to BAAQMD Regulation 9, Rule 1. All applicable District requirements are described in Section IV of the permit.

V. Schedule of Compliance

A schedule of compliance is required in all Title V permits pursuant to BAAQMD Regulation 2-6-409.10, which provides that a major facility review permit shall contain the following information and provisions:

“409.10 A schedule of compliance containing the following elements:

- 10.1 A statement that the facility shall continue to comply with all applicable requirements with which it is currently in compliance;
- 10.2 A statement that the facility shall meet all applicable requirements on a timely basis as requirements become effective during the permit term; and
- 10.3 If the facility is out of compliance with an applicable requirement at the time of issuance, revision, or reopening, the schedule of compliance shall contain a plan by which the facility will achieve compliance. The plan shall contain deadlines for each item in the plan. The schedule of compliance shall also contain a requirement for submission of progress reports by the facility at least every six months. The progress reports shall contain the dates by which each item in the plan was achieved and an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.”

Since the District has not determined that the facility is out of compliance with an applicable requirement, the schedule of compliance for this permit only contains elements 2-6-409.10.1 and 2-6-409.10.2.

The BAAQMD Compliance and Enforcement Division has conducted a review of compliance over the past year and has no records of compliance problems at this facility. The compliance report is contained in Appendix A of this permit evaluation and statement of basis.

VI. Permit Conditions

During the Title V permit development, the District has reviewed the existing permit conditions, deleted the obsolete conditions, and, as appropriate, revised the conditions for clarity and enforceability. Each permit condition is identified with a unique numerical identifier, up to five digits.

While the District has authority to revise the existing permits, and is doing so here concomitantly with the Title V process, it also has authority to supplement the terms of existing permits through the Title V process itself. When necessary to meet Title V requirements, additional monitoring, record keeping, or reporting has been added to the permit.

All changes to existing permit conditions are clearly shown in “strike-out/underline” format in the proposed permit. When the permit is issued, all “strike-out” language will be deleted; all “underline” language will be retained.

The existing permit conditions are derived from previously issued District Authorities to Construct (A/C) or Permits to Operate (P/O). Permit conditions may also be imposed or revised as part of the annual review of the facility by the District pursuant to California Health and Safety Code (H&SC) § 42301(e), through a variance pursuant to H&SC § 42350 et seq., an order of abatement pursuant to H&SC § 42450 et seq., or as an administrative revision initiated by District staff. After issuance of the Title V permit, permit conditions will be revised using the procedures in Regulation 2, Rule 6, Major Facility Review.

The District has reviewed and, where appropriate, revised or added new annual and daily throughput limits on sources to ensure compliance with District rules addressing preconstruction review, Regulation 2-1-301. For a grandfathered source (a source in existence before 1979, which in this case is the landfill) limits are being added to the existing permits pursuant to the authority in Regulation 2-1-403, which provides the District with authority to “impose any permit condition [it] deems reasonably necessary to insure compliance with federal or California law or District regulations.” Creating throughput limits for grandfathered sources is not required by either Part 70 or the District’s MFR rules. However, issuance of the Title V permit is an opportunity for the District to exercise authority under Regulation 2-1-403 by adding conditions to the District operating permit through a parallel process, that is, by revising the P/O concurrently with the Title V permit issuance. The District believes the addition of these throughput limits is authorized under Regulation 2-6-409.2.2, as these limits will help “assure compliance” with the District preconstruction review program.

The applicability of preconstruction review (Regulation 2-1-301) depends on whether there is a “modified source” as defined in District Regulation 2-1-234. Whether there is a modified source depends in part on whether there has been an “increase” in “emission level.” Regulation 2-1-234 defines what will be considered an emissions level increase, and takes a somewhat different approach depending on whether a source has previously been permitted by the District. Sources that were modified or constructed since the District began issuing new source review permits generally will have permits that contain throughput limits, and these limits are reflected in the Title V permit. These limits have previously undergone District review, and are considered to be the legally binding “emission level” for purposes of Regulations 2-1-234.1 and 2-1-234.2. In contrast, for “grandfathered” sources that have not had preconstruction review, an “increase” in “emission level” is addressed in Regulation 2-1-234.3. A grandfathered source is not subject to preconstruction review unless its emission level increases above the highest of: 1) the design capacity of the source, 2) the capacity listed in a permit to operate, or 3) the highest capacity demonstrated prior to March 2000. However, if the throughput capacity of a grandfathered source is limited by upstream or downstream equipment (i.e., is “bottlenecked”), then the relaxing of that limitation (“debottlenecking”) is considered a modification.

In proposing throughput limits for grandfathered sources, the District has described the limits differently based on the factual support in the record. The limit may be a reporting threshold, in which case if the limit is exceeded and not reported, a permit violation has occurred. It may be a firm throughput limit, so that a violation occurs whenever the limit is exceeded. Or, it may be a Regulation 2-1-234.3 modification threshold, in which case exceedence of the limit triggers a requirement to obtain an Authority to Construct. Where the information in the record is indicative of a Regulation 2-1-234.3 threshold, but not definitive in that regard, the limit is structured as a reporting threshold, and as presumptively an emissions limit and a modification threshold (i.e. a presumptive limit). When the information in the record is definitive, the limit is structured as a firm throughput limit and a modification threshold. It would be redundant for a limit to function as both a reporting threshold and a throughput limit, and so the latter precludes the former.

As noted above for presumptive limits, exceedence of the limit is not per se a violation of the permit. *Failure to report an exceedence is a permit violation.* If an exceedence occurs, the

facility has an opportunity to demonstrate that the throughput limit does not reflect the appropriate limit for purposes of Regulation 2-1-234.3. If the facility can demonstrate this, no enforcement action would follow, and the permit would be revised at the next opportunity. It also follows that compliance with these limits is not a “safe harbor” for the facility. If evidence clearly shows that a grandfathered source has undergone a “modification” as defined in Regulation 2-1-234.3, the District would consider that a preconstruction review-triggering event, regardless of compliance with the throughput limit in the Title V permit. There is no Title V “permit shield” associated with throughput limits for grandfathered sources.

