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January 6, 2017

*Via Overnight Mail and Electronic Mail*

“Mike” Mahfouz Zabaneh, P.E.  
U.S. EPA Region 9  
Land Division  
75 Hawthorne Street, LND 4-2  
San Francisco, CA 94105

Re: Comments of Evoqua Water Technologies, LLC on  
Draft RCRA Permit Decision for the Evoqua Facility near Parker, Arizona  
EPA RCRA I.D. Number: AZD982441263

Dear Mr. Zabaneh:

Our law firm is counsel to Evoqua Water Technologies, LLC (EWT), and this letter and its two attachments collectively constitute the written comments of EWT on the Environmental Protection Agency’s (EPA’s) draft RCRA permit decision (the Draft Permit) for the EWT facility near Parker, Arizona, submitted pursuant to 40 C.F.R. §124.11.

The first attachment consists of a statement of comments on the Draft Permit. As required by EPA’s regulations governing the submittal of comments on draft RCRA permits, 40 C.F.R. Part 124, EWT has identified reasonably ascertainable issues and reasonably available arguments for each condition on which it has comments. Where appropriate, EWT has identified where referenced documents are available in EPA’s public databases. Pursuant to 40 C.F.R. §124.13, such materials consist of EPA documents of general applicability or other generally available reference materials, and EWT intends that each such referenced document shall be incorporated into the administrative record of this proceeding.

The second attachment consists of redlined changes that EWT requests EPA make to the Draft Permit. These redlined changes form an integral part of the comments and it is EWT’s intent that every change suggested should be considered a substantive part of the comments that are being submitted on the Draft Permit.





"Mike" Mahfouz Zabaneh, P.E.  
January 6, 2017  
Page 2

Thank you in advance for your consideration of these comments. Should you have any questions, please do not hesitate to contact the undersigned at 781-416-5710 or [srichmond@bdlaw.com](mailto:srichmond@bdlaw.com).

Sincerely yours,



Stephen Richmond, Counsel to  
Evoqua Water Technologies, LLC

Enclosures

cc via email: Mimi Newton, Esq., Office of Regional Counsel, EPA Region 9  
Monte McCue, Evoqua  
Jessica Beckett-McWalter, Esq., Evoqua







**Comments of Evoqua Water Technologies, LLC on  
Draft RCRA Permit for Parker Facility  
EPA RCRA I.D. Number: AZD982441263**

These comments are accompanied by a redlined draft Permit showing proposed changes from the draft Permit, and the redlined draft Permit is intended to be incorporated into and construed as a part of these comments. Where these comments reference a proposed change, the change is reflected in redlining in the draft Permit.

**PERMIT COVER SHEET**

In the cover sheet at the end of page 1, the draft Permit states that the Permit has a ten year term, but also states that all obligations for performance of conditions of the permit remain in effect until deemed complete by the Region 9. The term of a permit is limited by statute to ten years. (“Any permit under this section shall be for a fixed term, not to exceed 10 years...”)(42 U.S.C. 6925(c)(3)). EPA therefore has no authority to impose conditions in a permit that exceed the ten year term. We request that EPA delete the language indicating that obligations for performance under the permit remain in effect until deemed complete by Region 9. This language exceeds EPA’s statutory authority. See proposed change.

**MODULE 1 - GENERAL PERMIT CONDITIONS**

I.A.1. The Resource Conservation and Recovery Act (“RCRA”) permit shield language in this paragraph does not correctly track the language in 40 CFR 270.4(a)(1) and does not sufficiently convey the permit shield protection that Permittee is entitled to. EPA has just recently issued a draft RCRA permit to another permit applicant (June 2016 draft permit for Envirosafe Services of Ohio, Inc.) (the “Envirosafe Permit”) which correctly states the permit shield protection, as follows:

Subject to 40 C.F.R. § 270.4, compliance with the RCRA permit during its term constitutes compliance, for purposes of enforcement, with Subtitle C of RCRA except for those requirements not included in the permit which: (1) become effective by statute; (2) are promulgated under 40 C.F.R. Part 268 restricting the placement of hazardous waste in or on the land; (3) are promulgated under 40 C.F.R. Part 264 regarding leak detection systems; or (4) promulgated under subparts AA, BB, or CC of 40 C.F.R. Part 265 limiting air emissions. (40 C.F.R. § 270.4).

The Envirosafe Permit is accessible at:

<https://www3.epa.gov/region5/waste/permits/ohd045243706-draft-federal-rcra-permit-201606.pdf>. EPA also used essentially this same language in Condition I.A. of the final RCRA permit it issued to Veolia ES on June 23, 2014 (the “Veolia Permit”), accessible at: <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&ved=0ahUKEwjP-eaEx9XPAhUFcD4KHQKyD9oQFggpMAI&url=https%3A%2F%2Fwww3.epa.gov%2Fregion5%2Fwaste%2Fpermits%2Fveolia-final-federal-rcra-permit-20140623.pdf&usg=AFQjCNGmqK6hP0i0vDOZm8JXNbLDzemAUA>. EPA’s proposed



language in I.A.1 of the draft Permit fails to provide the necessary permit shield protection, and EPA's deviation from requirements in 40 CFR 270.4(a)(1) and from the language that EPA itself has used in the EnviroSAFE Permit and the Veolia Permit is in excess of EPA's authority and is not supported in the record as a permissible use of agency discretion. We therefore request that EPA use the same language it has recently provided in the EnviroSAFE Permit and the Veolia Permit. See proposed change.

I.A.4. The language in this section is overbroad as it conflicts with the protections provided by the permit shield in 40 CFR 270.4(a)(1). For each of the reasons stated above in Section I.A.1, the language is not permissible and must be changed. See proposed change.

I.A.5. The language in this section is simply not understandable. The permit application does not contain or create requirements. This provision also appears to directly conflict with Section I.A.4, which states that compliance with the Permit does not constitute a defense to any action brought under any law providing for protection of public health or the environment. In addition, the draft permit is filled with duplicative requirements intended to cover the same areas, but consistently worded differently. In numerous sections, EPA has (i) commanded that the Permittee comply with specific attached plans incorporated as appendices, and (ii) directly incorporated rule provisions that provide a separate layer of requirements on top of the incorporated plans, and in addition (iii) adopted specific permit conditions attempting to summarize many of the incorporated rule provisions using language that differs from that used in the actual rule. The sum total of these overlapping provisions is a permit that is in many areas inconsistent, unclear, creates multiple potential compliance obligations out of single compliance requirements, and is internally conflicting.

Proposed Section I.A.5 compounds the problems created by the inconsistencies and the duplication of requirements by stating that the Permit terms supersede the requirements in the attachments where they are incorporated to the extent there are inconsistencies. Given the inconsistencies between the incorporated rules and the summaries of the rules that EPA has created in Permit conditions, if either an incorporated rule might be susceptible of different interpretations, or if one of EPA's many conditions summarizing rule requirements in the Permit is susceptible of different interpretations than would exist under the incorporated rule, then the Permittee will not know how to comply with the Permit. This casts significant doubt over the ability of the Permittee to understand the requirements of the Permit or to comply with the Permit. Does the Permittee follow its approved plan incorporated into the Permit, or does the Permittee instead ignore the approved plan because the incorporated rule or newly created provision appears to conflict, or has the potential to conflict? EPA has required the Permittee to create the attached plans, and EPA has presumably approved these plans by requiring them to be incorporated as binding requirements of the Permit. With the language in Section I.A.5, the Permittee cannot know whether to implement the attached plans or not, and the order of precedence provision in Section I.A.5 creates substantial ambiguity and uncertainty.

As a consequence, EPA has failed to provide the Permittee with fair notice of the requirements in the Permit. In addition, the language in Section I.A.5 is impermissibly vague and confusing and is arbitrary and capricious and in excess of EPA's authority. The provision also conflicts with the Permit Shield protection that EPA must provide with the Permit (see comments for Section



I.A.1 above). See proposed changes in this Section I.A.5 and throughout the draft Permit where we have attempted to eliminate duplicative and/or conflicting language.

1.A.6. EPA should clarify that Evoqua Water Technologies, LLC (“EWT”) is the owner of the carbon reactivation facility, and that the Colorado River Indian Tribes (“CRIT”) is the owner of the land on which the carbon reactivation facility is located, that EWT leases the land from CRIT, and that the responsibility for RCRA compliance rests primarily with EWT. CRIT is a sovereign entity and a government regulator of the facility; it is not authorized to make operational decisions at the facility, and it does not have any operational role. The Permit should not suggest otherwise.

The Permit should reflect that while CRIT is the owner of the real property on which the facility is situated, the party initially responsible for implementing and complying with the Permit in all instances is EWT. We understand that EPA’s policy is to consider a landowner to be a co-permittee under RCRA, but even given that this is the case, EPA does not need to issue a permit that treats EWT and CRIT as co-equal permit holders and that identifies in every section that the “Permittees” are responsible for individual compliance activities. As a matter of discretion, and as policy matter, EPA should craft the language of the Permit to provide deference to CRIT. See proposed change in this section, and throughout the Permit where we propose changing “Permittees” to “Permittee”.

#### I.D. Definitions.

The incorporation of defined terms contained in 40 CFR Parts 61 and 63 is in conflict with RCRA requirements and will cause substantial confusion and compliance uncertainty, as Parts 61 and 63 are air regulations and the terms defined in those parts have different, and in some instances conflicting, meanings when compared to those terms used in the RCRA program and in this Permit. As examples, the following terms are both defined in 40 CFR Part 61 in reference to particular air concepts, and used in the draft Permit in non-air contexts, in many cases repeatedly: *commenced*, *construction*, *effective date*, *issuance*, *owner or operator*, and *standard*. These references create substantial confusion in the Permit. The Part 61 and 63 references create impermissible vagueness and confusion and result in arbitrary and capricious provisions, in excess of EPA’s authority. This provision should therefore be modified to delete the incorporation of defined terms from Parts 61 and 63.

The definition of *Product* should clarify that Product is not regulated as a hazardous waste under this Permit.

The definition of *Facility* is too broad and exceeds EPA’s authority under RCRA. The definition should be consistent with the definition of Facility (or Hazardous Waste Management Facility) at 40 CFR 270.2. As drafted, the definition will potentially extend to EPA the authority under the Permit to regulate portions of the facility that are not subject to RCRA. This has implications throughout the draft Permit and therefore this comment applies wherever that term is used in the draft Permit. See proposed change.



The definition of *Site* is too broad and exceeds EPA's authority under RCRA. The definition should be consistent with the definition of Site at 40 CFR 270.2. See proposed change.

I.E.2. The provision addressing a renewal application does not allow for the reduced time permitted at EPA's discretion for the submittal of an application for a standardized permit under 270.10(h)(2). There is no reason for excluding this option and EPA cites no justification for this exclusion in the record. If the Permittee were to choose at some point in the future to proceed only with activities subject to a Standardized Permit, this option should be available. See proposed change.

I.E.3. This provision should track the language in 40 CFR 270.51, which clearly provides the statutory protection offered for continuation of permits and states the conditions that attach. The language in this section 1.E.3 attempts to paraphrase that section but does not fully capture it, does not clearly provide that continued permits remain fully effective as provided in 270.51(b), and does not provide the statutory protection in 5 U.S.C. §558(c), all to the substantive disadvantage of the Permittee. EPA cites no justification for this change from the regulatory language in the permitting record. Given the extraordinary length of time it has taken EPA to process the initial permit application for this Facility, it is vitally important that the Permit clearly state the permit continuation language contained in 40 CFR 270.51. EPA's language as drafted inaccurately paraphrases its RCRA reapplication rule and fails to state the requirements that EPA subjected to public notice and comment, without justification in the permitting record. The language is impermissibly vague and confusing and is arbitrary and capricious and in excess of EPA's authority. See proposed change.

I.E.8.

(i) This provision on inspection and entry should mirror the language in 270.30(i). However, instead of providing for an inspection right "at reasonable times" the permit provides for that right "during regular business hours or at a reasonable time". This language expands the concept of what might be considered reasonable beyond the access right that EPA subjected to public notice and comment when it issued the permit conditions that apply to all RCRA permits at 270.30, and EPA cites no justification for this change in the permitting record. The proposed language also varies from the language EPA recently used in both the EnviroSAFE Permit and the Veolia Permit, in Condition I.E.8.a. The language change exceeds EPA's authority and is not supported in the record as a permissible use of agency discretion. See proposed change.

(ii) In addition, the proposed language expands the inspection right to include CRIT's offices, which is an unwarranted incursion into CRIT's authority as a sovereign entity. There are no hazardous waste management activities that will be conducted under the permit in CRIT's offices, and Evoqua will maintain all Permit records. See our comments and objections above on Section I.A.6, which are incorporated here in their entirety. See proposed change.

I.E.9.a. The general permit conditions should not include specific procedures that are addressed in detail in other sections of the permit. This Section I.E.9.a contains both a general statement of the requirement for representative sampling as found at 40 CFR 270.30(j), and a specific laboratory method restriction that is drawn from other sections of the permit. The specific



restriction should be removed as it is not appropriate as a general condition. See proposed change.

I.E.9.b. The records retention provision should reflect that the retention requirements commence upon the effective date of the Permit, as EPA would not be authorized to apply that provision retroactively in this Permit.

The requirement should also clarify that the approved Appendix XXI provisions control. As noted above, the draft Permit attempts to uniformly resolve all conflicts between attached plans and permit language in favor of the permit language, but that is not appropriate nor is it within EPA's authority. Permittee has drafted and EPA is approving Appendix XXI of the Permit (Records Retention Requirements) and EPA is requiring that Permittee comply with this appendix. However, draft provision I.E.9.b currently conflicts with Appendix XXI. The Permittee has a right to fair notice of the requirements that EPA will seek to enforce. We incorporate and restate the comments and objections stated above on Section I.A.5 in their entirety.

In addition, EWT objects to the language incorporating Section V.G provisions, for the reasons stated below under Section V.G. EPA's proposed overlapping and inconsistent requirements prevent the Permittee from knowing what provisions will be viewed by EPA as controlling, and this will create substantial confusing to the Permittee, to EPA and to the public. The language of this section exceeds EPA's authority and is not supported in the record as a permissible use of agency discretion. We request that this section be modified as shown in our proposed changes.

I.9.c. Some monitoring records will not include information specified as required in this section. For instance, where analysis is conducted automatically or mechanically there will be no individual performing the analysis. The requirement should therefore apply only "to the extent applicable". As drafted, this requirement is ambiguous, exceeds EPA's authority and is not supported in the record as a permissible use of agency discretion. See proposed change.

I.E.10.

(i) The first sentence in this proposed section provides for notice of any planned alterations to the Facility. See our comment and objection above on the definition of *Facility*, which is incorporated here in its entirety. Consistent with the holdings of the Environmental Appeals Board in *In re: General Motors Corporation, Inland Fisher Guide Division*, RCRA Appeal No. 93-5 (EAB, July 11, 1994) and *In re General Motors Corporation, Delco Moraine Division*, RCRA Appeal Nos. 90-24 & 90-25 (EAB, Nov. 6, 1992), the notice requirement must be tailored to the location where RCRA activities occur at the site. The language EPA used in the corresponding provision in both the recent Envirosafe Permit and Veolia Permit is appropriately tailored to "the permitted facility". The more expansive reach of the language proposed here inexplicably varies from those precedents. The draft Permit language therefore exceeds EPA's authority and is not supported in the record as a permissible use of agency discretion.

(ii) The general permit conditions inexplicably attempt to apply a specific air program definition for "change" from 40 CFR Part 63 to the entire facility. The use of this air program definition,



and its expansive reach across the entire facility, is neither justified nor authorized. Application of the Part 63 definition to this facility in a RCRA permit is arbitrary and capricious and in excess of EPA's authority and is not supported in the record as a permissible use of agency discretion.

(iii) There is no justification in EPA's hazardous waste regulations for a requirement to report planned changes "in design, operation, or maintenance practices that were documented in the comprehensive performance test plan, Notification of Compliance, or startup, shutdown, and malfunction plan". EPA cites no rationale for this language in the permitting record. The RCRA rules, and the Permit, contain extremely precise requirements for submittal of permit modification applications in advance of a change when specific types of changes to the hazardous waste management facility are desired. In the context of the RCRA permit, this additional requirement is vague, duplicative of and conflicting with the RCRA rule permit amendment requirements. As drafted, the language expands the Permittee's obligations beyond those requirements in the applicable RCRA permit modification rule, and is therefore different than the language EPA subjected to public notice and comment when it issued the rule, without justification in the permitting record. As such, the language exceeds EPA's authority and is not supported in the record as a permissible use of agency discretion.

(iv) The facility is not a hazardous waste combustor, hazardous waste incinerator, hazardous waste cement kiln, hazardous waste lightweight aggregate kiln, hazardous waste solid fuel boiler, hazardous waste liquid fuel boiler, or a hazardous waste hydrochloric acid production furnace, and therefore it is not subject to EPA's MACT subpart EEE rule, 40 CFR 63.1200 *et seq.* (the "MACT EEE Rule"). *See, i.e.,* Boiler and Industrial Furnace rule, 56 Fed. Reg. 7134, 7200 (Feb. 21, 1991) ("EPA does not believe that these are recycling units but rather that regeneration is a continuation of the waste treatment process, that process consisting of removal of pollutants by adsorption followed by their destruction. Nor does the Agency believe that incinerator standards make technical sense for these devices, as noted above" (emphasis supplied)). EPA may include MACT EEE Rule requirements pursuant to 40 CFR 264.601 only to the limited extent they are appropriate for the carbon reactivation unit at the facility. EPA has attempted to impose MACT EEE Rule provisions here with no showing or evidence in the record that these provisions are appropriate for the unit. Application of the MACT EEE Rule notice provisions to this facility conflicts with EPA guidance, is arbitrary and capricious and in excess of EPA's authority, and is not supported in the record as a permissible use of agency discretion.