Conditions that are obsolete or that have no regulatory basis have been deleted from the permit.

The regulatory basis is listed following each condition. The regulatory basis may be a rule or regulation. The District is also using the following terms for regulatory basis:

- BACT: This term is used for a condition imposed by the APCO to ensure compliance with the Best Available Control Technology in Regulation 2-2-301.
- Cumulative Increase: This term is used for a condition imposed by the APCO that limits a source to the operations described in the permit application pursuant to BAAQMD Regulation 2-1-403.
- Offsets: This term is used for a condition imposed by the APCO to ensure compliance with the use of offsets for the permitting of a source or with the banking of emissions from a source pursuant to Regulation 2, Rules 2 and 4.
- PSD: This term is used for a condition imposed by the APCO to ensure compliance with a Prevention of Significant Deterioration permit pursuant to Regulation 2, Rule 2.
- TRMP: This term is used for a condition imposed by the APCO to ensure compliance with limits that arise from the District’s Toxic Risk Management Policy.

Parameter monitoring has been added for each abatement device. Additional monitoring has been added, where appropriate, to assure compliance with the applicable requirements.

The reasons for the changes to each condition are discussed below.

Condition # 8178

The Regulatory Basis for each part was added to the existing conditions for the Composting Operation S-3 and the following changes were made:

- Part 3: The visible emissions limit of Ringelmann 0.5 was replaced with Ringelmann 1.0 because there is no regulatory basis for Ringelmann 0.5 and it is not an enforceable limit.
- Part 4: This part was added to require the operator of the source to visually observe the operations for visible emissions and correct the problem as necessary. This visual monitoring is to be used as a surrogate for demonstrating ongoing compliance with District Regulations 6-301 and 6-305.
- Part 5 (previously Part 4) The period between allowable “Public Nuisance” episodes (before new permitting is required) was reduced from 12 months to 180 days to coincide with the language of District Regulation 2-1-317 (as it applies to non-permitted sources).

Condition # 10152 (deleted)

Condition # 10152 for the Tub Grinder S-5 and the Trommel Screen S-7 was superseded by Condition # 15050 as a result of actions taken in Permit Application # 17510 regarding the increased usage of S-5. The condition has therefore been deleted. Conditions for the Trommel Screen will be added to the new conditions for the Tub Grinder (i.e. Condition #15050).

Condition # 10423

The District is proposing to replace the existing permit conditions for the landfill with new standardized conditions developed during the Title V permitting process. Exact text changes are identified in the draft MFR Permit. The reasons for the changes to each condition number are discussed further below. The original parts 8 and 9 are restatements of Regulation 8, Rule 34 requirements that do not need to be repeated in permit conditions and have therefore been deleted altogether.

- Part 1: Waste acceptance limits were added to define the capacity of the landfill, which is a grandfathered source. The tons per day limit pertains to regulation of particulate emission from waste transport and disposal. The total cumulative waste disposal limit and the design capacity limit pertain to regulation of VOC emissions from decomposing waste in the landfill. The tons per day limit and the design capacity limit were included in Newby Island's Initial Design Capacity Report and Solid Waste Facility Permit. These limits are proposed as firm throughput limits and modification thresholds, so that any change to these rates constitutes a modification of the landfill, as defined in Regulation 2-1-234.4, and is subject to the Authority to Construct requirements of Regulation 2-1-301. The total cumulative waste disposal limit is based on assumptions regarding compaction density and current cover practices. The correlation between the total cumulative waste disposal limit and emissions is therefore changeable based on these variables. Accordingly, this limit is proposed as a reporting threshold and as a presumptive throughput limit and modification threshold.
- Part 2: The District has been adding contaminated soil handling procedures to any landfills that accept contaminated soil in order to assure compliance with the aeration prohibitions and emission minimization requirements of Regulation 8, Rule 40. The Newby Island Landfill is authorized to accept petroleum contaminated soils. See also the remarks concerning Condition # 14465.
- Part 3: Any on-site handling operations of non-contaminated (low VOC soil) soil are subject to Regulation 8, Rule 2. Due to the fugitive nature of the emissions that occur due to handling low VOC soil, the source testing procedures typically used to determine compliance with the 300 ppmv total carbon limit are not appropriate. The calculation procedures in this part were added in order to provide a method for demonstrating compliance with the alternative Regulation 8-2-301 emission limit of 15 pounds per day of total carbon.
- Part 4: This part requires the use of water and/or dust suppressants as necessary to prevent visible particulate emissions. It describes standard operating practices for minimizing

fugitive dust emissions and is necessary to assure compliance with Regulation 6-301. (This part replaces the original parts 1 and 2.)

- Part 5: Text was added to clarify that this landfill is required to control all collected gas and is prohibited from intentionally venting collected landfill gas. (This part replaces the original part 4.)
- Part 6: The text of this condition describes the current and proposed components for the gas collection system. This part also describes the types of collection system changes that require prior District approval in the form of an Authority to Construct.
- Part 7: The text of this condition states the current standard continuous operation requirement for landfill gas collection systems. (This part replaces the original part 5.)
- Part 8: This part was added to identify the heat input limits for the A-1 Landfill Gas Flare, which define the maximum rated capacity for this equipment. These limits were derived from the information reported in Permit Application #16259. These heat input limits will ensure that emissions will not increase as a result of a replacement or modification that increases the capacity of a permitted source without a preconstruction permit review.
- Part 9: The District requires a minimum temperature of no less than 1400 °F in order to ensure adequate destruction of toxic compounds. The minimum temperature limit (with no averaging time) was changed to a minimum temperature averaged over any three hour period for consistency with the federal Emission Guidelines for MSW Landfills. This part also incorporates the EG procedure for establishing a minimum temperature limit based on source test results. A source test on A-1 was conducted in October 2002 and demonstrated compliance with the Regulation 8-35-301.3 limits. During this source test, the average combustion zone temperature was 1599 °F. Using the procedure identified in this part, the minimum combustion zone temperature is now 1549 °F. (This part replaces the original part 7.)
- Part 10: All landfill gas combustion equipment is subject to the Regulation 9-1-302 limit of no more than 300 ppmv of SO₂ in the exhaust (dry basis). Under theoretical combustion conditions, 300 ppmv of SO₂ in the exhaust is equal to 1300 ppmv of H₂S in landfill gas. This part explains that a landfill gas H₂S limit will be used as a surrogate for demonstrating compliance with the BAAQMD Regulation 9-1-302 sulfur dioxide limit. Although the sulfur content of landfill gas can vary, District analyses of Bay Area landfill gas have shown no instances where the TRS concentration (expressed as H₂S) has exceeded 400 ppmv. Therefore, quarterly monitoring of the sulfur content in the landfill gas is appropriate for demonstrating compliance with the landfill gas H₂S limit.
- Part 11: The annual source test required by Regulation 8-34-412 is described in more detail in Part 11.

Part 12: An annual landfill gas characterization test was added to measure the amounts of specific toxic air contaminants that may be emitted from the site. This test is also required by Regulation 8-34-412.

Part 13: Record keeping requirements were added to ensure compliance with applicable regulations and permit limits. (The record keeping requirements from the original parts 3 and 6 are stated in part 13a and 13i, respectively.)

Part 14: The MSW Landfill NESHAP (40 CFR, Part 63, Subpart AAAA) that was adopted by EPA on 1/16/03 requires landfill operators to submit semi-annual reports instead of the annual report required by Regulation 8-34-411. The effective date for this new reporting frequency is January 16, 2004. This permit condition was added in order to establish the semi-annual reporting frequency and to synchronize the reporting periods and submittal dates for this report with the semi-annual MFR monitoring reports that will be required by Section I.F. of the MFR Permit.

Condition # 14098

No changes were made to this condition, which is shared by numerous gasoline dispensing facilities.

Condition # 14465 (deleted)

As previously discussed, the Contaminated Soil Cover Operation S-3 has been merged into the landfill source S-2. As a result, S-3 no longer exists as a separate source and permit conditions regarding the handling of contaminated soil have been added to S-2 (Condition # 10423, Part 2). Therefore, Condition # 14465 was deleted.

Condition # 15050

Because of their similar type of emissions, permit conditions for the Trommel Screen S-7 have been added to those of the Tub Grinder S-5. Likewise, because of the dissimilar types of emissions, conditions for the Tub Grinder Engine S-6 have been deleted from Condition # 15050 and will be assigned a separated condition number. In addition, the regulatory basis for each part was added and the following changes were made:

Part 4: The visible emissions limit of Ringelmann 0.5 was replaced with Ringelmann 1.0 because there is no regulatory basis for Ringelmann 0.5 and it is not an enforceable limit.

Part 5: This part was added to require the operator of these sources to visually observe the operations for visible emissions and correct the problem as necessary. This visual monitoring is to be used as a surrogate for demonstrating ongoing compliance with District Regulations 6-301 and 6-305.

Part 6: (previously Part 4) The period between allowable “Public Nuisance” episodes (before new permitting is required) was reduced from 12 months to 180 days to coincide with the language of District Regulation 2-1-317 (as it applies to non-permitted sources).

Condition # 19498

This condition includes the deleted portion of Condition # 15050 that pertained to the Tub Grinder Engine (S-6). The regulatory basis for each part was added and the following changes have been made:

Part 5: This requirement was part 7 of the original Tub Grinder Engine conditions. Using low sulfur fuel (<0.05% S) will ensure compliance with a sulfur dioxide emission limit of 0.1 g/bhp-hour. Therefore the sulfur dioxide emission limit is not necessary and was deleted.

Part 6: Initial source test requirement has been replaced with an annual source test requirement to periodically demonstrate compliance with the established POC, NO_x, and CO emissions limits.

Part 8: The Ringelmann 1.0 emission limit for S-6 has been replaced with a visual observation requirement for persistent smoke from the engine. This visual monitoring is to be used as a surrogate for demonstrating ongoing compliance with District Regulations 6-301 and 6-305.

VII. Applicable Limits and Compliance Monitoring Requirements

This section of the permit is a summary of numerical limits and related monitoring requirements for each source. The summary includes a citation for each monitoring requirement, frequency of monitoring, and type of monitoring. The applicable requirements for monitoring are completely contained in Sections IV, Source-Specific Applicable Requirements, and VI, Permit Conditions, of the permit.

The tables below contain only the limits for which there is no monitoring or inadequate monitoring in the applicable requirements. The District has examined the monitoring for other limits and has determined that monitoring is adequate to provide a reasonable assurance of compliance. Calculations for potential to emit will be provided when no monitoring is proposed due to the size of a source.

Monitoring decisions are typically the result of a balancing of several different factors including: 1) the likelihood of a violation given the characteristics of normal operation, 2) the degree of variability in the operation and in the control device, if there is one, 3) the potential severity of impact of an undetected violation, 4) the technical feasibility and probative value of indicator monitoring, 5) the economic feasibility of indicator monitoring, and 6) some other factor, such as a different regulatory restriction applicable to the same operation, that also provides some assurance of compliance with the limit in question.

These factors are the same as those historically applied by the District in developing monitoring for applicable requirements. It follows that, although Title V calls for a re-examination of all monitoring, there is a presumption that these factors have been appropriately balanced and incorporated in the District's prior rule development and/or permit issuance. When a rule or permit requirement has historically had no monitoring associated with it, no monitoring may still be appropriate in the Title V permit if, for instance, there is little likelihood of a violation. Compliance behavior and associated costs of compliance are determined in part by the frequency and nature of associated monitoring requirements. As a result, the District will generally revise

the nature or frequency of monitoring only when it can support a conclusion that existing monitoring is inadequate.