(v) RCRA Section 1006(b) commands that EPA must "avoid duplication, to the maximum extent practicable, with the appropriate provisions of the Clean Air Act..." 42 U.S.C. §6905(b)(1). RCRA Section 3004(n) also provides EPA with a limited window, which existed only from 1984 to 1986, in which to promulgate air emission rules for the monitoring and control of air emissions at hazardous waste treatment, storage and disposal facilities. 42 U.S.C. §6924(n). The insert of a MACT EEE Rule provision into a RCRA permit violates these requirements and is not otherwise authorized by RCRA, and the language therefore exceeds EPA's authority. Nor is the language supported in the record as a permissible use of agency discretion. See further discussion below in Module V, which is incorporated here in its entirety.

(vi) It is illogical, arbitrary and inconsistent with EPA's permit modification rule to require



submittal of an advance notice “as soon as possible” of planned changes, and then to also require that such notice include a request for a permit modification. The timing for permit modification requests is specifically addressed by EPA in 40 CFR 270.42, with specific time frames provided for modification applications. Insertion of different time frames in this permit condition varies the time frames that EPA subjected to public notice and comment when it issued the permit modification rule provisions, without justification in the permitting record. The proposed language is in excess of EPA’s authority and is not supported in the record as a permissible use of agency discretion.

See proposed changes for all comments in Section I.E.10.

I.E.11. This provision on reporting anticipated noncompliance should mirror the language in 270.30(1)(2). As drafted, the provision expands the Permittee’s obligation beyond the permitted facility or activity, and is therefore different than the language EPA subjected to public notice and comment when it issued the permit conditions that apply to all RCRA permits at 270.30. EPA cites no justification for this change in the permitting record. In clear distinction, the language EPA used in both the recent EnviroSAFE Permit and the Veolia Permit (Condition I.E.11) is appropriately tailored under the rule to “the permitted facility”. The proposed change from the language at 270(1)(2) adopted by EPA in the draft Permit exceeds EPA’s authority and is not supported in the record as a permissible use of agency discretion. See proposed change.

I.E.12. This provision on notifying new owners/operators prior to transfer should mirror the language in 264.12(c). As drafted, the provision expands the Permittee’s obligation beyond the operating life of the facility, and is therefore different than the language EPA subjected to public notice and comment when it issued the required notice provision that applies to all permitted RCRA facilities at 264.12. The rule language clearly provides that this requirement only applies to disposal facilities beyond their operating life, and this Facility is not a disposal facility. In clear distinction, EPA used the appropriate qualifier “during its operating life” in both the recent EnviroSAFE Permit and Veolia Permit in Condition I.E.13. EPA cites no justification for the proposed change to the regulatory language in the permitting record. The proposed change from the language at 264.12, as adopted by EPA in the draft Permit, exceeds EPA’s authority and is not supported in the record as a permissible use of agency discretion. See proposed change.

I.E.13. The provision on twenty-four hour reporting should mirror the language in 270.30(1)(6). As drafted, the provision expands the Permittee’s obligations beyond those requirements in the applicable EPA reporting rule, and is therefore different than the language EPA subjected to public notice and comment when it issued the reporting provision that applies to all permitted RCRA facilities at 270.30, without justification in the permitting record. The proposed change from the language at 270.30(1)(6) adopted by EPA in the draft Permit exceeds EPA’s authority and is not supported in the record as a permissible use of agency discretion, as noted below:

(i) See our comments and objections on Section I.A.6. above concerning joint permittees, which are incorporated here in their entirety. In addition, if this language were to remain unchanged it would subject both CRIT and Evoqua to a duty to act, and a compliance liability, even if one of the parties had no ability to know of facts that give rise to the duty and the liability.



(ii) Proposed section I.E.13.a.ii, applies to conditions “which could threaten the environment or human health inside or outside the Facility.” EPA’s reporting rule applies only to conditions which could pose a threat outside the Facility. EPA’s proposed change in the draft Permit is an incursion into the regulation of a private employer’s worker health and safety program, which is the exclusive province of the Department of Labor and the Occupational Safety and Health Administration pursuant to the Occupational Safety and Health Act. EPA has no statutory authority under the Resource Conservation and Recovery Act to prescribe or enforce standards or regulations affecting occupational safety or health in a place of private employment. In recognition of this limitation, EPA used the appropriate language from the rule “outside the facility” in both the recent EnviroSAFE Permit in Condition I.E.13.a.ii and the Veolia Permit in Condition I.E.14.b.

See proposed changes for all comments in Section I.E.13.

I.E.16. The provision in the draft Permit on submitting other information should mirror the language in 40 CFR 270.30(l)(10). As drafted, the provision expands the Permittee’s obligations beyond those requirements in the applicable EPA submittal rule, and it is therefore different than the language EPA subjected to public notice and comment when it issued the reporting provision that applies to all permitted RCRA facilities at 270.30, without justification in the permitting record. The rule clearly provides that the Permittee’s obligation is different depending upon whether it is addressing a new awareness of relevant facts to a permit application, or the submittal of incorrect information in an application or any report. The draft Permit language blends these obligations and requires the Permittee to act on new awareness of relevant facts for any report. This could impose unwarranted and very significant and time intensive obligations on the Permittee to evaluate all past reports submitted to EPA every time “relevant facts” become known in the future. The proposed language is unwarranted, burdensome, arbitrary and capricious, and in excess of EPA’s authority. See proposed change.

I.G.1 and G.2. The permit submittal requirement in the draft Permit is not clear on whether all submittals must be made on paper or may be made electronically with EPA concurrence. Section G.1. provides the submittal requirement and appears to mandate paper submittals. Section G.2 provides that all paper submittals must be accompanied by electronic copies and states that submittals may be made by electronic mail where EPA and the Permittees have agreed in writing (does this mean on paper?) on the appropriate email address. There is no reason why there should be a requirement for a three-party written agreement for specific submittals in order to prevent the waste of paper. Paper submittals on this permitting matter to date have already used tens or even hundreds of reams of paper, most of which could now easily be replaced by electronic documents and submittals. EPA should, as a matter of discretion and sound environmental practice, allow for all submittals under the Permit to be made by electronic means instead of on paper in order to conserve natural resources and reduce the generation of waste. EPA should clearly state in the Permit Section G.1 that electronic submittals are authorized as an alternative to paper submittals. See proposed changes.



I.G.2. Again, EPA should agree that documents can be submitted in electronic form only. This will reduce the unnecessary and wasteful use of paper. As a result, EPA should change Section I.G.2 so that submittals need not be printed on recycled (or any other type of) paper.

I.G.3.b. This provision is ambiguous - we cannot determine what it means. Please clarify its effect. This section comes from the permit issuance and appeal rule, which establishes procedural requirements for permit issuance and appeal. That rule is not intended to be applied as a condition to an actual permit. The provision is impermissibly vague and confusing and provides no fair understanding of what is intended to be required. Its application here is arbitrary and capricious and in excess of EPA's authority.

I.G.4. There is no justification in EPA's hazardous waste regulations for a requirement to submit MACT reports for a facility category that EPA has determined to not be subject to the MACT requirements. See our comments and objections above on Section I.E.10.iv, which are incorporated here in their entirety. In the context of the RCRA permit, this requirement is ambiguous, exceeds EPA's authority and is not supported in the record as a permissible use of agency discretion. This provision should be deleted.

I.G.5., I.G.6, I.G.7 and I.G.8, and I.L. Approval Process for Submittals and Dispute Resolution.

As drafted, these provisions deny Permittee sufficient procedural safeguards and access to judicial review for agency actions that deprive Permittee of substantive property rights, and thereby they violate Permittee's due process rights under the Fifth Amendment to the U.S. Constitution, and Permittee's statutory rights to access the courts for judicial review under RCRA Section 7006(b), 42 U.S.C. §6976(b). Without these protections, the Permittee may be placed in a position where it will be compelled by the Permit to conduct substantive work that it can only learn of well after the Permit becomes final, at a time when it will have had no opportunity to challenge EPA's directive. Alternatively, the Permittee will be faced with the potential of being forced to either comply with an objectionable decision made by EPA, or defend an enforcement action brought by EPA to cure a claimed violation of an obligation in the Permit to implement unilateral modifications and conditions that EPA issues after the Permit becomes final. This puts EPA in the position in the future of unilaterally affecting the substantive property rights of the Permittee without affording the Permittee its constitutional and statutory rights to seek judicial review of EPA's actions.

First, any permit conditions requiring the Permittee to submit substantive documents to EPA during the Permit term and that allow for EPA to issue approvals with substantive conditions, or to require substantive modifications of such submittals, and any provisions that purport to require Permittee to waive its rights to judicial appeal, are unlawful to the extent that they do not allow Permittee to meaningfully object through appeal, including the right to seek judicial review in the event EPA and the Permittee ultimately disagree on the conditions or modifications which EPA seeks to impose. Decisions by EPA on substantive submittals under the Permit are final agency actions and the permit language should indicate this explicitly. All changes to the Permit should be processed through the permit modification provisions of 40 CFR Part 270 and 40 CFR Part 124, with a right provided to the Permittee to seek judicial review of agency decision-making. EPA's position that such modifications are not required is contradicted by its own



language in proposed Section I.G.6.a, calling for submittal of a permit modification application in the event Permittee discovers the need to revise a previously approved deliverable.

Applicant is mindful of EPA's Environmental Appeals Board ("EAB") decisions on dispute resolution (*i.e.*, *In re General Electric*, 4 E.A.D. 615 (EAB 1993); *In re Allied Signal*, 4 E.A.D. 291 (EAB 1994); *In re Caribe General Electric Products*, 8 E.A.D. 696 ((EAB 2000)). However, those decisions are statements of agency interpretation. They have never been adopted by any federal court and we believe that the conclusions in those decisions are an incorrect application of the law and that their reasoning would not be upheld if subject to judicial review.

Second, even if we were to accept EPA's administrative interpretations of a permittee's due process and statutory appeal rights as enunciated in its EAB decisions (which we do not), the language EPA has used in the draft Permit is insufficient to protect Permittee's due process rights. Under draft Section I.G.5.d, EPA purports to require Permittee to implement without recourse any condition of approval mandated by EPA without any access to the dispute resolution procedures in the Permit. Even though we find the dispute resolution procedures constitutionally and statutorily deficient, if EPA's logic in its EAB decisions is followed, EPA must provide an informal opportunity to Permittee to meet with Regional staff, to submit a written statement explaining the points of disagreement with any proposed conditions of approval, and to receive a final written decision by the Region setting forth its reasons for the decision. *See General Electric, supra, and In re Caribe General Electric Products, supra.* It has not done so here.

Third, EPA's proposed Section I.G.5.f seeks to require Permittee to implement any "non-deficient portion" of a submittal that is rejected by EPA, at the direction of EPA, again without recourse to an appeal right (either constitutionally protected or statutorily required, or an administrative review process under EPA's incorrect interpretation as noted above). For the reasons stated above, this provision is unlawful.

Fourth, EPA's language in proposed Sections I.G.5.b., e., g. and h. indicates that EPA may disapprove, condition or modify a submittal, and/or require Permittee to modify a submittal, to address all "deficiencies" determined to exist by EPA. There is no limitation stated on EPA's authority to determine that such "deficiencies" exist, and EPA has not identified any standard by which it will make such determinations. EPA must act within its lawful authority and cannot require Permittee to implement unilateral decisions on substantive matters if EPA's decisions are based on an improper analysis or otherwise exceed its authority.

Fifth, even if we were to adopt EPA's position that a dispute resolution process denying access to the courts for substantive decisions would be sufficient to satisfy due process concerns (which we do not), the dispute resolution procedure offered by EPA in Section I.L. would still be deficient because it does not provide the opportunity to meet with someone at EPA in a decision-making position above the level of the permitting staff. In fact, the language only provides a right to meet with a "representative" of the permitting staff, so in fact EPA could designate anyone for this meeting. EPA's position appears to be that a meeting with any low level staff person, including the permitting staff who initially made the disputed decision, is sufficient to constitute a "hearing" and satisfy due process concerns, so long as the Permittee has the ability to



submit a subsequent written statement to someone at EPA in a higher position. This stretches due process considerations beyond the breaking point and provides so much flexibility to EPA that it makes a mockery of the concept of dispute resolution.

Sixth, as these comments are submitted, there is a bill pending in Congress to change the standard of review that the federal courts use to review agency actions. To the extent that the review standard for agency actions changes in any manner in the future, the final Permit must accommodate the revised review standard. The Permittee objects to the Section I.G.5 language to the extent that it does not provide the opportunity to challenge agency decision making based upon an application of federal law in existence as of the time that the specific agency decision making occurs. It would be in excess of EPA's authority to require the Permittee to waive this right in advance and the Permittee objects now to the extent that EPA would wish to argue at a future date that a waiver had occurred.

#### Additional Comments on Section I.G.5:

In Section I.G.5.c., EPA indicates that it will provide a notice of deficiency prior to issuing certain types of unilateral modifications (or conditions). This provision violates Permittee's due process rights, which include a right to notice detailing reasons for the agency's intent to deprive an entity of a private interest. To avoid a constitutional defect, EPA must provide sufficient notice of its rationale. See proposed change.

In Sections I.G.5.c. and I.G.5.e., the mandated ten day and twenty one day response periods are arbitrary. Under certain circumstances, these response periods would be facially unreasonable. As an example, the Permit requires the Permittee to submit to EPA a performance demonstration test ("PDT") plan. This is an extremely complex and detailed technical document: the original PDT plan for the Facility is comprised of a 394 page document in the permitting record. If EPA issued a detailed notice of deficiency for a future PDT plan, it would be virtually impossible to provide an adequate response within ten days. Consequently, as drafted the mandatory ten day and twenty one day response times are arbitrary and capricious and exceed EPA's authority.

In Section I.G.h., EPA attempts to mandate that Permittee is in violation of the Permit if EPA disapproves or modifies a submittal based on a conclusion by EPA that the submittal contains a material defect. This language is unlawful to the extent that it does not allow Permittee to meaningfully object through appeal, including the right to seek judicial review in the event EPA and the Permittee ultimately disagree on the conditions or modifications which EPA seeks to impose. For all the reasons set forth above, this condition must be changed.

See proposed changes to Section I.G.5.

I.G.6.b. See our comments and objections above on Section I.G.5, which are incorporated here in their entirety. Any decision by EPA to modify, disapprove or conditionally approve a submittal must be afforded the appropriate procedural rights. See proposed change.

I.H. The Permit should state EPA's affirmative obligation to treat appropriately identified confidential information under the protections afforded by 40 CFR Part 2, for purposes of



clarifying that obligation to the Permittee and to the public. EPA provides this clarity in both the recent EnviroSAFE Permit in Condition I.H and the Veolia Permit in Condition I.H. See proposed change.

I.I. It is not appropriate to require maintenance of all listed records for the life of the facility. The RCRA rules clearly specify which documents must be maintained longer than three years and EPA has not offered any justification for a burdensome and extraordinary expansion of those requirements. This requirement inaccurately states the records retention requirements in Part 264 and therefore exceeds the requirements that EPA subjected to public notice and comment without justification in the permitting record. As drafted, this provision is unwarranted, burdensome, exceeds EPA's authority and is not supported in the record as a permissible use of agency discretion.

I.J. and I.K.12. There is no need for an ongoing information repository as all documents can be posted to the internet for public access. A repository at this time simply requires the wasteful printing of documents on paper. Further, there is no rationale for setting up a new information repository since one already exists for the Permit application. EPA has not offered any justification for this burdensome requirement, or for the duplication of setting up a second repository. As drafted, this provision is unwarranted, burdensome, wasteful, exceeds EPA's authority and is not supported in the record as a permissible use of agency discretion. In the event EPA disagrees with these comments, EWT has no understanding of what documents EPA believes would be placed in a repository, as the draft provision refers to an "Exhibit I", which does not exist.

I.K.1 – I.K.4.

These sections contain a compliance schedule for the conduct of PDTs.

- (i) Under 40 CFR 270.33, a schedule of compliance is used to provide time to install equipment necessary to achieve compliance with Part 264 standards that were not previously applicable. EPA guidance on this provision states the following: "compliance schedules in permits should be used to allow the construction or installation of equipment that is not required under Part 265 but that is required to comply with Part 264 standards." *Memo from Bruce Weddle, PPC 9524.1984(01)* (Available on EPA's RCRA Online database). There are no requirements in Part 264 for this Facility to conduct PDTs or HHRAs. These activities can only be added as a discretionary matter by EPA and they therefore do not qualify as items for a compliance schedule. The inclusion of these requirements in a compliance schedule is in error and they should be removed. We have proposed that a PDT section be added to Section V.
- (ii) Any PDT requirements should be located in Module V of the Permit. See proposed changes. EWT would agree to conduct a PDT within 61 months of the effective date of the Permit to confirm that the Facility emissions remain at a consistent level. See proposed changes. However, as explained below, there is no basis for requiring a PDT soon after the Permit effective date, or for requiring PDTs at a frequency that exceeds what EWT has proposed.



The Facility is not an incinerator and the extremely comprehensive PDT test results demonstrated that the Facility is operating safely. The permitting record includes a detailed risk assessment which establishes with a high degree of scientific certainty that the emissions from the Facility are protective of public health and the environment. There is therefore no justification in the record that would support a conclusion that the Facility needs to be regulated as an incinerator, with continuing PDT requirements.

PDTs are extremely burdensome and expensive. PDTs are not required for this Facility by RCRA or by the Federal Clean Air Act. A PDT was voluntarily agreed to by the applicant in order to demonstrate with a high degree of scientific certainty that the Facility is safe and its operations are protective of health and the environment. The voluntary PDT and risk assessment conducted for this facility were, to our knowledge, the most stringent and comprehensive evaluation of emissions from a carbon reactivation facility ever conducted in the United States. The test results, documented in the PDT report that is part of the record of this proceeding, confirmed that the Facility meets and exceeds all risk criteria. Following the conduct of the test and review of the test results, EPA reported that “EPA has determined that impacts from long-term exposure to the Evoqua facility emissions are insignificant.” See EPA Fact Sheet, *Risk Assessment at Evoqua Water Technologies*, June 2016.

Based on the permitting record, EPA cannot lawfully impose frequent, burdensome and expensive requirements for additional PDTs at this facility alone, and not for the industry as a whole, without establishing a rational basis for such requirements. In fact, EPA seems to have pre-committed itself to overregulation of this facility by stating in a November 11, 2016 press release that “(t)he proposed permit will impose stricter requirements that Evoqua must follow, including the most stringent environmental controls for this type of facility in the nation.” There is no justification in the record for the repeated conduct of the PDTs that EPA has proposed, and the cost of such testing will render the continued processing of RCRA-regulated carbon uneconomic, particularly in relation to the numerous carbon reactivation facilities in the United States that are subject to RCRA but which conduct many fewer or no PDTs.

EPA’s attempt to impose a requirement for frequent PDTs is unlawful, arbitrary and capricious, in excess of EPA’s authority under RCRA, and an inappropriate use of agency discretion. See proposed change in Section I.K. and Module V.

- (iii) There is no rationale for requiring notice to the facility mailing list each time a PDT test plan is prepared. EPA has identified no rationale in the permitting record for this requirement. The dates for submitting the plans and for conducting the testing will be clearly identified in the Permit, and the public can easily access these plans upon request.



- (iv) The PDT reports should not include an assessment of results compared to emission limits, for the reasons discussed in our comments and objections to Module V, which are incorporated here in their entirety.

I.K.5 A comprehensive human health and ecological risk assessment (collectively “HHRA”) has been completed and entered into the permitting record, and the RCRA permitting decision is informed by the conclusions drawn from that rigorous evaluation. There is no justification, either technically or in the permitting record, that would support a requirement to re-conduct an HHRA for a carbon reactivation facility every five years. Risk impacts to human health and the environment have been extensively assessed in support of the initial permitting. New data can be compared to the original study but there is no support for re-conducting the study.

HHRAs are extremely burdensome and expensive. An initial HHRA was never required for this Facility – an HHRA was voluntarily agreed to by the applicant in order to clarify that the Facility did not pose health or environmental risks. The voluntary HHRA was, to our knowledge, the most costly, stringent and comprehensive evaluation of emissions impacts from a carbon reactivation facility ever conducted in the United States. The test results, documented in the HHRA report that is a part of the record of this proceeding, confirmed that the Facility meets and exceeds all risk criteria. Importantly, after reviewing the test results, EPA concluded that “EPA has determined that impacts from long-term exposure to the Evoqua facility emissions are insignificant.” See EPA Fact Sheet, *Risk Assessment at Evoqua Water Technologies*, June 2016.

With this scientific record and with EPA’s conclusion about the insignificance of Facility emissions impacts, there is simply no justification for EPA now to impose a requirement for additional frequent, burdensome and expensive HHRAs at this facility. EPA has never determined that comprehensive HHRAs are even necessary for carbon reactivation facilities, and burdening this single facility with repeated PDTs and HHRAs when EPA has concluded that the emissions impacts from this facility are insignificant and where EPA does not require any other carbon reactivation facilities to conduct this costly testing and evaluation, is simply arbitrary and capricious. Further, there is no evidence in the record that would show or even suggest that the risk profile of the facility will change during the ten year Permit term. There is no rational basis for such requirements and they must be removed from the Permit.

EPA stated in a November 11, 2016 press release that: “(t)he proposed permit will impose stricter requirements that Evoqua must follow, *including the most stringent environmental controls for this type of facility in the nation*” (emphasis supplied). This statement appears to commit the Agency to the overregulation of the Facility before the Permit has been issued, and in the absence of a technical justification. EPA cannot impose these costly requirements without scientific and engineering support in the record, and there is none. The Facility did voluntarily conduct the testing and analysis, in order to allay concerns. But now that those concerns have been addressed to a scientific certainty, there is simply no justification for the proposed frequency and extensiveness of the PDTs and HHRAs. The cost of such requirements risks so overburdening the maintenance of a RCRA permit that the continued processing of RCRA-regulated carbon at the Facility could become uneconomic, particularly as the Facility must compete with the numerous carbon reactivation facilities in the United States that EPA has not required to perform similar HHRAs or PDTs.



EPA's attempt to impose a requirement for subsequent HHRAs is unlawful, arbitrary and capricious, in excess of EPA's authority under RCRA, and an inappropriate use of agency discretion. The HHRA requirements should be deleted in their entirety.

I.K.6. The RF-1 closure process is not appropriate for a compliance schedule, as the Permittee is in full compliance with existing closure requirements for RF-1. This provision should be moved to the closure section of the Permit.

I.K.7. and 8. The hopper provisions are not appropriate for a compliance schedule. These provisions should be moved to Module IV, the Tank section of the Permit, as EWT and EPA have discussed (and we believe agreed) that the hoppers should be regulated as ancillary equipment to the spent carbon storage tanks. Section I.K.8 should be deleted in its entirety. There is no basis for requiring leak testing and P.E. certification as the Permittee is currently managing H-1 as ancillary to the spent carbon storage tanks so it is subject to daily documented inspections to confirm there are no leaks. Pursuant to the work plan referenced above, EWT will be replacing the hopper with a new hopper that meets the requirements for a double walled vessel. This provision exceeds EPA's authority and is not supported in the record as a permissible use of agency discretion. There is therefore no rationale for a leak test and evaluation by a professional engineer and these requirements should be deleted.

In addition, the decision by EPA to approve, disapprove or condition an approval of this work plan is a substantive decision that affects Permittee's rights and must be subject to dispute resolution. Our comments and objections in Sections I.G.5., I.G.6, I.G.7 and I.G.8, and I.L. are incorporated here in their entirety. See proposed change.

I.K.10. This RCRA Subpart BB provision is confusing and does not address the existing permitting record. EWT submitted a Subpart BB plan to EPA years ago as a component of the Part B application and the plan is identified by EPA as Permit Attachment Section N. The record contains no information or critique about the contents of this plan, but proposed Section I.K.10 calls for the Permittee to submit a new plan as part of a permit modification application. The record does not reflect why EPA is calling for a new Subpart BB plan or the status of the existing plan, and as such the condition calling for a new plan is not supported in the record. EWT is willing to discuss this with EPA but based upon the record, EPA's language seeking submittal of a new Subpart BB plan and a permit modification application is not justified and is in excess of EPA's authority.

I.K.11. A requirement calling for the monitoring of sulfur in the waste carbon feed is not an appropriate provision for a compliance schedule. The Facility has been subject to the controls contained in 40 CFR Part 265, and as documented in a letter dated April 26, 2016, which letter is part of the permitting record, those controls establish enforceable limits on the potential to emit regulated pollutants from the carbon reactivation process. EWT agrees that new limits on the potential to emit are appropriate as the Facility transitions from Part 265 to Part 264 and, as a result, this proposed section should be moved to Module II, Section C, addressing waste analysis, where the limit should reside in the Permit. A permit modification is not necessary for this provision because the final Permit can simply establish the condition.



(i) The time frame for collecting and sending samples for analysis needs to account for weekends, holidays and both shorter and longer months. See proposed change.

(ii) There is no hourly or daily feed limit for sulfur. The sulfur limit, for air emissions purposes, is expressed as an annual limit of 30 tons per year. The Waste Analysis Plan is not an appropriate document in which to address an annual air emission limit. Section I.K.11.b should be deleted, and the 30 tons per year limit should be contained in Table V-1 as a binding restriction on emissions.

As drafted, Section I.K.11 exceeds EPA's authority and is not supported in the record as a permissible use of agency discretion.

I.K.12. See our comments and objections above on Sections I.J. and I.K.12, which are incorporated here in their entirety. We do not believe there is a justifiable rationale for establishing a new information repository. This section should be deleted.

I.K.13. Training. See our comments and objections on Sections I.E.10, II.M.1.b and d, and Table V-1, which are incorporated here in their entirety. The Facility is not an incinerator and is not subject to MACT EEE Rule. The requirements EPA attempt to impose in this section are extraordinarily burdensome and are not justified in the record. EWT requests that this provision be deleted in its entirety.

I.L. Dispute Resolution. See our comments and objections on Sections I.G.5, 6, 7 and 8, which are incorporated here in their entirety. See proposed changes.

## **MODULE 2 - GENERAL FACILITY CONDITIONS**

II. General Facility Description. The facility description does not differentiate between incoming spent carbon that is RCRA-regulated and that which is not RCRA-regulated. This distinction is necessary to clarify that non-regulated material is not subject to permit requirements until such time as it is mixed with RCRA-regulated material in the process. EPA has previously determined that spent carbon that contains a characteristic sludge or by-product is not a solid waste even if it exhibits a characteristic of solid waste. See Memo from M. Williams to S. Wassersug, EPA 9441.1986(26) (Apr. 2, 1986); *see also* Letter from M. Petruska to J. Maguire, EPA Faxback 11927 (June 10, 1994) ("residues contained in recovery units used to treat waste water would be considered a sludge. And, if the sludge is sent for reclamation, it would not be considered a solid waste. 40 CFR 261.2(c)(3).") (both documents available on EPA's RCRA Online database). There are also several clarifications that are necessary to address additional vagueness in the description, including that the wastewater treatment system which EPA has described is not subject to the Permit. As drafted, the language in the facility description is impermissibly vague and confusing and exceeds EPA's authority under RCRA. See proposed changes.



II.A.2. EPA's proposed language prohibiting "any storage or treatment activity not specifically described" is vague and potentially sweeping in its impact. Where EPA knows that the vast majority of spent carbon received on site is not subject to RCRA regulation upon receipt, and therefore is beyond the reach of the Permit, it is either arbitrary and capricious and in excess of EPA's authority to impose such a prohibition, or the language is impermissibly vague. In addition, EPA's language is impermissibly vague and confusing as it refers in one place to storage and treatment and in another to generation, accumulation or 90 day storage. Further, the language would appear to prohibit adherence with the requirements of Parts 264, 270, 273 and 279 where appropriate. This language must be clarified and there is no legal justification for restricting the Permittee as stated. See proposed changes.

II.A.3. EPA's proposed language inaccurately paraphrases the storage requirements for TSDFs in 40 CFR 268.50, and fails to accurately state the requirements that EPA subjected to public notice and comment in the rule, without justification in the permitting record. The proposed language is impermissibly vague and confusing and provides insufficient clarity to allow the Permittee to understand what the provision requires. As such, the language in this section is arbitrary and capricious and in excess of EPA's authority. See proposed changes.

II.A.4. EPA has significantly misstated its own rules when describing the permit modification provision in this section.

(i) EPA's permit rule at 40 CFR 270.42 uses the term 'modification' to describe changes to a permit. In the draft Permit, EPA attempts to use the term 'modification' to describe changes to "units designated in this Permit". These are very different things.

(ii) EPA's proposed language requires that the Permittee make a "Permit Modification request" before it can make any modification to its units, when EPA's permit rule clearly states that some modifications of the Permit may be made without submitting a request to EPA. See 40 CFR 270.41(a)(1) ("The permittee must notify the Director... within 7 calendar days *after the change is put into effect.*") (emphasis supplied).

(iii) EPA's draft Permit language appears to require that all modifications of the Permit become subject to the procedures in Draft Permit Condition I.G.7, which only applies by its terms to deliverables explicitly required by the Permit to be submitted with an accompanying request for a permit modification. There may certainly be instances where the Permittee wishes to seek a modification that has not been ordered by EPA, and EPA's rules provide for this explicitly at 40 CFR 270.42.

Consequently, in the three examples above, EPA's draft Permit language inaccurately paraphrases its RCRA TSDF rules and fails to accurately state the requirements that EPA subjected to public notice and comment, without justification in the permitting record. This language is impermissibly vague and confusing and provides insufficient clarity to allow the Permittee to understand what the provision requires. As such, it is arbitrary and capricious and in excess of EPA's authority. See proposed changes.



II.A.6. EPA has misstated its own rule where it includes the requirement for a generator to certify a program of waste reduction. The EPA rule, at 40 CFR 264.73(b)(9), provides that the permittee must certify that it “has a program in place to reduce the volume and toxicity of hazardous waste that is generated on-site to the degree determined by the Permittee to be economically practicable”. Without explanation in the record, EPA fails to include in the permit condition the language “determined by the Permittee”, thereby potentially changing the scope of the certification. EPA’s draft Permit language inaccurately paraphrases its RCRA certification rule and fails to accurately state the requirements that EPA subjected to public notice and comment, without justification in the permitting record. The proposed language is impermissibly vague and confusing and provides insufficient clarity to allow the Permittee to understand what the provision requires. As such, the proposed language is arbitrary and capricious and in excess of EPA’s authority. See proposed change.

II.E.2 – E.5. These provisions are all duplicative of II.E.1 and should be removed. Section E.1 provides that Permittee must comply with 264.15. Sections E.2 – E.5 simply attempt to paraphrase 264.15 requirements. EPA’s draft Permit language inaccurately paraphrases the inspection requirements in the RCRA rule and fails to accurately state the requirements that EPA subjected to public notice and comment, without justification in the permitting record. The proposed language is impermissibly vague and confusing and provides insufficient clarity to allow the Permittee to understand what the provision requires. As such, the proposed language is arbitrary and capricious and in excess of EPA’s authority. EPA should use the same approach taken in Section II.G, for Personnel Training. See proposed changes.

II.F. This general maintenance, calibration and operation provision is not consistent with EPA’s RCRA permit requirements. The proposed language is impermissibly vague and confusing and provides insufficient clarity to allow the Permittee to understand what the provision requires. As such, it is arbitrary and capricious and in excess of EPA’s authority. See proposed change.

II.H.1. This is a permit that authorizes storage and treatment of hazardous waste. The Permit should state the wastes that are authorized to manage, not just state what wastes the facility may not store or treat. In addition, for purposes of clarity, the Permit should directly reference the wastes listed in Table C-1 of Permit Attachment C, rather than create a new table. See proposed changes.

II.H.3. This Permit that authorizes storage and treatment of hazardous wastes. This provision needs to be limited to hazardous wastes. It cannot apply to wastes not regulated as hazardous wastes. The proposed language is either impermissibly vague and confusing, or it is arbitrary and capricious, an impermissible use of EPA’s discretion, and/or in excess of EPA’s authority.

II.H.5.b. This is a permit that authorizes storage and treatment of hazardous waste. This provision needs to be narrowly tailored to regulate only hazardous wastes. The proposed language is either impermissibly vague and confusing, or it is arbitrary and capricious and in excess of EPA’s authority.



II.H.5.c. This provision simply repeats a prohibition that is already stated in II.H.1. If a waste code is not listed in the table, it is not authorized for storage or treatment. This section should be removed from the Permit.

II.H.5.h. See our comment and objection above on Section II.H.5.c, which is incorporated here in its entirety.

II.J.2. EPA has misstated its own rule where stating the requirement for testing and maintenance of emergency equipment. The EPA rule, at 40 CFR 264.33, provides that equipment “where required, must be tested and maintained as necessary”. EPA’s draft Permit language, without explanation in the record, calls for testing and maintaining as necessary but is silent as to whether such testing and maintenance is required. This potentially expands the scope of the requirement without justification. EPA’s draft Permit language inaccurately paraphrases its rule and fails to accurately state the requirements that EPA subjected to public notice and comment, without justification in the permitting record. The proposed language is impermissibly vague and confusing and is arbitrary and capricious and in excess of EPA’s authority. See proposed change.

II.J.4. EPA’s aisle spacing rule provides EPA with the flexibility to decide that aisle spacing in a particular area is not needed on a fact-specific and request-specific basis. 40 CFR 264.35. This allowance should be incorporated into the Permit so that the Permittee and EPA have the flexibility allowed in the rule in the event a specific area is later determined not to need the minimum aisle spacing that would otherwise be required. See proposed change.