NO_x Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S-6 Tub Grinder Engine (Facility # A5472)	BAAQMD Condition # 19498, Part 3	≤ 5.3 g/bhp-hr of NO _x , calculated as NO ₂	Annual Source Test

NO_x Discussion:

Annual source testing is a standard method of determining compliance with NO_x emission limits on IC engines.

CO Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S-6 Tub Grinder Engine (Facility # A5472)	BAAQMD Condition # 19498, Part 4	≤ 3.0 g/bhp-hr of CO	Annual Source Test

CO Discussion:

Annual source testing is a standard method of determining compliance with CO emission limits on IC engines.

SO₂ Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S-6 Tub Grinder Engine (Facility # A5472)	BAAQMD 9-1-301	Property Line Ground Level SO ₂ Limits: ≤ 0.5 ppm for 3 minutes and ≤ 0.25 ppm for 60 min. and ≤ 0.05 ppm for 24 hours	None
A-1 Landfill Gas Flare (Facility # A9013)	BAAQMD 9-1-301	Property Line Ground Level Limits: ≤ 0.5 ppm for 3 minutes and ≤ 0.25 ppm for 60 min. and ≤ 0.05 ppm for 24 hours	None
A-1 Landfill Gas Flare (Facility # A9013)	BAAQMD 9-1-302	300 ppmv (dry)	Quarterly Sulfur Analysis of Landfill Gas
S-6 Tub Grinder Engine (Facility # A5472)	BAAQMD 9-1-304	Fuel Sulfur Content Limit: ≤ 0.5% sulfur by weight	Records
S-6 Tub Grinder Engine (Facility # A5472)	BAAQMD Condition # 19498, Part 5	Fuel Sulfur Content Limit: ≤ 0.05% sulfur by weight	Records
S-2 Newby Island Sanitary Landfill with Gas Collection System (Facility # A9013)	BAAQMD Condition # 10423, Part 10	Landfill Gas Sulfur Content Limit: ≤ 1300 ppmv of TRS as H ₂ S	Quarterly Sulfur Analysis of Landfill Gas

SO₂ Discussion:

Maximum allowable SO₂ emissions from S-6 Tub Grinder Engine are 0.34 tons/year. Maximum allowable emissions from the A-1 Landfill Gas Flare are 147.03 tons/year of SO₂, based on the maximum allowable landfill gas sulfur content of 1300 ppmv of TRS and the flare capacity of 2600 scfm of landfill gas. However, District source tests indicated that the concentration of TRS in typical Bay Area landfill gas is no more than 400 ppmv of TRS (less than a third of the allowable emission rate). Therefore, maximum potential emissions from A-1 are only 45.24 tons/year of SO₂. A site-specific landfill gas sample collected in 1998 found the average concentration of TRS in the Newby Island landfill gas to be 64.3 ppmv. At this concentration, maximum actual emissions from A-1 are only 7.3 tons/year of SO₂ and are not substantial.

BAAQMD Regulation 9-1-301: As discussed below for BAAQMD Regulation 9-1-302 and 9-1-304, this facility will be subject to federally enforceable limits, which will ensure compliance with the BAAQMD Regulation 9-1-302 gas stream emission limit of 300 ppmv of SO₂ in the flare exhaust and with the BAAQMD Regulation 9-1-304 fuel sulfur content limit of 0.5% sulfur by weight. Sources complying with the BAAQMD Regulation 9-1-302 or 9-1-304 limits are not expected to exceed the ground level concentration limits listed in BAAQMD Regulation 9-1-301. Therefore, monitoring for ground level SO₂ concentrations in addition to the proposed landfill gas monitoring and record keeping requirements would not be appropriate.

BAAQMD Regulation 9-1-302: This facility will be subject to a federally enforceable limit of 1300 ppmv TRS (measured as H₂S) in the landfill gas (BAAQMD Condition # 10423, Part 10). As shown in the calculation below, this limit will ensure compliance with the BAAQMD Regulation 9-1-302 emission limit of 300 ppmv of SO₂ in the flare exhaust because the air required for combustion dilutes the concentration of sulfur in the flue gas compared to the concentration of sulfur in the landfill gas.

$$\begin{aligned} \text{SO}_2 &= (1,300 \text{ lb-mole S}/10^6 \text{ lb-mole LFG}) * (1 \text{ lb-mole SO}_2/1 \text{ lb-mole S}) * (1 \text{ lb-mol} \\ &\quad \text{LFG}/4.3959 \text{ lb-mol flue gas @ 0\% O}_2) * (10^6 \text{ lb-mol flue gas/MM lb-mol flue gas}) \\ &= 296 \text{ PPM of SO}_2 \text{ in flue gas @ 0\% O}_2, \text{ dry basis} \end{aligned}$$

Staff has proposed permit conditions that require the landfill gas to be monitored for total reduced sulfur content, measured as H₂S, (on a quarterly basis) to ensure compliance with the landfill gas concentration limit of 1300 ppmv of TRS. This monitoring will also demonstrate compliance with the Regulation 9-1-302 limit.

BAAQMD Regulation 9-1-304: In accordance with BAAQMD Condition # 19498, Part 5, this facility is required to maintain records of vendor certified sulfur content for all fuels burned in the S-6 Tub Grinder Engine. The use of vendor certification is a standard method of monitoring for compliance with a liquid fuel sulfur content limit.

BAAQMD Condition # 19498, Part 5: In accordance with BAAQMD Condition # 19498, Part 5, this facility is required to maintain records of vendor certified sulfur content for all fuels burned in the S-6 Tub Grinder Engine. The use of vendor certification is a standard method of monitoring for compliance with a liquid fuel sulfur content limit.