II.J.5. EPA has misstated its own rule where stating the requirement for making arrangements with local authorities. The EPA RCRA rule, at 40 CFR 264.37, recognizing that emergency response arrangements require action by third parties that the Permittee cannot compel, provides that the Permittee “*must attempt to make* the following arrangements, as appropriate for the type of waste handled...” (emphasis supplied). EPA’s draft Permit language, without explanation in the record, calls for the Permittee to “maintain arrangements.” The draft Permit language also mandates that the Permittee must “get this refusal in writing” if the third parties refuse. The Permittee can’t compel third parties to act, either to complete the arrangements or provide a written refusal, and even if it is possible to document a refusal, the proposed language does not appear to excuse the failure to complete the arrangements in the first place. The draft Permit language also seeks to require updating arrangements every 5 years, which is not required by EPA’s rule at §264.37. There is no justification in the record for this expansion beyond the rule requirement. Further, for reasons that are not explained, EPA seeks to compel maintenance of records of a refusal to complete arrangements for the life of the facility, which exceeds the requirements in the operating records rule at 40 CFR 264.73. The draft Permit language expands the scope of the arrangements and recordkeeping requirements in EPA’s rules, without justification. The proposed language fails to accurately state the requirements that EPA subjected to public notice and comment, without justification in the permitting record. The language is impermissibly vague and confusing, arbitrary and capricious, and in excess of EPA’s authority. See proposed changes.



II.K.2. and 3. EPA guidance clarifies that only significant changes are intended to trigger the need to submit revised updated contingency plans to local response agencies. Too many submittals containing inconsequential changes will be confusing and overly burdensome to receiving agencies. EPA policy states:

Examples of events necessitating updating written information include, but are not limited to: change in waste streams treated, *significant changes* in volumes or quantity of wastes handled, or *significant design changes* to the facility.

Memo from Matt Hale to RCRA Directors, *Preparedness and Prevention Requirements for RCRA TSDFs (Response to Chemical Safety Board Recommendation 2007-01-1-NC)* (March 5, 2010) (emphasis supplied) (available in EPA's RCRA Online database). Permittee is entitled to rely upon EPA's published interpretation of the Contingency Plan requirements in Part 264. Furthermore, only significant changes should necessitate an application for a permit revision. The proposed language is either impermissibly vague and confusing, or arbitrary and capricious and in excess of EPA's authority, and an inappropriate use of agency discretion. See proposed changes.

II.L.1.a 1. EPA uses the term "significant discrepancy" in the draft Permit, while the manifest discrepancy rule that is incorporated into this section uses and defines the term "significant differences." EPA has clarified that its use of "significant" in this section is intended to be limited to the two variances of weight and piece count, which is consistent with its definition of "significant differences". See RCRA/Superfund Hotline No. 9475.1985(01) (available on EPA's RCRA Online database). Use of the undefined term is an inaccurate paraphrasing of the rule and fails to clearly state the requirements that EPA subjected to public notice and comment, without justification in the permitting record. This language is impermissibly vague and confusing and may be arbitrary and capricious and in excess of EPA's authority. See proposed changes.

II.L.1.b. EPA's paraphrasing of the un-manifested waste rule has the potential to inaccurately trigger the un-manifested waste requirements in 40 CFR 264.76. This language must limit the obligation to submit a report to those instances when the facility accepts hazardous waste from an off-site source without an accompanying manifest. As stated in the draft Permit, the requirement is an inaccurate paraphrasing of the rule and does not clearly state the requirements that EPA subjected to public notice and comment, without justification in the permitting record. This language is impermissibly vague and confusing, may be arbitrary and capricious and is in excess of EPA's authority. See proposed changes.

II.M.1.b. EPA has misstated its own rule, and has created great ambiguity and potential increased reporting and recordkeeping burdens without justification in the record. It is not possible to discern whether this was an attempt to paraphrase the applicable rule or to increase the Permittee's obligations beyond the rule.

(i) Where EPA has required the Permittee to maintain a written operating record in accordance with the provisions of 40 CFR 264.73 in Section II.M.1.a, it is extremely unclear what is meant by a requirement in II.M.1.b. to "record and maintain, in the operating record for this Permit, all



monitoring, inspection, and other data compiled under the requirements of this Permit in accordance with 40 CFR § ... 264.73 and 264.1064". As section II.M.1.a already requires adherence to the operating record provisions in 264.73, and that section includes a specific reference to 40 CFR 264.1064, there is no need for this provision and it should be removed from the Permit. It adds nothing but ambiguity.

(ii) For the reasons stated in Sections I.E.10, I.K.13 and Table V-1, the facility is not subject to the MACT EEE Rule. Our comments and objections on Sections I.E.10, I.K.13, and Table V-1, are incorporated here in their entirety. EPA has clearly stated, repeatedly, that carbon reactivation facilities are not hazardous waste incinerators. *See, i.e.,* Boiler and Industrial Furnace rule, 56 Fed. Reg. 7134, 7200 (Feb. 21, 1991) ("EPA does not believe that these are recycling units but rather that regeneration is a continuation of the waste treatment process, that process consisting of removal of pollutants by adsorption followed by their destruction. *Nor does the Agency believe that incinerator standards make technical sense for these devices, as noted above*" (emphasis supplied)). While EPA has the discretion to determine that portions of MACT Subpart EEE may be relevant, it must support those determinations in the record and there is no such support in the record to justify the use of this provision. The draft Permit is simply written as if the MACT EEE Rule applies. Therefore the provisions of 40 CFR 63.1211 are inappropriate for this Permit as a matter of law. This provision therefore is arbitrary and capricious and in excess of EPA's authority, and an inappropriate use of agency discretion. See proposed change.

II.M.1.c. The following changes are needed to Table D-2 in Appendix XXI, Section D, of the Permit application to reflect the appropriate O&M manuals:

Table D-2. Operating and Maintenance Manuals

Equipment *	Manufacturer/ Supplier **	Purpose
Spent Carbon GAC Probes	Dynatrol	Spent Tank Level Control
Eductors	Penberthy	Transferring Spent Carbon
Spent Carbon Storage Tanks	Unknown	Storing Spent Carbon
Carbon Vessels	<u>SiemensEvoqua</u> <u>and/or</u> <u>predecessors</u>	Vapor Control for Spent Tanks
T-Tank PRV	Tyco	Spent Tanks Pressure Relief Valve
T-18 Furnace Feed Tank	Modern	Storing Spent Carbon
Furnace Feed Valve	Linatex	Feed Valve
Dewater Screw	B.W. Sinclair	Dewater Spent Carbon
Weigh Belt	Merrick	Measuring Spent Carbon Feed Rate
Rotary Air Lock	Wm. Meyer	Transfer Spent Carbon
LMI Chemical Pumps	LMI	Off Gas pH control
Magnetic Flow Meters	Rosemount	Off Gas Liquid Flow
Scrubber Pumps	Goulds	Venturi/Packed Bed Pumps

Quench/Venturi Scrubber	Clean Gas Inc.	Air Pollution Control
Packed Bed Scrubber	Clean Gas Inc.	Air Pollution Control
WESP	Clean Gas Inc.	Air Pollution Control
ID Fan	Barron	Gas
Stack	Warren Environmental	Gas Dispersion
CEMS Carbon Monoxide	TECO/Siemens	Measure Carbon Monoxide
CEMS Oxygen Analyzers	Ametek	Measure Oxygen
Stack Flow Meter	Cemtek	Measure Stack Flow Rate
Reactivation Furnace (RF-2)	Hankin Environmental	Reactivate Spent Carbon
Afterburner (AB-2)	Hankin Environmental	Destruction of Organics
Natural Gas Burners	North American	Temperature Control
Thermocouples	Pyco	Temperature Monitoring

\* Note - This table includes components of the facility that are exempt from permitting. Data related to these components is provided for informational purposes and ease of review only and they are not intended to become regulated components of the hazardous waste facility.

\*\* Note – Manufactures are listed for informational purposes only. Facility may elect to use other vendors with comparable products.

II.M.1.d. As stated in the comments and objections above for II.M.1.b, the MACT EEE provisions do not apply to the Facility and there is no justification in the permit record for applying these provisions. Our comments and objections on Sections I.E.10, I.K.13, II.M.1.b and Table V-1, are incorporated here in their entirety. This provision should be stricken from the Permit. See proposed change.

II.M.2. Our comments and objections on the MACT EEE Rule in Sections I.E.10, I.K.13, II.M.1.b and Table V-1, are incorporated here in their entirety. For the reasons stated, the MACT Subpart EEE provisions do not apply to the Facility and there is no justification in the permit record for applying these provisions. The reference to 63.1211 should be stricken from the Permit. All objections to MACT EEE provisions identified above are repeated here. See proposed change.

II.P. and II.Q. and II.R. EPA should specify that changes in financial assurance mechanisms, changes in cost estimates, and changes in insurance coverage will not be considered changes to the Permit and will not require applications for permit modifications under 40 CFR 270.42. See proposed changes.

### MODULE 3 – CONTAINERS

III.B.3. and Table III-1: There is no rational basis for imposing constraints in the Permit on the number and type of containers which Permittee may maintain for satellite accumulation, or where it may choose to locate 90 day accumulation containers. As a hazardous waste generator, Permittee should be able to locate these containers areas where it is convenient to do so, and the



number and type of such containers should be changeable without seeking a formal modification of the Permit. This provision is arbitrary and capricious and in excess of EPA's authority, and an inappropriate use of agency discretion. See proposed changes to Table III-1.

III.C., III.D.1, III.D.2, III.E.1, III.E.2, III.E.3.a and III.E.3.b. Section III.B.3 requires the Permittee to manage all containers in accordance with Subpart I. The additional provisions in Sections III.C, III.D.1, III.D.2, III.E.1, III.E.2, III.E.3.a and III.E.3.b. repeat the obligations that are set forth in Part 264, Subpart I. It is not appropriate to have redundant conditions in the Permit. If there is a violation, EPA cannot cite Permittee for multiple violations of the same requirement simply because the requirement is stated multiple times in the Permit. These duplicative conditions should be removed from the Permit.

#### III.D.3.

(i) This provision is nonsensical. EPA should not create a condition that purports to tell the Permittee how to comply with Condition III.D.1, which is itself simply a paraphrasing of a provision in the Part 264, Subpart I regulation.

(ii) This provision is also an inappropriate use of agency discretion. The language expands the scope of Subpart I requirements without justification in the permitting record.

(iii) This provision also provides no fair notice of its meaning. By attempting to dictate how Permittee should use or evaluate containers with appropriate liners, EPA has created substantial ambiguity. It is not possible to determine whether EPA is creating new requirements for container compatibility or if it is attempting to paraphrase what it believes is already required by Subpart I. It is simply not clear or understandable whether EPA is demanding that the Permittee, as an example, use the WAP testing procedures to evaluate every container for compatibility. Would an inspector cite a violation where a container was in good condition but there was no record that the WAP procedures had been reviewed? If EPA seeks to simply impose the requirements of Subpart I, this has been accomplished in Section III.B.3 and this duplicative provision should be deleted. If EPA seeks to impose an additional requirement here, the language used is extremely unclear, it creates substantial ambiguity, and it exceeds EPA's authority by imposing requirements for container management that are different from those that EPA subjected to public notice and comment in Subpart I, without justification for the changes in the permitting record. See proposed change.

III.E.3.c. This provision incorporates a chart from the Part B application but inexplicably does not include a note to the chart which clarifies that the facility receives other types and sizes of containers. The chart without this note is extremely unclear and creates substantial ambiguity that might result in the interpretation of the chart as a limit on the type of container the Facility may manage, and also may be interpreted as applying to non-hazardous wastes. The facility cannot operate with a limit on the type of containers it can manage, and the Permit may not impose conditions on containers of waste that are not hazardous wastes. As drafted, using the chart to create a limitation on container types is unsupported in the permitting record, is arbitrary and capricious, and exceeds EPA's authority. See proposed change, which clarifies that other types of containers may be managed at the Facility.



III.F.2.a. This condition inaccurately paraphrases the requirements of 40 CFR 264.175(b)(5). If EPA seeks to expand the scope of that provision, there is no justification in the permitting record for this expansion. See proposed changes.

III.F.2.b. 40 CFR 264.175(b)(5) requires removal of liquids “in as timely a manner as is necessary to prevent overflow of the collection system.” EPA’s proposed language in the draft Permit appears to override the requirement in the rule and instead require removal of liquids within 24-hours of initial accumulation. The Facility is located in an arid region, and a mandatory 24-hour removal requirement is unduly restrictive and burdensome. As an example, if there is an accumulation of a small puddle in a large collection system late on a Saturday night, it should not be mandatory to remove that liquid on a Sunday before the 24 hour period runs. There is no support in the permitting record for the 24-hour language proposed by EPA. The proposed language exceeds EPA’s authority by imposing requirements that are different from those that EPA subjected to public notice and comment in 40 CFR 264.175, without justification in the permitting record. See proposed change.

III.G. As discussed in prior comments above on other sections of the draft Permit, we do not believe it is appropriate for EPA to require compliance with an entire subpart of the RCRA regulations, in this case Subpart CC as it does in III.G.1, and then seek to require compliance with some specific sections (but not all sections) of that subpart, using language that loosely paraphrases the rule (and that in many cases misstates or ambiguously states rule provisions). We incorporate and repeat the comments and objections stated above on this concern and request that EPA delete Sections III.G.2 – III.G.6 in their entirety.

It appears that the provisions in Section III.G.2 – III.G.6 were drafted without reference to the Subpart CC Compliance Plan. Subpart CC is a complicated rule. This is presumably why EPA requires the Facility to have a Compliance Plan explaining how the rule will be applied at the Facility. EPA has reviewed that plan and is incorporating it into the Permit. The Permit language should simply state that the Facility must comply with Subpart CC and the Subpart CC Compliance Plan. The Permit should not attempt to incorporate the Compliance Plan and also state numerous pages and clauses from the regulation in summary form. The result in the draft Permit is confusing, impermissibly vague, and in conflict with the rule and the approved Compliance Plan. The proposed language is unsupported in the permitting record, arbitrary and capricious, and in excess of EPA’s authority. See proposed changes.

III.H.1. This condition inaccurately paraphrases the requirements of 40 CFR 264.171. If EPA seeks to expand the scope of that provision, there is no justification in the permitting record for this expansion. See proposed change.

III.H.3., III.H.4. and III.H.5. As discussed in prior comments above on several other sections of the draft Permit, we do not believe it is appropriate for EPA to require compliance with general sections of Part 264, and an incorporated plan (in this case the inspection plan) and then seek in different Permit conditions to require compliance with some specific subsections of the incorporated rule sections, using language that paraphrases the rule, that in many cases misstates or ambiguously states rule provisions, and in several instances creates new requirements beyond those stated in the rule provisions, with no justification for these many changes in the permitting



record. In the case of EPA's Subpart CC inspection language, for example, there is substantial deviation from the requirements of 240 CFR 64.1086, including the omitting of the EPA-defined term "date of acceptance" and its replacement with a term that is ambiguous. EPA's language as drafted in Sections III.H.3, III.H.4 and III.H.5 inaccurately paraphrases the inspection requirements contained in Part 264 of EPA's RCRA rule and fails to state the requirements that EPA subjected to public notice and comment, without justification for those changes in the permitting record. The language is impermissibly vague and confusing and is arbitrary and capricious and in excess of EPA's authority. We therefore request that EPA delete Sections III.H.3. and III.H.4. and III.H.5 from the Permit.

III.I. This provision seeks to require recordkeeping under 40 CFR 264.1086 for containers that are exempt under 40 CFR 264.0182(c), without explanation. Section 264.1082(c) explicitly states that any container exempt under that provision "is exempt from standards specified in §264.1084 through §264.1087." Therefore, the rules adopted by EPA after notice and public comment prohibit EPA from requiring compliance with 40 CFR 264.1086 for any container that is exempt under 40 CFR 264.0182(c). This proposed provision is in conflict with the language in EPA's own rule and is not supported in the permitting record, is arbitrary and capricious and in excess of EPA's authority, and is an inappropriate use of agency discretion. See proposed changes.

III.I.5. EPA should clarify that the Permittee has met this requirement in Appendix VII of the Part B application, so that it is clear that the information required for the Permit has been provided and reviewed by EPA. See proposed change. In addition, the remainder of this provision is vague and ambiguous and deprives the Permittee of fair notice of the requirements that EPA attempts to impose. What are "hazardous waste container-specific documents"? It is unclear what EPA believes the difference is between "documents" and "information"? Or what it believes would constitute an amendment, revision, and modification to "information"? As drafted, this proposed provision is in conflict with the language in EPA's own rule is not supported in the permitting record, is arbitrary and capricious and in excess of EPA's authority, and is an inappropriate use of agency discretion. See proposed changes.

III.I.6. and III.J. The Facility does not manage reactive waste. EPA expressly prohibits the management of reactive waste in Section II.H.5, and the Waste Analysis Plan also states that reactive waste will not be managed at the Facility. The many references to reactive waste in these sections are inappropriate for the Permit and should be removed.

III.J and III.K. EPA must clarify that these provisions apply only to the management of hazardous wastes. EPA does not have the statutory authority to regulate non-hazardous wastes in this Permit. See proposed changes.

III.J.4. There is no existing regulatory requirement that prohibits the stacking of drums of ignitable waste and a limitation here is not supported in the record, is arbitrary and capricious, and exceeds EPA's authority by imposing requirements that exceed those that EPA subjected to public notice and comment in Part 264, without justification in the permitting record.

#### **MODULE 4 - STORAGE TANKS**



IV. As noted in comments on Sections III.H.3., III.H.4. and III.H.5. above, these provisions similarly repeat the obligations that are set forth in Part 264, Subpart J. The Permit should require compliance with Subpart J, but it should not restate and paraphrase individual conditions, as this adds duplicate Permit conditions for the same underlying requirements. It is not appropriate to have redundant conditions in the Permit. If there is a violation, EPA cannot cite Permittee for multiple violations of the same requirement simply because the requirement is stated multiple times in the Permit. See our comments and objections above on Sections III.H.3, III.H.4 and III.H.5, which are incorporated here in their entirety. The individual provisions in Section IV should be removed from the Permit.