BAAQMD Condition # 10423, Part 10: In accordance with BAAQMD Condition # 10423, Part 10, this facility will be required to monitor for TRS content (measured as H₂S) in the landfill gas on a quarterly basis using a draeger tube. The use of a draeger tube is a standard method of monitoring for TRS content in landfill gas. District analyses have not found any Bay Area landfill gas containing more than 400 ppmv of TRS (less than a third of the allowable emission rate). One site-specific test indicated that the actual concentration of TRS in Newby Island landfill gas was 64.3 ppmv (less than 5% of the allowable emission rate). Since the actual landfill gas sulfur content is expected to be much lower than the limit, quarterly monitoring is sufficient to demonstrate compliance with the landfill gas sulfur content limit.

PM Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S-2 Newby Island Sanitary Landfill with Gas Collection System (Facility # A9013)	BAAQMD 6-301	Ringelmann 1.0	Records of all site watering and road cleaning events
S-3 Composting Operations (Facility # A5472)	BAAQMD 6-301	Ringelmann 1.0	Visual observation of source during operation
S-5 Tub Grinder (Facility # A5472)	BAAQMD 6-301	Ringelmann 1.0	Visual observation of source during operation
S-6 Tub Grinder Engine (Facility # A5472)	BAAQMD 6-301	Ringelmann 1.0	Visual observation of source during operation
S-7 Trommel Screen (Facility # A5472)	BAAQMD 6-301	Ringelmann 1.0	Visual observation of source during operation
A-1 Landfill Gas Flare (Facility # A9013)	BAAQMD 6-301	Ringelmann 1.0	None
S-6 Tub Grinder Engine (Facility # A5472)	BAAQMD 6-310	≤ 0.15 grains/dscf	None
A-1 Landfill Gas Flare (Facility # A9013)	BAAQMD 6-310	≤ 0.15 grains/dscf	None
S-5 Tub Grinder (Facility # A5472)	BAAQMD 6-311	40 pounds/hour, for Process Weight Rate (P) ≥ 57,320 pounds/hour	None
S-7 Trommel Screen (Facility # A5472)	BAAQMD 6-311	40 pounds/hour, for Process Weight Rate (P) ≥ 57,320 pounds/hour	None

PM Discussion:

BAAQMD Regulation 6-301 for S-2 Landfill: The active filling operations and associated vehicle traffic can generate significant particulate emissions. Presently this facility has no means of demonstrating compliance with the Regulation 6-301, which limits visible emissions to no darker than 1.0 on the Ringelmann Chart (except for periods or aggregate periods less than 3 minutes in any hour). Additional monitoring is required pursuant to Part 70 of the Clean Air Act. Typically, landfills maintain compliance with Regulation 6-301 by employing a dust mitigation program and using visual monitoring by site operators to ensure that dust mitigation measures are adequate. Dust mitigation measures include the application of water and/or dust suppressants on unpaved roads, fill areas, stockpiles, and other dust prone operations and sweeping, watering, or other cleaning measures on paved roads and parking areas. The frequency of watering and sweeping schedules varies from several water applications/day for dry days to no watering or sweeping on rainy days. Newby Island’s watering requirements are specified in Condition # 10423, Part 4 (proposed). The District is proposing to add record keeping requirements of all water and/or dust suppressant applications and road cleaning activities (Condition # 10423, Part

13e), in order to demonstrate compliance with the Regulation 6-301. District inspectors will observe the landfill operations on dry days to ensure that the dust mitigation measures in place are adequate to maintain compliance with the Ringelmann 1.0 limit.

BAAQMD Regulation 6-301 for S-3, S-5, S-6, and S-7: Observing a source during operation is a standard method of monitoring for visible emissions. The Permit Holder is required to take all steps necessary to prevent visible emissions from each of these sources including shutting down the source if necessary. Since particulate emissions are visible before a Ringelmann 1.0 limit would be exceeded, these steps should prevent the exceedance of the Ringelmann 1.0 limit. From Permit Applications # 11122 and # 17510, the total maximum potential emissions from these four sources are 13.3 tons/year of PM₁₀ and are not substantial.

BAAQMD Regulation 6-301 for A-1 Landfill Gas Flare: Visible particulate emissions are normally not associated with combustion of gaseous fuels, such as natural gas or landfill gas. The AP-42 PM emission factor for an enclosed ground flare burning landfill gas is 0.0171 pounds/MM BTU. Therefore, the maximum potential emissions from the A-1 Flare (rated capacity 71 MM BTU/hour) are approximately 5.3 tons/year of PM₁₀. Since particulate emissions are not significant and violations of Ringelmann 1.0 limit are not expected, periodic monitoring for the Ringelmann limit would not be appropriate for this flare.

BAAQMD Regulation 6-310 for S-6 Tub Grinder Engine: BAAQMD Regulation 6-310 limits filterable particulate (FP) emissions from any source to 0.15 grains per dry standard cubic foot (gr/dscf) of exhaust volume. The PM₁₀ emission factor from EPA AP-42 Table 3.3-2 “Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines” is 0.31 lb/MMBTU. Assuming a typical diesel engine exhaust gas concentration of 15% excess oxygen, the Regulation 6-310 limit can be compared to the AP-42 PM₁₀ emission factor as follows:

From 40 CFR 60, Appendix A, Method 19, Table 19-1-F, the oxygen-based, F Factor (dry) for distillate oils is 9,190 dscf/MMBTU (for stoichiometric combustion or 0% oxygen in the exhaust). At a typical exhaust stream oxygen content of 15% oxygen, this factor becomes:

$$9,190 * (20.9 - 0) / (20.9 - 15) = 32,554 \text{ dscf/MMBTU.}$$

The conversion of the AP-42 factor from lb/MMBTU to gr/dscf @ 15% O₂ is then:

$$(0.31 \text{ lb/MMBTU}) / (32,554 \text{ dscf/MMBTU}) * (7000 \text{ gr/lb}) = 0.067 \text{ gr/dscf @ 15\% O}_2$$

If it is assumed that the AP-42 PM₁₀ emission factor is a conservative estimate of the actual PM emissions from the Tub Grinder Engine S-6, the emissions from S-6 are less than half of the converted Regulation 6-310 limit. Therefore, the addition of periodic monitoring to demonstrate compliance with Regulation 6-310 is not recommended.