In the event EPA does not accommodate our request for removal of the duplicate conditions, we provide comments on some of the individual provisions in this Module, reserving our objection to the duplication and our request for complete removal of these provisions.

IV.A.1. The use of the phrase “tank-like systems” is vague and ambiguous and deprives the Permittee of fair notice of the requirements that EPA attempts to impose. The RCRA tank system requirements apply to “tanks” and “tank systems”, which are both defined terms in 40 CFR 260.10, not to the ambiguously phrased “tank-like systems”, which is not defined. To the extent that EPA seeks to impose tank or tank system requirements of Part 264 Subpart J to equipment that does not constitute a tank or tank system, this is not supported in the record, is arbitrary and capricious and in excess of EPA’s authority, and/or is an inappropriate use of agency discretion. The term “tank-like” should be deleted. See proposed change.

IV.A.2. EPA may not impose the requirements of 40 CFR Subpart FF through this Permit. Under RCRA Section 1006(b), Congress required that EPA “shall avoid duplication, to the maximum extent practicable, with the appropriate provisions of the Clean Air Act.” 42 U.S.C. §6905(b)(1). In recognition of this limitation, EPA’s RCRA rule allows Permittee to elect to determine compliance with 40 CFR Part 264, Subparts AA, BB and CC either by complying with those subparts or by documenting its compliance with certain Clean Air Act programs in the Facility’s operating record. See 40 CFR §§ 264.1030(b), 264.1064(m), and 264.1080(b)(7).

In fact, to address the RCRA Section 1006(b) prohibition, EPA explicitly provided in both the recent Veolia Permit and the Envirosafe Permit the following condition:

**I.K COORDINATION WITH THE CLEAN AIR ACT**

You must comply fully with the requirements contained in this permit. This permit does not include the requirements imposed by the Clean Air Act.

Further, RCRA Section 3004(n) provided EPA with a limited window from 1984 to 1986 in which to promulgate air emission rules for the monitoring and control of air emissions at hazardous waste treatment, storage and disposal facilities. 42 U.S.C. §6924(n). EPA is not authorized outside of this limited window to impose such requirements. Consequently, EPA is not authorized in a RCRA permit to mandate compliance with specific Clean Air Act program rules but must instead follow the procedure adopted in Subparts BB and CC by providing Permittee with the election to comply with Subpart FF. See proposed change.



In addition, EPA's authority to regulate the use of tanks is limited to the storage and treatment of hazardous waste. See 40 CFR 264.190. To the extent that EPA seeks to impose requirements on tanks that are not used to manage hazardous waste, this is not supported in the record, is arbitrary and capricious and in excess of EPA's authority, and is an inappropriate use of agency discretion. See proposed changes.

Further, the Permittee believes that Subpart BB applies to only a small portion of the tank systems for T-1, T-2, T-5 and T-6, and not to any portions of the tank system for T-18. Permittee also believes that air emission control requirements do not apply to Tank T-11 because annual testing has demonstrated no controls are required, in accordance with the Subpart CC Compliance Plan (Appendix XX). EPA appears to have agreed with this as there is no control requirement contained in Table IV-2. As drafted, the language in Section IV.A.2 is therefore incorrect on these points and exceeds EPA's authority. See proposed changes.

IV.A.3. H-1 and H-2 are not "defined as 'open valves or lines' under ... Subpart BB, and as 'individual drain systems' under the Clean Air Act's air emission control requirements for individual drain systems found at 40 CFR Part 61, Subpart FF." EWT has agreed with EPA that H-1 and H-2 may be construed as open valves or lines and individual drain systems as a matter of interpretation. See proposed change.

Table IV-1. As EWT notified EPA by communication of February 20, 2015, including engineer design calculations and certification, EWT intends to replace H-1 and H-2 with hoppers of similar capacity. The capacity and dimensions of H-1 will be approximately 270 cubic feet and 7'x14'x9' and the capacity and dimensions of H-2 will be approximately 50 cubic feet and 6'x5'x5'. The new hoppers will be constructed of stainless steel. EPA approved these designs by return communication of March 3, 2015. See proposed changes.

IV.B.2. See our comments and objections above in Section IV.A.1. on the use of the term "tank like", which are incorporated here in their entirety. See also our comments and objections above in Section IV.A.2. concerning the limitation of EPA's authority to hazardous waste management, which are incorporated here in their entirety. In addition, the comma in the first line of this provision should be eliminated from the Permit so that it is clear the requirement applies only to new components. See proposed changes.

IV.B.3. See our comments and objections above in Section IV.A.2. concerning the limitation of EPA's authority to hazardous waste, which are incorporated here in their entirety. The incorporation by reference of Subpart J is also duplicative of the requirement to comply with Subpart J in Condition IV.A.2. See proposed changes.

IV.B.4. There is no RCRA rule requirement to conduct written assessments on the hoppers, or to conduct leak tests as EPA proposes in the current schedule of compliance. There is nothing in the permitting record to support such a requirement.

Further, as noted above in our comments and objections on Table IV-1, which are incorporated here in their entirety, EWT intends to replace the existing hoppers, and EPA has already



approved the new replacement design. EWT anticipates that the replacements will occur prior to the issuance of the final Permit. EWT will comply with the requirements for replacement of ancillary equipment in a tank system in 40 CFR 265.192(g) in conducting this work. This will include certification of the design of the hoppers as ancillary equipment, but will not include certification of tank installation as there is no tank being installed. To the extent that EPA seeks to impose Part 264 tank installation requirements to ancillary equipment that will be replaced while the Facility is in interim status, this exceeds EPA's authority, is not supported in the record, is arbitrary and capricious, and is an inappropriate use of agency discretion.

IV.C.1. The reference to 40 CFR 264.171 is in error and this section should be deleted. The obligations to maintain tank systems and respond to leaks are addressed in substantial detail in other portions of Module IV. This provision is inconsistent with those detailed requirements. The language is therefore unclear, it creates substantial ambiguity, and it exceeds EPA's authority by imposing requirements that are different from those that EPA subjected to public notice and comment in Subpart J, without justification in the record.

IV.E.1. and 2. The language in these sections inaccurately paraphrases the language in 40 CFR 264.194(b). To the extent EPA seeks to change the meaning of that section, the language exceeds EPA's authority by imposing requirements that are different from those that EPA subjected to public notice and comment in the Subpart J rulemaking, without justification in the permitting record. In addition, EPA's authority in this section is limited to hazardous waste. In addition, EPA should not include a freeboard requirement for H-1, as H- is not a tank. See proposed changes.

IV.E.3. EPA's authority in this section is limited to hazardous waste. See our comments and objections above in Section IV.A.2. concerning the limitation of EPA's authority to hazardous waste, which are incorporated here in their entirety. See proposed changes.

IV.F.2. The containment system provisions must be clearly limited to hazardous waste tanks. EPA has clarified in guidance that the containment system requirements in 40 CFR 264.193 apply only to hazardous waste tanks, including the capacity calculation provisions. *See, e.g., RCRA/Superfund Hotline Summary (July 1987) (Available on RCRA Online as Document No. 9483.1987(13))* ("The hazardous waste tank regulations are not applicable to tanks containing non-hazardous waste; therefore the vault must be designed to contain 100 percent of the capacity of the largest hazardous waste tank."). See our comments and objections above in Section IV.A.2. concerning the limitation of EPA's authority to hazardous waste, which are incorporated here in their entirety. See proposed change.

IV.F.4. The containment system provision for calculating the required volume for secondary containment for Tanks T-1, T-2, T-5 and T-6 is unclear as drafted. The language is vague and ambiguous and deprives the Permittee of fair notice of the requirements that EPA attempts to impose. See proposed changes.

IV.F.6. and IV.F.7. There is no regulatory requirement that Hoppers H-1 and H-2 must undergo any leak testing or other integrity assessment, either on a one-time basis or annually as proposed. H-1 and H-2 are construed by EPA as piping (see EPA's conclusion that H-1 and H-2 are



regulated as *open ended lines* under Subpart BB in Section IV.A.3). Under 40 CFR 264.193(f), aboveground piping that is visually inspected for leaks on a daily basis is specifically excluded from secondary containment requirements. An open ended line uncontestedly constitutes piping and therefore an open ended line that is visually inspected would not be required to have secondary containment. While EWT is proceeding to install double walled hoppers to replace H-1 and H-2 as a protective measure, and EPA has approved this design, this protective step is not required, and cannot be required by EPA in the Permit. To the extent that EPA seeks to impose tank system secondary containment requirements on H-1 and H-2, this conflicts directly with the above ground piping exclusion in 40 CFR 264.193(f). Such a requirement is not supported in the permitting record, is arbitrary and capricious and in excess of EPA's authority, and is an inappropriate use of agency discretion.

IV.G.1. and IV.G.2. As noted above, the use of Part 61, Subpart FF to meet the requirements of Part 264 Subparts BB and CC, is an option that can be chosen by the Permittee. Therefore, we request that the Permit language reflect that Permittee may elect to comply with the Subpart BB and CC requirements directly or as an alternative may choose to comply with Subpart FF to satisfy Subpart BB and CC obligations. See proposed changes.

As discussed in our comments and objections above in Section IV.A.2, which are incorporated here in their entirety, RCRA prohibits EPA from imposing the requirements of the Clean Air Act through this Permit. Consequently, the Subpart FF compliance plan can be referenced by the Permit but its provisions cannot be incorporated into the RCRA permit and changes to the compliance plan can be made without amending the RCRA Permit. See proposed changes.

IV.G.2.b. The hoppers must be opened to feed both hazardous and non-hazardous waste to the treatment system. As §264.1056 only refers to the feed of hazardous wastes streams, EPA's proposed language must be modified to accommodate the feed of non-hazardous wastes streams. In addition, this provision should clarify that it is permissible to open the hoppers to conduct maintenance and repair work to ensure that EPA inspectors understand that such work is authorized.

IV.G.3. This provision should state that Permittee will comply with the applicable requirements of Subpart BB, as many of the BB requirements will not apply directly to the Facility.

IV.G.4. This provision seeks to apply recordkeeping criteria in 40 CFR 264.1089(f)(1) and 1090(a) that are required for tanks, surface impoundments and containers exempt from Subpart CC for certain reasons. However, the draft Permit language states that this provision applies "when operating the scrubber, recycler, boiler and cooling tower blow-down storage tank, T-11." This requirement is ambiguous. The recordkeeping requirements only apply to tanks, surface impoundments or containers; they should not apply to a "scrubber", "recycler" or "boiler", and in fact it is not clear what EPA intends these terms to mean. Furthermore, the recordkeeping requirements in Attachment O, Appendix XX and Part CC are already incorporated into the Permit to the extent applicable. The proposed language is impermissibly vague and confusing, arbitrary and capricious, an impermissible use of EPA's discretion, and/or it exceeds EPA's authority by imposing requirements that are different from those that EPA subjected to public



notice and comment without justification in the permitting record. This section should be deleted from the Permit.

IV.G.5. As discussed in our comments and objections above in Section IV.A.2, which are incorporated here in their entirety, RCRA prohibits EPA from imposing the requirements of the Clean Air Act through this Permit. The draft Permit language in this section is taken verbatim from EPA's Clean Air Act regulations, the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 61, Subpart A, Section 61.12(c). This provision violates RCRA Section 1006(b) and must be deleted from the Permit.

Table IV-2. See proposed changes consistent with above comments.

IV.G.7 and G.8 These provisions for the most part do not apply to activities at the Facility. Further they are inexact and abbreviated summaries of complex and intricate requirements in Subpart CC. The Permittee is already required by the Permit to comply with Subpart CC. As noted above, EPA should not attempt to summarize regulatory provisions in new conditions when those regulatory provisions are otherwise incorporated into the Permit, and certainly not provisions that do not directly apply to Facility operations. The proposed language is impermissibly vague and confusing, is arbitrary and capricious, an impermissible use of EPA's discretion, and/or it exceeds EPA's authority by imposing requirements that are different from those that EPA subjected to public notice and comment without justification in the permitting record. These sections should be deleted from the Permit.

As noted above in our comments and objections in Section IV.A.2., which are incorporated here in their entirety, RCRA prohibits EPA from imposing the requirements of the Clean Air Act through this Permit. EPA therefore cannot impose Subpart FF requirements through this Permit. Section IV.G.8.b.i. and ii. should be deleted.

IV.H. In this section, the draft Permit states a requirement to comply generally with the tank inspection rule at 40 CFR 264.195, and then includes an attempt to paraphrase individual rule requirements. This is at best duplicative. See our comments and objections stated above on Sections II.E.2 – E.5, which are incorporated here in their entirety.

In addition, the draft Permit inaccurately paraphrases rule requirements throughout this section. We provide three examples, but the proposed language creates many additional problems:

(i) The draft Permit language changes the RCRA rule requirement for visual inspections "once each operating day" to "daily". Precision matters in RCRA, as EPA inspectors often read each requirement with an extraordinary devotion to the literal meaning of each word. EPA has published an interpretation of the term "once each operating day" in guidance (*see Operating Day Defined*, OSWER Letter from M. Williams to P.E. Gerwert (10/16/87)( available on EPA's RCRA Online database as Doc. No. 9483.1987(19)), and Permittee is entitled to rely upon, and to continue to rely upon, EPA's published interpretation of that requirement.

(ii) The draft Permit language does not provide for the elective to use reduced frequency inspections where leak detection systems are employed, as allowed under the rule.



(iii) The draft Permit language creates a new requirement for daily inspections of the waste feed cutoff, bypass and drainage systems, which is not contained in the rule.

Permittee is entitled to be subject to the inspectional program described in 40 CFR 264.195. EPA cannot vary from those requirements without justification in the permitting record, which does not exist in this case. To the extent that EPA does not agree to remove the duplicative requirements, the proposed paraphrasing language is impermissibly vague and confusing, arbitrary and capricious and/or in excess of EPA's authority, and an inappropriate use of agency discretion. We request that the rule simply be incorporated by reference and that these summary provisions be deleted in their entirety. To the extent EPA declines to do so and retains duplicate provisions, we believe EPA must precisely and accurately state those requirements consistent with the rule language.

IV.H.4. The decision by EPA to approve, disapprove or condition an approval of this work plan is a substantive decision that affects Permittee's rights and must be subject to dispute resolution. Our comments and objections in Sections I.G.5., I.G.6, I.G.7 and I.G.8, and I.L. are incorporated here in their entirety. See proposed change.

IV.H.7.a EWT agrees to this condition but asks that EPA clarify that the condition would not apply if any tank is replaced with a new tank in the future. See proposed change.

IV.H.7.d. The Facility has already replaced all carbon steel components and fittings of any hazardous waste tank system that are in direct contact with spent carbon and recycle water slurry with 300 series stainless steel components and fittings. This provision should therefore be deleted from the Permit.

IV.H.8. This provision duplicates the requirement already in the Permit in Section II.E.1 to comply with the inspection schedule in Section F and Appendix XII. EPA cannot impose multiple requirements in the Permit that are identical, and this condition should therefore be deleted.

IV.H.10. This provision duplicates 40 CFR 264.193(i)(5), and adds additional requirements that are not found in the regulation, with no support for the additional requirements in the permitting record. The language used in this section is impermissibly vague and confusing, arbitrary and capricious, and/or an inappropriate use of agency discretion. The proposed language also exceeds EPA's authority by imposing requirements that are different from those that EPA subjected to public notice and comment in Subpart J without justification in the permitting record. See proposed deletion.

IV.I.1. The draft Permit has merged into a single long set of conditions the responses required in the event of tank system spills or carbon adsorber equipment defects. In merging these conditions, the draft Permit significantly changes the requirements that apply to the Permittee under 40 CFR 264.196 and 40 CFR 264.1084, to the detriment of the Permittee. There are numerous places where this issue exists: we provide three illustrative examples:



(i) The draft Permit language impermissibly requires the Permittee to immediately take out of service a carbon adsorber exhibiting a defect, when EPA's rules provides 5 days for a first effort at repair, and completion of repair within 45 days. In some cases, repair can be delayed under the rule until the next process unit shutdown. There are important reasons for these rule provisions and allowances, and they have been ignored by EPA in drafting this provision. There are cases where emissions would increase if there were an immediate removal from service. There are other cases where emissions are minuscule and do not warrant the interruption of an immediate shut down.

(ii) The draft Permit language on addressing the shutdown of waste flow as a result of a release from a tank system appears to create a violation if flow is not stopped within 24 hours, where the rule provision allows for a longer period in some circumstances without a violation.

(iii) The draft Permit language also inserts an approval right for the Director where there is no approval right afforded by the rule and no justification in the record for such a right.

The attempt to paraphrase rule requirements in this section of the draft Permit, and to blend the two different system requirements, and apparently add new requirements without support in the permitting record, results in language that is impermissibly vague and confusing, arbitrary and capricious, and/or an inappropriate use of agency discretion. The proposed language also exceeds EPA's authority by imposing requirements that are different from those that EPA subjected to public notice and comment in rulemaking without justification in the permitting record. We request that the rule requirements be accurately stated. See proposed changes.

IV.I.1.d. The draft Permit language inaccurately rephrases and attempts to paraphrase 40 CFR 264.196(e). In so doing, the language creates a presumption that a tank system must be closed, reversing the meaning of the language in the rule. The language used in this section is impermissibly vague and confusing, arbitrary and capricious, and/or an inappropriate use of agency discretion. The proposed language also exceeds EPA's authority by imposing requirements that are different from those that EPA subjected to public notice and comment in Subpart J, without justification in the permitting record. We request that the rule requirements be accurately stated, for the reasons noted above. See proposed changes.