BAAQMD Regulation 6-310 for A-1 Landfill Gas Flare: Regulation 6-310 limits filterable particulate (FP) emissions from any source to 0.15 grains per dry standard cubic foot (gr/dscf) of exhaust volume. Using the AP-42 emission factor for landfill gas combustion in a flare (0.0171 pounds PM₁₀/MM BTU) and assuming the landfill gas contains up to 55% methane, the maximum PM₁₀ emission rate from A-1 is:

$$(0.0171 \text{ lb PM}_{10} / \text{MM BTU}) * (7000 \text{ gr/lb}) * (1 \text{ MM BTU} / 10^6 \text{ BTU}) * (547 \text{ BTU/ft}^3 \text{ LFG}) / (5.1506 \text{ ft}^3 \text{ flue gas, dry, 0\% O}_2 / \text{ft}^3 \text{ LFG}) = 0.012 \text{ gr/dscf @ 0\% O}_2$$

The Regulation 6-310 grain-loading limit (0.15 gr/dscf) is far above any expected PM emissions from the flare. It would therefore not be appropriate to add periodic monitoring for this standard.

BAAQMD Regulation 6-311 for S-5 Tub Grinder and S-7 Trommel Screen: This regulation limits mass emissions on a sliding scale based on the process weight rate. Since it would be virtually impossible to meaningfully monitor compliance with these limits due to variable operation rates and the fugitive nature of the particulate emissions, emission calculations will be used to demonstrate ongoing compliance with this regulation using assumptions about material throughput and emission rates.

For the S-5 Tub Grinder, BAAQMD has accepted an unabated particulate emission factor of 0.024 pounds/ton (from AP-42 “log debarking”) for wood chippers and tub grinders. The S-5 Tub Grinder has a maximum wood waste capacity of 80 tons/hour, resulting in a maximum unabated particulate emission rate of 1.92 pounds/hour. At a process weight rate of 80 tons per hour, Regulation 6-311 limits emissions to 40 pounds/hour (maximum allowable emission rate for any operation processing more than 57,320 pounds/hour of material). The maximum allowable emission rate is more than 20 times higher than the expected unabated emission rate. The same holds true for any process weight rate at which S-5 may be operating. Therefore, no monitoring is recommended for this standard.

The S-7 Trommel Screen rotates yard waste and chipped wood in a drum shaped screen to remove dirt and small debris. The following continuous drop material handling equation from AP-42 Chapter 13.2.4 “Aggregate Handling And Storage Piles” may be useful in estimating particulate emissions from trommel screens because of the similarities of the operations:

$$E = k(0.0032) \times \frac{(U/5)^{1.3}}{(M/2)^{1.4}} \quad (\text{lb/ton})$$

where:

E = emission factor (lb/ton)

k = particle size multiplier (dimensionless)

U = mean wind speed (miles per hour)

M = material moisture content (%)

For the S-7 Trommel Screen, the following variables will be used:

k = 0.74 (to include all particulate < 30 microns in diameter)

U = 15 mph (conservative estimate at the upper boundary of the equation limit)

M = 2 % (midrange estimate)

The emission factor is then estimated to be 0.01 lb/ton. Therefore, the highest expected emissions from the S-7 Trommel Screen is as follows:

$$\text{S-7: } (30 \text{ tons/hr})(0.01 \text{ lb/ton}) = 0.3 \text{ lb/hr}$$

The maximum capacity emission rate is well below the maximum allowable Regulation 6-311 rate of 40 pounds/hour. Furthermore, emissions from S-7 will be well below the Regulation

6-311 allowable emission rate at any process weight rate. Therefore, no monitoring is recommended for this standard.

Organic Compound Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S-2 Newby Island Sanitary Landfill with Gas Collection System (Facility # A9013)	BAAQMD 8-2-301	15 pounds/day or 300 ppm, dry basis (applies only to aeration of or use as cover soil of soil containing < 50 ppmw of volatile organic compounds)	Records

Organic Compound Discussion:

BAAQMD Regulation 8-2-301: The on-site handling operations of non-contaminated (low VOC soil) soil at the S-2 Landfill are subject to Regulation 8, Rule 2, Section 301. Due to the fugitive nature of the emissions that occur due to handling low VOC soil, the source testing procedures typically used to determine compliance with the 300 ppmv total carbon limit are not appropriate. Therefore, calculation procedures were added in Condition # 10423, Part 3, in order to provide a method for demonstrating compliance with the alternative Regulation 8-2-301 emission limit of 15 pounds per day of total carbon. Record keeping requirements were added to Condition # 10423, Part 13d to ensure compliance with these requirements.