In addition, for Section IV.I.1.d.iv, as noted above in our comments and objections in Section IV.A.2., which are incorporated here in their entirety, RCRA Section 1006(b) prohibits EPA from imposing the requirements of the Clean Air Act through this Permit, including the requirements of 40 CFR Part 61, Subpart FF. Further, EPA seeks arbitrarily to subject Permittee to closure requirements for entire tank systems if the Permittee does not meet a repair timeframe imposed through Subpart FF. This draconian remedy would likely force the long term shutdown of the entire Facility, as the Facility has very little redundant storage capacity. EPA does not impose such a requirement in either the EnviroSAFE Permit or the Veolia Permit. The imposition of such a sanction is arbitrary and capricious and an unlawful exercise of discretion. This clause should be removed from the Permit.

IV.I.1.e. The draft Permit language substantively changes the requirements imposed by 40 CFR 264.196(f) and substantially increases the stringency of the rule requirements, without



justification in the permitting record. EPA does not impose such requirements in either the EnviroSAFE Permit or the Veolia Permit. The language used in this section is impermissibly vague and confusing, arbitrary and capricious, and/or an inappropriate use of agency discretion. The proposed language also exceeds EPA's authority by imposing requirements that are different from those that EPA subjected to public notice and comment in Subpart J, without justification in the permitting record. We request that the rule requirements be accurately stated. See proposed changes.

IV.I.2. The inspection requirement is summarized incorrectly from the rule provision at 40 CFR 264.1084(k). The language used in this section is impermissibly vague and confusing, arbitrary and capricious, and/or an inappropriate use of agency discretion. The proposed language also exceeds EPA's authority by imposing requirements that are different from those that EPA subjected to public notice and comment in Subpart J, without justification in the permitting record. We request that the rule requirements be accurately stated. See proposed change.

IV.J.1 The Facility does not have any existing tank systems without secondary containment. This provision should be deleted.

IV.J.2. The release reporting requirement from Part 264, Subpart J, 40 CFR 264.196(d), is limited to releases from tank systems. The reporting requirement is summarized incorrectly as it does not specify that it relates to releases from tank systems, or that a report made under 40 CFR Part 302 will satisfy this requirement. The language used in this section is therefore impermissibly vague and confusing, arbitrary and capricious, and/or an inappropriate use of agency discretion. The proposed language also exceeds EPA's authority by imposing requirements that are different from those that EPA subjected to public notice and comment in Subpart J without justification in the permitting record. We request that the rule requirements be accurately stated. See proposed changes.

IV.J.3. It is redundant to state "tank system or secondary containment system" as the definition of tank system at 40 CFR 260.10 includes the containment system. See proposed change.

IV.K.1. It is redundant to state "tank system or secondary containment system" as the definition of tank system at 40 CFR 260.10 includes the containment system. See proposed change.

IV.L.1. It is redundant to state "the same tank system or the same secondary containment system" as the definition of tank system at 40 CFR 260.10 includes the containment system. See proposed change.

IV.M.2. The language in the draft Permit changes the closure requirements imposed by 40 CFR 264.197 by substituting the word "practically" for the word "practicably", which is actually used in the rule. The language used in this section is therefore impermissibly vague and confusing, arbitrary and capricious, and/or an inappropriate use of agency discretion. The proposed language also exceeds EPA's authority by imposing requirements that are different from those that EPA subjected to public notice and comment in Subpart J without justification in the permitting record. We request that the rule requirements be accurately stated. See proposed change.



IV.M.3 The Facility anticipates that H-1 will be replaced prior to the issuance of the final Permit. This provision is therefore unnecessary. See proposed deletion.

### **MODULE V – Thermal Treatment Unit**

V. These proposed conditions can be interpreted to prohibit Permittee from treating in RF-2 spent carbon that is not classified as a hazardous waste. Such a prohibition would be arbitrary and capricious, an inappropriate use of agency discretion, and in excess of EPA's authority. See proposed changes throughout the Module.

V.A.3. It is not appropriate for the draft Permit to state that conditions are based on Part 264 Subpart O or Part 63 Subpart EEE, as neither of those subparts is applicable to the Facility. Our comments and objections on the MACT EEE Rule in Sections I.E.10, I.K.13, II.M.1.b, and Table V-1 of these comments are incorporated here in their entirety. EPA can state its rationale for using sections of either subpart in the record of the permitting proceeding, but it should not state in the Permit that conditions are based on those subparts. See proposed changes.

V.B.1.ii. and V.C.1.iv. These provisions seek to regulate worker safety in the Facility, an area over which EPA has no jurisdiction. Worker safety is reserved to the Occupational Safety and Health Administration under the Occupational Safety and Health Act. 29 U.S.C. §651 *et seq.* These provisions should be deleted or modified as shown.

V.B.1.iii. The proposed language in this section suggests that there would be a requirement for a specific shaft speed, which is not appropriate. The only important technical consideration is the residence time based upon a calculation at an *assumed* shaft speed. Also the actual measured shaft speed as documented in the PDT report is 1 rpm for every 54 seconds. As drafted, the language in this section is therefore impermissibly vague and confusing, arbitrary and capricious, and/or an inappropriate use of agency discretion. See proposed changes.

V.B.2.i. and 2.ii. These conditions seek to impose requirements on carbon "containing hazardous waste". The status of spent carbon received at this site is not determined by applying the 'contained in' rule. The status of the spent carbon depends upon whether the carbon exhibits a hazardous characteristic or is a listed hazardous waste, as determined through waste profiling and application of the site's Waste Analysis Plan, approved by EPA. Consequently, as drafted this provision is incorrect. Finally, the provision also impermissibly prevents treatment of non-hazardous carbon, and impermissibly limits the spent carbon generated on site that can be treated in RF-2.

The combined language is unauthorized by law or regulation, impermissibly vague and confusing, arbitrary and capricious, and/or an inappropriate use of agency discretion. See proposed changes.

V.B.3. This provision simply restates the restriction in V.B.2, which also restates the restriction in Section I of the Permit. EPA may not impose multiple requirements in the Permit that are essentially identical, and this condition should therefore be deleted. The combined language is



unauthorized by law or regulation, impermissibly vague and confusing, arbitrary and capricious, and/or an inappropriate use of agency discretion. See proposed change.

V.C.1. These sections use the terms “feed rates” and “feed limits” interchangeably. It is illogical and not understandable to include a condition that limits feed of spent carbon that contains constituents in concentrations exceeding permissible feed limits. Feed rates are measured in lbs/hour, not in concentrations of constituents. In addition, the Permit should explain that the feed rate limits are designed to ensure the facility does not exceed the emission limits. Further, Section V.C.1.ii purports to mandate compliance with the emission limits in Table V-1 in two separate requirements. These requirements are duplicative and therefore unwarranted. The language in this section is unauthorized by law or regulation, impermissibly vague and confusing, arbitrary and capricious, and/or an inappropriate use of agency discretion. See proposed changes.

Table V-1. Performance Limits; and Table V-4 Performance and Emission Limits.

EPA may not impose MACT EEE Rule emission limits on this Facility under its RCRA authority. Our comments and objections on the MACT EEE Rule in Sections I.E.10, I.K.13 and II.M.1.b are incorporated here in their entirety.

EPA has specifically concluded that there is no technical basis for subjecting carbon reactivation facilities to the hazardous waste incineration standards. *See* Boiler and Industrial Furnace (“BIF”) rule, 56 Fed. Reg. 7134, 7200 (Feb. 21, 1991) (“EPA does not believe that these are recycling units but rather that regeneration is a continuation of the waste treatment process, that process consisting of removal of pollutants by adsorption followed by their destruction. *Nor does the Agency itself believe that incinerator standards make technical sense for these devices, as noted above*”(emphasis supplied)).

In addition, as discussed above, there is no basis in the permitting record for the imposition of emission limits from the MACT EEE Rule. The MACT EEE Rule adopts emission standards for six source categories. These categories are grouped together because they burn hazardous waste. *See* 72 FR 54875, 54877 (9/27/07). The six source categories are incinerators, cement kilns, lightweight aggregate kilns, solid fuel boilers, liquid fuel boilers, and hydrochloric acid production furnaces. The Facility is not in any of these source categories and therefore is not subject to the MACT EEE Rule.

MACT EEE requirements are not appropriately applied to this Facility for several reasons. First, the Facility does not burn hazardous waste. Second, the Facility is not in any of the six categories subject to the MACT EEE Rule. Third, EPA has clearly stated that hazardous waste incineration emission standards are not technically appropriate for carbon reactivation facilities. In 1991, EPA clarified in the preamble to the BIF rule that both direct flame and nonflame carbon reactivation thermal units were not to be regulated as incinerators, and in that rulemaking revised the definition of “carbon regeneration unit” in 40 CFR 260.10 to differentiate these units from incinerators. As EPA wrote:



Although several commenters supported the application of part 264, subpart O incinerator standards to direct flame and nonflame [carbon regeneration] devices, EPA has decided against this since demonstration of conformance with the DRE standards (and the proposed CO/THC standards) may not be achievable or warranted for carbon regeneration units considering the relatively low levels of toxic organic compounds adsorbed onto the activated carbon.

...

(...Nor does the Agency believe that incinerator standards make technical sense for these devices, as noted above). In addition, few if any of these units have actually been regulated as incinerators in practice.

56 Fed. Reg. 7134, 7200 (2/21/91).

Where EPA has previously determined that it would not make “technical sense” to apply hazardous waste incinerator requirements to carbon reactivation facilities, and that the emission limits imposed by hazardous waste incinerator standards may not be achievable or warranted for these facilities given the relatively low levels of toxics adsorbed onto spent carbon, and where the Facility has been subjected to a comprehensive PDT to evaluate emissions and a HHRA to assess the risks posed by those emissions, and where EPA has concluded that the facility poses insignificant risk on the basis of those evaluations, there is simply no rational basis for EPA to seek to apply the MACT EEE Rule emission limits to the Facility.

EPA has selectively applied provisions of the MACT EEE Rule in the draft Permit, but rather than doing so in a judicious way it has imposed the most burdensome requirements while specifically excluding protections that EPA has placed in the rule for facilities that are actually subject to its terms. One example of this is the failure to provide startup, shutdown and malfunction protection. *See, e.g.*, proposed Condition V.C.5.v.b.(2). Another is the failure to provide surrogate monitoring appropriate to the technology employed and limited risks identified through the elaborate health risk and ecological risk assessment process that the Permittee completed as part of the application process. Thus, the conditions EPA seeks to impose create the absurd result of burdening the Permittee with onerous conditions that would be applied to hazardous waste incineration facilities that present far greater risk to the environment than would the Facility, while not affording the Permittee with the basic protections that EPA has provided those incineration facilities through the rulemaking process.

Further, RCRA Section 1006(b) commands EPA to “avoid duplication, to the maximum extent practicable, with the appropriate provisions of the Clean Air Act...”. 42 U.S.C. §6905(b)(1), and RCRA Section 3004(n) provided EPA with a limited window from 1984 to 1986 in which to promulgate air emission rules for the monitoring and control of air emissions at hazardous waste treatment, storage and disposal facilities, and EPA chose to exclude carbon reactivation from RCRA Part 264 subpart O requirements and promulgated no other air rules for this facility during the 1984 – 1986 time period. 42 U.S.C. §6924(n).

EPA may include MACT EEE Rule requirements pursuant to 40 CFR 264.601 only to the extent they are appropriate for the carbon reactivation unit at the facility and this is supported in the permitting record. EPA has attempted to impose MACT EEE Rule emission limits with no



showing that these provisions are appropriate for the unit. In fact, as noted above, the PDT results and the extensive HHRA evaluation and conclusions in the Permit record establish the opposite: these scientific data demonstrate that the emissions from the Facility meet all applicable risk based standards, and that there is no basis for the extensive and costly MACT EEE Rule monitoring, testing and emission limit program.

EPA itself has concluded that the Facility poses minimal risk. As EPA stated recently about the risk assessment and PDT test results:

EPA has determined that impacts from long-term exposure to the Evoqua facility emissions are insignificant.

See EPA Fact Sheet, *Risk Assessment at Evoqua Water Technologies*, June 2016.

We would note that in spite of this conclusion, EPA has recently stated in a press release that the permit will impose “the most stringent environmental controls for this type of facility in the nation.” EPA Press Release Extending Public Comment Period for Draft Permit (November 10, 2016). This statement of EPA’s regulatory intent directly conflicts with the data in the Permit record. The conclusion that the most stringent controls will be imposed, presumably the MACT EEE Rule emission limits, is simply unsupported in the record.

EPA cannot simply impose expensive and unnecessary emission limits. There must be a rational basis in the record to support the use of agency discretion. Here, there is none. The record shows that the Facility emits extremely low levels of pollutants, and EPA’s own stringent risk assessment methodologies have established with ample margins for safety that the Facility’s emissions are at a level where health and ecological impacts from long term operations will be “insignificant.” With feed rate, carbon monoxide, nitrogen oxides and sulfur oxides limits and appropriate monitoring in Tables V-1 and V-4, and with the many specified operational limits in Table V-2, the Permit can ensure continuous operation within the parameters that were established by the PDT for safe operation with insignificant risk.

Consequently, EPA’s own conclusions demonstrate that it would be an absurd result to impose costly and inapplicable MACT EEE Rule emission limits on the Facility. The Facility has demonstrated that it can operate with comfortable safety margins using process parameters in place during the PDT, including a 99.99% destruction and removal efficiency, and the Permit can readily adopt a limit suite of controls to ensure those operational conditions are maintained. See proposed changes to Module V and Tables V-1 and V-4.

The insertion of the MACT EEE Rule emission limits and operating conditions into the Permit would violate EPA’s statutory limitations under RCRA and the proposed provisions in Module V exceed EPA’s authority. For the foregoing reasons, the insertion of MACT EEE Rule emission limits into the draft Permit is arbitrary and capricious, in excess of EPA’s authority, and an inappropriate use of agency discretion without justification in the permitting record. See proposed changes.

Table V-1. PM and Dioxin Standards



In addition to the foregoing comments and objections, we offer the following comments on the PM and dioxin limits proposed for Table V-1.

As with all MACT emission standards, the dioxin and particulate matter (“PM”) standards in the HWC MACT Rule are developed based on the establishment of MACT floors tailored to the specific units subject to regulation under the Clean Air Act. EPA has clearly stated that carbon regeneration units are not part of the source category regulated by the MACT EEE Rule and therefore the MACT floor analysis, including all of the technology based limits derived from the MACT floor, is inapplicable to the Facility.

EPA has concluded in the MACT EEE Rule that certain types of hazardous waste combustors are not subject to dioxin limits or PM limits, based on a number of different considerations including the use of a wet control system or the types of wastes combusted. So for instance, liquid fuel boilers equipped with wet (or no) air pollution control systems, all hydrochloric acid production furnaces, and lightweight aggregate kilns using a rapid quench of combustion gas at the exit to the combustion chamber, are not subject to any dioxin limits. EPA has determined that all of these facilities can use CO or hydrogen chloride limits, and a destruction and removal standard, as an appropriate surrogate to a dioxin limit. See 70 Fed. Reg. 59402, 59410 (10/12/05), Table 1. Similarly, hydrochloric acid production furnaces are not subject to PM limits, on the basis that “hydrochloric acid production furnaces generally feed hazardous wastes with low ash content and consequently emit low levels of particulate matter.” 70 Fed. Reg. at 59409. As a result, “EPA adopted standards for particulate matter (“PM”) for all of the hazardous waste combustor source categories except for hydrochloric acid production furnaces.” 72 Fed. Reg. 54874, 54878 (9/27/07).

The Facility has a wet electrostatic precipitator for air pollution control, is not a hazardous waste combustor, does not combust its carbon, uses a rapid quench of combustion gas at the exit to the combustion chamber, and does not manage wastes with a high ash content. These controls have been the basis for EPA’s conclusions that other types of facilities should not be subject to the MACT EEE Rule dioxin and PM emission limits. Here, EPA ignores the evidence that it relied on in its rulemaking to determine that the MACT EEE Rule limits are inappropriate, and has instead attempted to apply the MACT EEE Rule dioxin and PM emission limits directly through the Permit. There is no basis in the record for concluding that the Facility should be subject to either a dioxin limit or a PM limit. The comments and objections stated above for Table V-1 are incorporated here in their entirety. See proposed changes.

V.C.2.b. This proposed provision states that the Permittee must follow the SSMP whenever RF-2 is in non-compliance with the Permit. This statement is incorrect. The SSMP exists to provide procedures to follow when there is a start-up, shut down or malfunction – a condition that is not steady state operation – which results in a condition that would violate the Permit. In that event, the Permittee is to follow the SSMP to ensure that impacts are minimized in response to the abnormal operating condition. As drafted, the provision is incorrect and would be in excess of EPA authority, arbitrary and capricious, and an inappropriate use of agency discretion. See proposed change.



Table V-3. The first entry on this table should refer to the Weigh Belt, not the Weigh Cell. The last entry on this table should be deleted, as it is a repeat of the first Weigh Belt entry.

V.C.4.ii and iii. The Facility is not subject to any MACT standard and certainly is not subject to 40 CFR 63.8, and therefore should not be required to comply with MACT CEMS monitoring, repair and maintenance provisions. These provisions are both burdensome and expensive, and their inclusion is not supported in the record of this proceeding. In addition, EPA should not seek to impose a vague and malleable condition requiring the maintenance of 'necessary parts' for a CEMS unit. The Facility is required to continuously monitor, and that standard is clear. A vague condition relating to parts that should be maintained does not provide fair notice to the Permittee of the requirement EPA seeks to impose, and therefore is arbitrary and capricious and beyond EPA's authority. The comments and objections on Table V-1 above are incorporated here in their entirety. The Facility conducts, and is willing to continue to conduct, daily calibrations of its O2 and CO CEMs. See proposed changes.

V.C.1.viii and V.C.5 and V.C.5.v.a. These proposed sections all seem to state the same waste feed cutoff requirements but in different ways. Such language is impermissibly vague and confusing, arbitrary and capricious, and an inappropriate use of agency discretion. See proposed changes.

V.C.1.ix.  
V.C.1.x;  
V.C.5.v and  
V.C.5.v.c.  
V.G.4

It is not appropriate to subject the Facility to all of the hazardous waste incinerator monitoring provisions of 40 CFR 63.1209. Nor is it appropriate to incorporate specific enforcement provisions from 40 CFR 63.1206 or 63.6 or 63.10.

As noted above, EPA has specifically determined that carbon regeneration facilities are not hazardous waste combustors and therefore Subpart EEE does not apply. The attempt at incorporation of the 18 single-spaced pages of intricate hazardous waste incinerator monitoring requirements from §63.1209, and an enforcement provision from §63.1209 of the rule, where this rule has been determined definitively by EPA to not apply to carbon reactivation facilities, is both extreme and unsupported. These provisions are arbitrary and capricious, and an inappropriate use of agency discretion. The proposed language also exceeds EPA's authority by imposing requirements that EPA has determined in a rulemaking should not apply to this type of facility, without justification in the permitting record. Our comments and objections on the MACT EEE Rule in Sections I.E.10, I.K.13 and II.M.1.b and Table V-1 are incorporated here in their entirety. These MACT provisions should be deleted from Section V.G.4 of the Permit.

With respect to the monitoring conditions, the draft Permit contains independent monitoring provisions based on the contents of the Waste Analysis Plan and sections of the Permit application. The Permit should list the specific monitoring procedures that have been selected for the Facility. Group A1, A2 and C parameters are measured by field instruments. Group B parameters are measured by sampling as described in the Waste Analysis Plan, except for the



DRE efficiency, which is derived from a stack test. These are the only monitoring requirements that should be referenced.

See proposed changes to all sections.

V.C.5. In this provision, waste feed cutoff should occur in accordance with the provisions of the Permit, not in accordance with the MACT EEE Rule, which does not apply to the Facility. See our comments and objections in Table V-1 and Section V.C.4, which are incorporated here in their entirety. See proposed changes.

In addition, in V.C.5.i and V.C.5.v.a., EWT can agree to inspect and repair the AWFCO on a periodic frequency, but cannot guarantee that it will always work. Consequently, it is not reasonable for EPA to require a “functioning” system. The way this term is used in the Permit indicates that the Permittee would be in violation of this condition if there were any malfunction of the system. It is impossible to guarantee that a system will never malfunction, and even EPA has recognized this by providing protection for malfunctions in the HWC MACT Rule. No such protection has been offered in the Permit. This language is arbitrary and capricious, and an inappropriate use of agency discretion. See proposed insert to Section V.C.1.ii and proposed change to this section.

V.C.5.ii As the draft Permit mandates the use of an “automatic” waste feed cutoff system, it is irrational to also require Permittee to automatically cut off the feed. EPA has already required the cutoff to be installed and operated in Condition V.C.1.viii. All that Permittee can do once the automatic system is installed is to maintain it and fix it if and when needed. This provision is arbitrary and capricious, and an inappropriate use of agency discretion, and exceeds agency authority. In addition, in Table V-r, the only parameter that will be monitored by a CMS following our comments is CO. See proposed changes.

EPA should also clarify that the flow to the system should stop if parameters or limits are “exceeded”, not if they are “met or exceeded”. In addition, it is not possible to have the waste feed cutoff system automatically shut off flow whenever there is a CMS malfunction or a AWFCO system failure because the instrumentation cannot detect the wide range of malfunctions that could occur and the system cannot be set to respond in the manner that the draft Permit dictates. Therefore, the proposed language is impermissibly vague and confusing, arbitrary and capricious, and an inappropriate use of agency discretion. See proposed changes.

V.C.5.v.a. This provision restates in a different manner what is already stated in Section V.c.5.ii. As provided above, the Permit cannot restate requirements in different sections, and in this case the restatement will result in substantial confusion as it is not consistent with V.c.5.ii. The proposed language is impermissibly vague and confusing, unduly burdensome, arbitrary and capricious, and/or an inappropriate use of agency discretion. See proposed change.

V.C.5.viii. This provision seems to ignore that the SSMP addresses how the Facility will respond when waste feed is automatically stopped. As stated above, the Permit cannot duplicate requirements in different permit sections, or provide conflicting requirements. The proposed



language is impermissibly vague and confusing, unduly burdensome, arbitrary and capricious, and/or an inappropriate use of agency discretion. See proposed change.

V.C.5.ix. This provision duplicates the already voluminous inspection requirements in Section VF, the Inspection Schedule and Checklist, Permit Attachment Section F and Appendix XII. In addition, it seeks to impose an extremely burdensome and unwarranted recordkeeping requirement for each AWFCO test. The proposed language is impermissibly vague and confusing, unduly burdensome, arbitrary and capricious, and/or an inappropriate use of agency discretion. See proposed change.

V.C.6.ii. The amount of natural gas burned should be preserved in regular units of gas used, not in MMSCF. There is no justification in the record for why the Facility should be required to convert its gas usage to a format that is not customary for gas metering. The proposed language is unduly burdensome, arbitrary and capricious, and/or an inappropriate use of agency discretion. See proposed change.

V.D.1. and V.D.2. The language in these provisions is unclear and creates substantial ambiguity. We believe EPA intends first that V.D.1. require that emissions from the RF-2 stack, measured using the test protocols specified in the Permit, shall not exceed the Performance and Emission Limits specified in Table V-4, and second that V.D.2. require that the equipment be continuously operated at all times that RF-2 is in operation treating hazardous waste. The language used in these sections is impermissibly vague and confusing, arbitrary and capricious, and an inappropriate use of agency discretion. See proposed changes.

Comments on Table V-4 are included above with comments on Table V-1.

V.D.3. This provision is too vague and ambiguous to provide fair notice to Permittee of what actions EPA expects to achieve compliance. Further this provision is nothing more than a duplication of the requirement to comply with emission limits. The Permit cannot contain duplicate requirements in different permit sections. The proposed language is impermissibly vague and confusing, arbitrary and capricious, and/or an inappropriate use of agency discretion. This provision should be deleted.

V.D.4. and V.E. These provisions contain language from Subparts A and FF of Part 61, neither of which is enforceable through a RCRA permit. As stated above, RCRA Section 1006(b) commands EPA to "avoid duplication, to the maximum extent practicable, with the appropriate provisions of the Clean Air Act...". 42 U.S.C. §6905(b)(1). RCRA Section 3004(n) also provided EPA with a limited window from 1984 to 1986 in which to promulgate air emission rules for the monitoring and control of air emissions at hazardous waste treatment, storage and disposal facilities. 42 U.S.C. §6924(n). The insert of a Part 63, Subpart A provision into a RCRA permit violates these requirements and is not otherwise authorized by RCRA and therefore exceeds EPA's authority. Nor is it supported in the record as a permissible use of agency discretion.

V.F and V.G. These provisions are derived from the regulatory provisions that apply to hazardous waste incinerators only, pursuant to Part 264, Subpart O and the MACT EEE Rule.



The Facility is not an incinerator for the reasons stated above. The Facility is subject to Subpart X, for miscellaneous units, but is not subject to Subpart O or the MACT EEE Rule. Where EPA has determined that records for non-incinerator TSDFs should be maintained for three years, it is not appropriate for EPA to require a five-year retention for this facility. The insert of Subpart O and Part 63 records retention requirements into this Permit is not authorized by RCRA and exceeds EPA's authority. A five year retention requirement, and inspection language derived from the Subpart O standard are not supported in the Permit record as a permissible use of agency discretion. The inspection requirements and the record retention requirement for inspection and monitoring for this Facility must be stated as required by the applicable portions of Part 264. See proposed changes.

**V.I.** See comments and objections to PDT requirements in Module 1, which are incorporated here in their entirety. Permittee proposes to conduct two PDTs to confirm emissions of key parameters as set forth in this new section. See proposed changes.

V.I.8. The decision by EPA to disapprove or condition an approval of a plan or report under this section is a substantive decision that affects Permittee's rights and must be subject to dispute resolution. Our comments and objections in Sections I.G.5., I.G.6, I.G.7 and I.G.8, and I.L. above are incorporated here in their entirety. See proposed change.

V.L. This provision applies to hazardous waste incinerators only, pursuant to Part 264, Subpart O. It does not apply to other types of hazardous waste treatment facilities regulated under Part 264. As stated above, the Facility is subject to Subpart X, for miscellaneous units, but is not subject to Subpart O, since EPA has determined that carbon regeneration facilities are not incinerators. In addition, EPA clarified in its rulemaking for Subpart X facilities that these facilities will be treated differently for purposes of applying monitoring and response action programs. EPA stated the following in the preamble to the final Subpart X rule:

The Subpart F ground-water protection requirements will apply somewhat differently to miscellaneous units compared to the conventional types of units. For miscellaneous units, Subpart F requirements under § 264.101 for corrective action will always apply. However, the requirements under § 264.91 through 264.100 for monitoring and response action programs apply only to those units that have a potential for contamination of ground water. These standards will apply on a case-by- case basis through the new § 264.602...

52 Fed. Reg. 46946, 46955 (12/10/87). Consequently, EPA may not require any sampling and analysis of soil and groundwater that the Director may request. Such a provision exceeds EPA's authority and is not supported in the record as a permissible use of agency discretion. See propose change.

## **MODULE VI – Corrective Action**

VI.A.3. The proposed language stating that noncompliance with "reports required in accordance with this Permit" will be deemed noncompliance with the Permit does not make sense. The



Permittee cannot fail to comply with a report. This provision is too vague and ambiguous to provide fair notice to Permittee of what actions EPA expects to achieve compliance. The proposed language is impermissibly vague and confusing, arbitrary and capricious, and an inappropriate use of agency discretion. This provision should be deleted from the Permit.

VI.A.5. and VI.A.6. The proposed language mandating production of “all raw data and reports...and other supporting information gathered or generated during activities undertaken pursuant to this Permit” is overly broad. The proposed remedy of permit termination for any failure to submit timely information is draconian (i.e., if the facility submits one manifest one day late this provision suggests EPA can terminate the Permit). These provisions are not required or authorized by any regulatory provision; they exceed EPA’s authority, are arbitrary and capricious, and are not supported in the permitting record as a permissible use of agency discretion. See proposed deletions.

VI.A.7. The controls and restrictions that the draft Permit contains on corrective action work are unwarranted, and are unreasonably burdensome. As examples:

- EPA does not need 45 days advance notice of every person to work on corrective action, including every contractor, subcontractor and laboratory. A requirement to provide such notice could significantly delay work, dramatically increase costs and is simply an unwarranted intrusion into the minutia of work that is already carefully defined in EPA’s regulations;
- EPA does not need the names, titles and qualifications of every person to work on a corrective action project. A requirement to provide such information is unduly burdensome and is simply an unwarranted intrusion into the minutia of work that is already carefully defined in EPA’s regulations.
- EPA cannot create a standard-less right to fire Permittee’s project coordinator at any time. This is a substantive action and EPA’s actions must be reasonable under the circumstances and cannot constitute an arbitrary or capricious exercise of discretion. The effect of this provision would be to provide EPA with a right to act capriciously, and EPA would then undoubtedly claim that Permittee is forbidden from seeking judicial review, of EPA’s action.

These provisions are neither required nor authorized by any regulatory provision; they exceed EPA’s authority, are arbitrary and capricious, and are not supported in the permitting record as a permissible use of agency discretion. See proposed changes.

VI.E.1. This provision should specify that notification is required for spills or *releases to the environment*. There would be no reason to trigger the complicated sequence of events that follows in Section VI.E (which as drafted include multiple rounds of reporting, assessment, and permit modification) if there were a release of hazardous waste to a secondary containment system that was entirely contained, or a release of regulated spent carbon inside a building. This provision as drafted exceeds EPA’s authority, is arbitrary and capricious, and is not supported in the permitting record as a permissible use of agency discretion. See proposed change.



VI.E.2. There is no reason why every spill of greater than 1 lb would automatically require a permit modification. This would be highly inefficient, a waste of both Permittee's and EPA's resources, and would cause unwarranted alarm to the public. A permit modification should only be appropriate if there were a determination following a release that contamination was going to be left in place or that additional assessment will be necessary at a later time. Consequently, this provision should be tailored and should be moved to follow the work called for in Section VI.E.4.

VI.E.4. and VI.F.1. In these provisions, the decision by EPA to require an RFI Work Plan would be a substantive decision that affects Permittee's rights and must be subject to dispute resolution. Our comments and objections in Sections I.G.5., I.G.6, I.G.7 and I.G.8, and I.L. above are incorporated here in their entirety. See proposed change.

VI.G.1. This provision should not cite to a corrective action remediation guidance document that is 26 years old and was never taken by the agency beyond "interim final" status. Further, by citing a 26-year old guidance compendium that adopts a rigid and inflexible approach to corrective action, EPA is ignoring the flexibility that EPA itself has since incorporated into corrective action through the Corrective Action Management Units and Contaminated Media rulemakings in 2002 and 2005. No guidance should be referenced in this section. See proposed change.

VI.J. In this provision, the decision by EPA to select a corrective action remedy would be a substantive decision that affects Permittee's rights and must be subject to dispute resolution. Our comments and objections in Sections I.G.5., I.G.6, I.G.7 and I.G.8, and I.L. above are incorporated here in their entirety. See proposed change.

VI.M. In this provision, the decision by EPA to create or modify a Schedule of Compliance or other permit condition would be a substantive decision that affects Permittee's rights and must be subject to dispute resolution. Our comments and objections in Sections I.G.5., I.G.6, I.G.7 and I.G.8, and I.L. above are incorporated here in their entirety. See proposed change.

#### TABLE VI-1 - HAZARDOUS WASTE MANAGEMENT UNIT IDENTIFICATION

Various equipment listed on Table VI-1 has previously been removed from the site and therefore does not meet the definition of a hazardous waste management unit in 40 CFR 260.10. Such equipment cannot be designated as constituting a hazardous waste management unit in Table VI-1. These include the venturi scrubber, the RF-1 emissions stack, carbon adsorber – PV1000 (item 18), slurry transfer inclined plate settler tank, scrubber recycle tank T-17 and the filter press. See proposed deletions from Table VI-1 of the Permit.

The induced draft fan for RF-2 does not contact hazardous waste since it is only used to manage exhaust gas, which is not a hazardous waste. This should be removed from Table VI-1 of the Permit.



The emission stack for RF-2 does not contact hazardous waste since it is only used to manage exhaust gas, which is not a hazardous waste. This should be removed from Table VI-1 of the Permit.

The inclusion of these pieces of equipment on Table VI-1 exceeds EPA's authority under RCRA, is arbitrary and capricious, and is not supported in the permitting record as a permissible use of agency discretion. See proposed changes.











DRAFT RCRA PERMIT Evoqua  
Water Technologies LLC ~~Colorado~~  
~~River Indian Tribes~~ EPA ID#  
AZD982441263 Introduction/Table  
of Contents, Page 1 September  
2016



**U.S. Environmental Protection Agency  
Resource Conservation & Recovery Act Draft Permit  
EPA RCRA I.D. Number: AZD982441263**

**BENEFICIAL  
LANDOWNER:**

**COLORADO RIVER INDIAN  
TRIBES**

26600 Mohave Road  
Parker, Arizona 85344

**OPERATOR: EVOQUA WATER TECHNOLOGIES,  
LLC**

2523 Mutahar Street  
Parker, Arizona 85344

Pursuant to the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, 42 USC Sections 6901 *et seq.*, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, P.L. 98-616 (collectively, hereafter, "RCRA"), and regulations promulgated thereunder by the U.S. Environmental Protection Agency (EPA) (codified and to be codified in Title 40 of the Code of Federal Regulations), this Permit is issued to Evoqua Water Technologies, LLC and the Colorado River Indian Tribes (collectively, hereafter, the "Permittees"), for the facility located at 2523 Mutahar Street, Parker, Arizona 85344 with the EPA RCRA ID # AZD982441263.

This Permit, with all its attachments, constitutes the full RCRA Permit for this Facility. The Permittees, pursuant to this Permit, are required to investigate any releases of hazardous waste or hazardous constituents at the Facility, regardless of the time at which waste was placed in a unit. The Permittees are required to take appropriate corrective action for any such releases.

The Permittees must comply with all the terms and conditions of this Permit. This Permit consists of the conditions contained herein (including those in any appendices) and the applicable regulations contained in 40 CFR Parts 61, 63, 124, and 260 through 270, as specified in this Permit, and the statutory requirements of RCRA. Nothing in this Permit shall preclude the Regional Administrator from reviewing and modifying the Permit at any time during its term in accordance with 40 CFR § 270.41.