H₂S Sources

S# & Description	Emission Limit Citation	Emission Limit (Not Federally Enforceable)	Monitoring
S-2 Newby Island Sanitary Landfill with Gas Collection System (Facility # A9013)	BAAQMD 9-2-301	Property line ground level limits: ≤ 0.06 ppm Averaged over 3 minutes and ≤ 0.03 ppm Averaged over 60 minutes	None
A-1 Landfill Gas Flare (Facility # A9013)	BAAQMD 9-2-301	Property line ground level limits: ≤ 0.06 ppm Averaged over 3 minutes and ≤ 0.03 ppm Averaged over 60 minutes	None

Hydrogen Sulfide (H₂S) Discussion:

BAAQMD Regulation 9-2-301: Hydrogen sulfide can be detected by its odor at concentrations as low as 0.0005 ppmv and is generally identified by its characteristic rotten egg smell a concentration of 0.005 ppmv or less. Therefore, H₂S emissions are typically discovered by smell well before the concentration approaches the lowest Regulation 9-2-301 emission limit of 0.03 ppmv. The District rarely receives complaints about hydrogen sulfide odors from Bay Area landfills and has never received any complaints about hydrogen sulfide odors from this facility. Since H₂S odors have not been detected at this facility, the concentration of H₂S at the property

line is expected to be well below the Regulation 9-2-301 limits. Monitoring for ground level H₂S concentrations would not be appropriate when no H₂S odor problem exists.

Other Limits

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
A-1 Landfill Gas Flare (Facility # A9013)	BAAQMD Condition # 10423, Part 8	$\leq 1,704$ MM BTU per day and $\leq 621,960$ MM BTU per year	Gas Flow Meter and Records

Other Limits Discussion:

The use of a gas flow meter and records is a standard method for monitoring heat input limits at flares and other combustion devices.

VIII. Test Methods

This section of the permit lists test methods that are associated with standards in District or other rules. It is included only for reference. In most cases, the test methods in the rules are source test methods that can be used to determine compliance but are not required on an ongoing basis. They are not applicable requirements.

If a rule or permit condition requires ongoing testing, the requirement will also appear in Section VI of the permit.

IX. Permit Shield

The District rules allow two types of permit shields. The permit shield types are defined as follows: (1) A provision in an MFR permit explaining that specific federally enforceable regulations and standards are not applicable to a source or group of sources, or (2) A provision in an MFR permit explaining that specific federally enforceable applicable requirements for monitoring, recordkeeping and/or reporting are subsumed because other applicable requirements for monitoring, recordkeeping, and reporting in the permit will assure compliance with all emission limits.

The second type of permit shield is allowed by EPA's White Paper 2 for Improved Implementation of the Part 70 Operating Permits Program. The District uses the second type of permit shield for all streamlining of monitoring, recordkeeping, and reporting requirements in Title V permits. The District's program does not allow other types of streamlining in Title V permits.

This facility has no permit shields. This permit has no streamlining. The applicant did not request any permit shields or streamlining.

D. Alternate Operating Scenarios

No alternate operating scenario has been requested for this facility.

E. Compliance Status

A July 31, 2002 office memorandum, from the Director of Compliance and Enforcement to the Director of Permit Services, presents a review of the compliance record of International Disposal Corporation of California (Site #: A9013). The Compliance and Enforcement Division staff has reviewed the records for the facility for the period between 7/1/01 through 6/30/02. This review was initiated as part of the District evaluation of an application by Browning-Ferris Industries of California, Inc. for a Title V permit. During the review period:

- There were no Notices of Violation issued during this review period.
- The District did not receive any complaints.
- The facility is not operating under a Variance or an Order for Abatement from the District's Hearing Board.
- There were no monitor excesses or equipment breakdowns reported or documented by District staff.

The owner certified that all equipment was operating in compliance on April 6, 2001. No non-compliance issues have been identified to date.

F. Differences between the Application and the Proposed Permit

The Title V permit application was submitted on April 6, 2001. This application is the basis for the proposed Title V permit. Differences between the application and the proposed permit include the following:

1. The Non-Retail Gasoline Dispensing Facility identified as G# 9641 was assigned a source number (S-4) at Facility # A9013.
2. In accordance with District permitting practice, the Contaminated Soil Cover Operation listed as S-3 in the Title V permit application has been merged into the landfill source S-2. As a result, S-3 no longer exists as a separate source and permit conditions regarding the handling of contaminated soil have been added to S-2.
3. Throughput limits (identified by a basis of Regulation 2-1-301) have been added as necessary to all sources with no existing throughput or emission limits.

Permit Evaluation and Statement of Basis: Facility # A5472, BFI – The Recyclery and Facility # A9013, International Disposal Corporation of CA, 1601 Dixon Landing Rd, Milpitas, CA 95035

4. In their application, the Newby Island Landfill/Recyclery identified the applicable requirements for their facility in very general terms. The District has specifically identified the applicable requirements for this facility, including any requirements that were adopted after the Title V permit application was submitted.

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Permit Evaluation and Statement of Basis: Facility # A5472, BFI – The Recyclery and Facility # A9013, International Disposal Corporation of CA, 1601 Dixon Landing Rd, Milpitas, CA 95035

APPENDIX A
BAAQMD COMPLIANCE REPORT

APPENDIX B
GLOSSARY

ACT

Federal Clean Air Act

APCO

Air Pollution Control Officer: Head of Bay Area Air Quality Management District

ARB

Air Resources Board

BAAQMD

Bay Area Air Quality Management District

BACT

Best Available Control Technology

Basis

The underlying authority which allows the District to impose requirements.

BFI

Browning Ferris Industries

CA

California

CAA

The federal Clean Air Act

CAAQS

California Ambient Air Quality Standards

CAPCOA

California Air Pollution Control Officers Association

CARB

California Air Resources Board

CEQA

California Environmental Quality Act

CFR

The Code of Federal Regulations. 40 CFR contains the implementing regulations for federal environmental statutes such as the Clean Air Act. Parts 50-99 of 40 CFR contain the requirements for air pollution programs.

CH₄ or CH₄

Methane

CO

Carbon Monoxide

CT

Combustion Zone Temperature

Cumulative Increase

The sum of permitted emissions from each new or modified source since a specified date pursuant to BAAQMD Rule 2-1-403, Permit Conditions (as amended by the District Board on 7/17/91) and SIP Rule 2-1-403, Permit Conditions (as approved by EPA on 6/23/95). Used to determine whether threshold-based requirements are triggered.

District

The Bay Area Air Quality Management District

EG

Emission Guidelines

EO

Executive Order

EPA

The federal Environmental Protection Agency.

Excluded

Not subject to any District regulations.

Federally Enforceable, FE

All limitations and conditions which are enforceable by the Administrator of the EPA including those requirements developed pursuant to 40 CFR Part 51, subpart I (NSR), Part 52.21 (PSD), Part 60 (NSPS), Part 61 (NESHAPs), Part 63 (MACT), and Part 72 (Permits Regulation, Acid Rain), including limitations and conditions contained in operating permits issued under an EPA-approved program that has been incorporated into the SIP.

FP

Filterable Particulate as measured by BAAQMD Method ST-15, Particulate.

H₂S or H₂S

Hydrogen Sulfide

HAP

Hazardous Air Pollutant. Any pollutant listed pursuant to Section 112(b) of the Act. Also refers to the program mandated by Title I, Section 112, of the Act and implemented by 40 CFR Part 63.

HHV

Higher Heating Value. The quantity of heat evolved as determined by a calorimeter where the combustion products are cooled to 60F and all water vapor is condensed to liquid.

LFG

Landfill gas

Major Facility

A facility with potential emissions of: (1) at least 100 tons per year of regulated air pollutants, (2) at least 10 tons per year of any single hazardous air pollutant, and/or (3) at least 25 tons per year of any combination of hazardous air pollutants, or such lesser quantity of hazardous air pollutants as determined by the EPA administrator.

MAX or Max.

Maximum

MFR

Major Facility Review. The District's term for the federal operating permit program mandated by Title V of the Federal Clean Air Act and implemented by District Regulation 2, Rule 6.

MIN or Min.

Minimum

MOP

The District's Manual of Procedures.

MSW

Municipal solid waste

MW

Molecular weight

N2 or N₂

Nitrogen

NA

Not Applicable

NAAQS

National Ambient Air Quality Standards

NESHAPS

National Emission Standards for Hazardous Air Pollutants. See in 40 CFR Parts 61 and 63.

NMHC

Non-methane Hydrocarbons (Same as NMOC)

NMOC

Non-methane Organic Compounds (Same as NMHC)

NO_x or NO_x

Oxides of nitrogen.

NSPS

Standards of Performance for New Stationary Sources. Federal standards for emissions from new stationary sources. Mandated by Title I, Section 111 of the Federal Clean Air Act, and implemented by 40 CFR Part 60 and District Regulation 10.

NSR

New Source Review. A federal program for pre-construction review and permitting of new and modified sources of pollutants for which criteria have been established in accordance with Section 108 of the Federal Clean Air Act. Mandated by Title I of the Federal Clean Air Act and implemented by 40 CFR Parts 51 and 52 and District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

O₂ or O₂

Oxygen

Offset Requirement

A New Source Review requirement to provide federally enforceable emission offsets for the emissions from a new or modified source. Applies to emissions of POC, NO_x, PM₁₀, and SO₂.

Phase II Acid Rain Facility

A facility that generates electricity for sale through fossil-fuel combustion and is not exempted by 40 CFR 72 from Titles IV and V of the Clean Air Act.

POC

Precursor Organic Compounds

PM

Particulate Matter

PM₁₀ or PM₁₀

Particulate matter with aerodynamic equivalent diameter of less than or equal to 10 microns

PSD

Prevention of Significant Deterioration. A federal program for permitting new and modified sources of those air pollutants for which the District is classified "attainment" of the National Air Ambient Quality Standards. Mandated by Title I of the Act and implemented by both 40 CFR Part 52 and District Regulation 2, Rule 2.

S

Sulfur

SIP

State Implementation Plan. State and District programs and regulations approved by EPA and developed in order to attain the National Air Ambient Quality Standards. Mandated by Title I of the Act.

SO₂ or SO₂

Sulfur dioxide

SSM

Startup, Shutdown, or Malfunction

SSM Plan

A plan, which states the procedures that will be followed during a startup, shutdown, or malfunction, that is prepared in accordance with the general NESHAP provisions (40 CFR Part 63, Subpart A) and maintained on site at the facility.

THC

Total Hydrocarbons (NMHC + Methane)

Title V

Title V of the federal Clean Air Act. Requires a federally enforceable operating permit program for major and certain other facilities.

TOC

Total Organic Compounds (NMOC + Methane, Same as THC)

TPH

Total Petroleum Hydrocarbons

TRMP

Toxic Risk Management Policy

TRS

Total Reduced Sulfur

TSP

Total Suspended Particulate

VOC

Volatile Organic Compounds

Symbols:

<	=	less than
>	=	greater than
≤	=	less than or equal to
≥	=	greater than or equal to

Units of Measure:

bhp	=	brake-horsepower
btu	=	British Thermal Unit
BTU	=	British Thermal Unit
°C	=	degrees Centigrade
cfm	=	cubic feet per minute
dscf	=	dry standard cubic feet
°F	=	degrees Fahrenheit

ft ³	=	cubic feet
g	=	grams
gal	=	gallon
gpm	=	gallons per minute
gr	=	grains
hp	=	horsepower
hr	=	hour
lb	=	pound
lbmol	=	pound-mole
in	=	inches
m ²	=	square meter
m ³	=	cubic meters
min	=	minute
mm	=	million
MM	=	million
MM BTU	=	million BTU
MMcf	=	million cubic feet
Mg	=	mega grams
ppb	=	parts per billion
ppbv	=	parts per billion, by volume
ppm	=	parts per million
ppmv	=	parts per million, by volume
ppmw	=	parts per million, by weight
psia	=	pounds per square inch, absolute
psig	=	pounds per square inch, gauge
scf	=	standard cubic feet
scfm	=	standard cubic feet per minute
sdcf	=	standard dry cubic feet
sdcfm	=	standard dry cubic feet per minute
yd	=	yard
yd ³	=	cubic yards
yr	=	year