This Permit is based on the premise that information and reports submitted by the Permittees prior to issuance of this Permit are complete and accurate, unless otherwise indicated in this Permit. Any inaccuracies found in this information or information submitted as required by this Permit may be grounds for termination or modification of this Permit in accordance with 40 CFR §§ 270.41, 270.42, or 270.43 and/or potential enforcement. The Permittees must inform the EPA of any deviation from or changes in the information in the application which would affect the Permittees' ability to comply with the applicable regulations or Permit conditions.

This Permit is effective \_\_\_\_\_, and shall remain in effect for ten (10) years until \_\_\_\_\_, unless revoked and reissued, or terminated under 40 CFR §§ 270.41 and/or 270.43 or continued in accordance with 40 CFR § 270.51(a). ~~All obligations for performance of the conditions of this Permit are in effect until deemed complete by the Director of the Land Division for the U.S. Environmental Protection Agency, Region 9 (the "Director").~~

This draft permit has been created in accordance with 40 CFR § 124.6 as part of US EPA's proposed RCRA hazardous waste permit decision for the hazardous waste facility (EPA ID # AZD982441263) located on trust land of the Colorado River Indian Tribes at 2523 Mutahar Street, Parker, Arizona, 85344, and operated by Evoqua Water Technologies LLC. ~~[For formatting purposes, this footer has been removed from the remainder of the document]~~



If any conditions of this Permit are appealed in accordance with 40 CFR § 124.19, the effective date of the conditions determined to be stayed in accordance with 40 CFR § 124.16 shall be determined by final agency action as specified under 40 CFR § 124.19.

9/27/2016  
Date Issued

\_\_\_\_\_  
/SIGNED/  
\_\_\_\_\_  
Jeff Scott  
Director  
Land Division

## Table of Contents

### MODULE I - GENERAL PERMIT CONDITIONS

I.	INTRODUCTION .....	I-1
I.A.	EFFECT OF PERMIT .....	I-1
I.B.	PERMIT ACTIONS .....	I-3
I.C.	SEVERABILITY .....	I-3
I.D.	DEFINITIONS .....	I-3
I.E.	DUTIES AND REQUIREMENTS .....	I-5
I.F.	SIGNATORY REQUIREMENT .....	I-12
I.G.	REPORTS, NOTIFICATIONS, AND DELIVERABLES .....	I-12
I.H.	CONFIDENTIAL INFORMATION .....	I-17
I.I.	DOCUMENTS TO BE MAINTAINED AT THE FACILITY .....	I-17
I.J.	INFORMATION REPOSITORY .....	I-17
I.K.	COMPLIANCE SCHEDULE .....	I-18
I.L.	INFORMAL DISPUTE RESOLUTION (IDR) .....	I-26

### MODULE II - GENERAL FACILITY CONDITIONS

II.	GENERAL FACILITY DESCRIPTION .....	II-1
II.A.	DESIGN AND OPERATION OF FACILITY .....	II-1
II.B.	REQUIRED NOTICES .....	II-2
II.C.	GENERAL WASTE ANALYSIS .....	II-3
II.D.	SECURITY .....	II-4
II.E.	GENERAL INSPECTION REQUIREMENTS .....	II-5
II.F.	MAINTENANCE AND OPERATION .....	II-6
II.G.	PERSONNEL TRAINING .....	II-6
II.H.	SPECIAL PROVISIONS FOR CERTAIN WASTES .....	II-6
II.I.	LOCATION STANDARDS .....	II-9
II.J.	PREPAREDNESS AND PREVENTION .....	II-9
II.K.	CONTINGENCY PLAN .....	II-11
II.L.	MANIFEST SYSTEM .....	II-13
II.M.	RECORDKEEPING AND REPORTING .....	II-13
II.N.	GENERAL CLOSURE REQUIREMENTS .....	II-15
II.O.	GENERAL POST-CLOSURE REQUIREMENTS .....	II-17
II.P.	COST ESTIMATE FOR FACILITY CLOSURE .....	II-18
II.Q.	FINANCIAL ASSURANCE FOR FACILITY CLOSURE .....	II-19
II.R.	LIABILITY REQUIREMENTS .....	II-19
II.S.	INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR IFINANCIAL INSTITUTIONS .....	II-19



**MODULE III - CONTAINERS**

III.A. APPLICABILITY ..... III-1  
 III.B. GENERAL REQUIREMENTS FOR CONTAINERS ..... III-1  
 III.C. CONDITION OF CONTAINERS ..... III-2  
 III.D. COMPATIBILITY OF WASTE WITH CONTAINER ..... III-2  
 III.E. MANAGEMENT OF CONTAINERS ..... III-3  
 III.F. CONTAINMENT SYSTEMS ..... III-4  
 III.G. AIR EMISSION CONTROLS FOR CONTAINERS ..... III-5  
 III.H. INSPECTION SCHEDULES AND PROCEDURES ..... III-7  
 III.I. RECORD KEEPING AND REPORTING ..... III-9  
 III.J. SPECIAL CONTAINER PROVISIONS FOR IGNITABLE ~~AND REACTIVE~~  
 WASTES ..... III-11  
 III.K. SPECIAL CONTAINER PROVISIONS FOR INCOMPATIBLE WASTE .. III-11  
 III.L. CLOSURE ..... III-12

**MODULE IV - STORAGE IN TANKS**

IV.A. APPLICABILITY ..... IV-1  
 IV.B. GENERAL REQUIREMENTS FOR TANK SYSTEMS ..... IV-3  
 IV.C. CONDITION OF TANK SYSTEMS ..... IV-4  
 IV.D. COMPATIBILITY OF WASTE WITH TANK SYSTEMS ..... IV-4  
 IV.E. MANAGEMENT OF TANK SYSTEMS ..... IV-4  
 IV.F. CONTAINMENT SYSTEMS ..... IV-5  
 IV.G. AIR EMISSION CONTROLS ..... IV-6  
 IV.H. INSPECTION SCHEDULES AND PROCEDURES ..... IV-13  
 IV.I. RESPONSE TO LEAKS, SPILLS OR DEFECTS ..... IV-16  
 IV.J. RECORDKEEPING AND REPORTING ..... IV-18  
 IV.K. SPECIAL TANK PROVISIONS FOR IGNITABLE ~~OR REACTIVE~~  
 WASTES ..... IV-19  
 IV.L. SPECIAL TANK PROVISIONS FOR INCOMPATIBLE WASTES ..... IV-20  
 IV.M. CLOSURE AND POST-CLOSURE CARE ..... IV-20

**MODULE V - THERMAL TREATMENT UNIT/CARBON REGENERATION  
 FURNACE**

V.A. APPLICABILITY ..... V-1  
 V.B. GENERAL REQUIREMENTS FOR RF-2 ..... V-1  
 V.C. OPERATION OF RF-2 ..... V-2  
 V.D. AIR POLLUTION CONTROL EQUIPMENT ..... V-16  
 V.E. FUGITIVE EMISSIONS CONTROLS ..... V-18  
 V.F. INSPECTION REQUIREMENTS ..... V-18  
 V.G. RECORDKEEPING AND REPORTING ..... V-19  
 V.H. CLOSURE ..... V-20  
 V.I. ADDITIONAL INVESTIGATIONS ..... V-20

**MODULE VI - CORRECTIVE ACTION**

VI.A. STANDARD CONDITIONS ..... VI-1  
 VI.B. REPORTING REQUIREMENTS ..... VI-3  
 VI.C. RESULTS OF THE RCRA FACILITY ASSESSMENT (RFA) ..... VI-4  
 VI.D. NEWLY-IDENTIFIED, NEWLY-DISCOVERED, OR NEWLY-CREATED  
 AOCs, SWMUS AND/OR HWMUS ..... VI-4  
 VI.E. NEWLY-DISCOVERED RELEASES ..... VI-6  
 VI.F. RCRA FACILITY INVESTIGATION (RFI) WORKPLAN ..... VI-7  
 VI.G. RCRA FACILITY INVESTIGATION FINAL REPORT ..... VI-8  
 VI.H. ADDITIONAL INTERIM CORRECTIVE MEASURES ..... VI-9  
 VI.I. CORRECTIVE MEASURES STUDY ..... VI-11  
 VI.J. REMEDY SELECTION ..... VI-12  
 VI.K. PERMIT MODIFICATION ..... VI-12  
 VI.L. NO FURTHER ACTION..... VI-12  
 VI.M. CORRECTIVE ACTION BEYOND THE FACILITY BOUNDARY ..... VI-13  
 VI.N. FINANCIAL ASSURANCE FOR CORRECTIVE ACTION ..... VI-13  
 VI.O. QUALITY ASSURANCE AND QUALITY CONTROL ..... VI-14

**PERMIT ATTACHMENT SECTIONS FROM PERMIT APPLICATION DATED APRIL 2016:**

A PART A DISCUSSION.....  
 B FACILITY DESCRIPTION .....  
 C SPENT CARBON CHARACTERISTICS .....  
 D PROCESS INFORMATION.....  
 E GROUNDWATER.....  
 F PROCEDURES TO PREVENT HAZARDS.....  
 G CONTINGENCY PLAN .....  
 H PERSONNEL TRAINING PROGRAM .....  
 I CLOSURE PLAN AND COST ESTIMATE AND LIABILITY  
 REQUIREMENTS.....  
 J SOLID WASTE MANAGEMENT UNITS, HAZARDOUS WASTE  
 MANAGEMENT UNITS, AND AREAS OF CONCERN.....  
 K OTHER FEDERAL LAWS .....  
 L CERTIFICATION.....  
 M SUBPART AA – PROCESS VENTS .....  
 N SUBPART BB – EQUIPMENT LEAKS .....  
 O SUBPART CC – AIR EMISSION STANDARDS .....  
 P EXPOSURE INFORMATION.....

**PERMIT ATTACHMENT APPENDICES:**

I PART A PERMIT APPLICATION .....



II	Topographic Map, Flood Insurance Map for the Colorado River Indian Reservation, Peripheral Land Use Study Diagram for the Colorado River Indian Tribe Lands, Wind Rose, Legal Boundaries.....	
III	SITE DIAGRAMS .....	
IV	WASTE ANALYSIS PLAN .....	
V	RF-2 PERFORMANCE DEMONSTRATION TEST PLAN AND REPORT	
VI	PROCESS FLOW DIAGRAMS AND PIPING AND INSTRUMENTATION DIAGRAMS .....	
VII	CONTAINER STORAGE AREA CONCRETE PAD ENGINEERING EVALUATION.....	
VIII	SPENT CARBON CONTAINER SPECIFICATIONS .....	
IX	HAZARDOUS WASTE TANK SYSTEM ASSESSMENT, DESIGN DRAWINGS, AND CONTAINMENT CALCULATIONS .....	
X	RF-2 EQUIPMENT DRAWINGS AND SPECIFICATIONS .....	
XI	RISK ASSESSMENT REPORT .....	
XII	INSPECTOR SCHEDULE AND CHECKLISTS .....	
XIII	CONTINGENCY PLAN .....	
XIV	TRAINING SYLLABUS OUTLINE AND DOCUMENTATION FORM	
XV	RCRA FACILITY CLOSURE PLAN .....	
XVI	RF-1 CLOSURE PLAN .....	
XVII	SAMPLING, ANALYSIS, AND QA/QC PLAN FOR CLOSURE ACTIVITIES	
XVIII	FINANCIAL ASSURANCE MECHANISM .....	
XIX	SUBPART BB COMPLIANCE PLAN .....	
XX	SUBPART CC COMPLIANCE PLAN .....	
XXI	RECORDS RETENTION REQUIREMENTS.....	
XXII	STARTUP SHUTDOWN MALFUNCTION PLAN .....	
XXIII	SUBPART FF COMPLIANCE PLAN.....	

## MODULE I - GENERAL PERMIT CONDITIONS

### I. INTRODUCTION

This document, consisting of Modules I through VI and the Permit Attachments, Permit Exhibits, and any other documents incorporated herein, constitutes a hazardous waste permit under Subtitle C of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended, (RCRA), and the applicable regulations at Title 40 of the Code of Federal Regulations (40 CFR) Parts 260 through 270 for hazardous waste storage and treatment at a carbon regeneration facility (EPA ID Number - AZD982441263) (Permit) located on the Colorado River Indian Tribes (CRIT) Reservation near Parker, Arizona. At the Evoqua Water Technologies, LLC Facility (defined below), spent carbon is treated in a regeneration furnace to purify it and make it suitable as a commercial product. [See 40 CFR §§ 264.10 and 264.11.]

### I.A. EFFECT OF PERMIT

- I.A.1. ~~The Permittees Evoqua Water Technologies LLC and CRIT are allowed to store and treat hazardous waste in accordance with the conditions of this Permit. Any storage or treatment of hazardous waste at the Facility not authorized in this Permit is prohibited. Pursuant to 40 CFR §270.4, compliance with this Permit generally constitutes compliance, for purposes of enforcement, with RCRA, as provided in 40 CFR 270.4(a)(1) with some exceptions (42 U.S.C. §§6901 et seq.). Subject to 40 C.F.R. § 270.4, compliance with the RCRA permit during its term constitutes compliance, for purposes of enforcement, with Subtitle C of RCRA except for those requirements not included in the permit which: (1) become effective by statute; (2) are promulgated under 40 C.F.R. Part 268 restricting the placement of hazardous waste in or on the land; (3) are promulgated under 40 C.F.R. Part 264 regarding leak detection systems; or (4) promulgated under subparts AA, BB, or CC of 40 C.F.R. Part 265 limiting air emissions. (40 C.F.R. § 270.4).~~ [See also Permit Conditions II.A.2. and II.A.5. and 40 CFR Part 262, §§270.1(c), and 270.4.]
- I.A.2. Issuance of this Permit does not convey any property rights of any sort or any exclusive privilege. [See 40 CFR §§270.4(b) and 270.30(g).]
- I.A.3. Issuance of this Permit does not authorize any injury to persons or property,



any invasion of other private rights, or any infringement of Tribal, state or local law or regulations. [See 40 CFR §270.4(c).]

I.A.4. Except to the extent authorized by 40 CFR §270.4(a)(1), ~~C~~compliance with the terms of this Permit does not constitute a defense to any order issued or any action brought under Sections 3008(h), 3013, or

7003 of RCRA, Sections 104, 106(a) or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) (42 U.S.C. §§9601 et seq.), or any other law providing for protection of public health or the environment. In addition, compliance with the terms of this Permit does not constitute a defense to any order issued or any action brought under Sections 3008(a), solely with respect to those requirements set forth at 40 CFR § 270.4(a)(1)(i)-(iv).

I.A.5.

This Permit supersedes ~~any and all requirements included in the attachments, sections, and appendices of~~ the permit application. However, to the extent that any attachments, sections or appendices of the permit application are incorporated into and made a part of this Permit, those shall apply as required by the Permit and to the extent that any such attachments, sections or appendices contradict or conflict with the requirements of the Permit set forth in Modules I through VI, inclusive, the conditions set forth in Modules I through VI shall control. In addition, references to RCRA's interim status requirements (40 CFR Part 265) contained in such attachments, sections or appendices are superseded by the standards applicable to RCRA permitted facilities (40 CFR Part 264), as appropriate, upon the effective date of this Permit.

I.A.6.

~~Unless set forth specifically otherwise herein, requirements of this Permit apply to both the tribal trust landowner and the operator of the Facility, who are referred to herein collectively as the "Permittees." However, compliance with such requirements of this Permit by either the Tribe, as beneficial landowner, or the operator is regarded as sufficient for both. [See 45 Federal Register (FR) 33295/eol. 3, (May 19, 1980).] The Facility is owned by Evoqua Water Technologies, LLC and is located on land that is owned by, and leased from, CRIT under a long-term lease. As the owner of the real property, CRIT is considered a co-permittee of this Permit. However, the operational requirements of this Permit that relate to the Facility are solely the responsibility of Evoqua Water Technologies, LLC. Consequently, while CRIT is a co-permittee, references to the Permittee in this Permit are intended to refer solely to Evoqua Water Technologies, LLC, except where otherwise specifically provided.~~

I.A.7.

Where citations to regulatory authority are included at the end of a permit condition -- for example "[See 40 CFR §264.XXX.]" -- such references are solely to assist those reading the Permit with identifying the source of the requirement to which the citation applies. Such citations do not, in and of themselves, incorporate the regulatory requirement into the permit condition. However, where regulations are referenced in the body of a



permit condition – for example “Pursuant to 40 CFR § 264.XXX” or “In accordance with 40 CFR § 264.XXX,” the requirements of the regulation so cited are incorporated into the permit condition.

- I.A.8. For the purposes of this Permit, any reference to a regulatory requirement (including any interim final regulation) shall refer to the version of such regulatory requirement which is in effect at the time of issuance of the permit. With some exceptions as set forth in 40 CFR § 270.4(a)(1), where regulatory authorities affecting conditions of this Permit are issued, revised or amended after the issuance of this Permit, such new, revised or amended provisions shall only be applicable to the operations of the Facility after a permit modification incorporates such requirements or after a renewal of the Permit, incorporating or referencing such new, revised or amended regulations, is issued. [See 40 CFR 270.32(c) and 40 CFR § 270.4(a)(1).]

#### I.B. PERMIT ACTIONS

- I.B.1. This Permit may be modified, revoked and reissued, or terminated for cause, in accordance with 40 CFR §§ 270.41, 270.42, and 270.43. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes or anticipated noncompliance on the part of the ~~Permittees~~Permittee, does not stay the applicability or enforceability of any permit condition. [See 40 CFR §§ 270.4(a)(2), 270.30(f), 270.41, 270.42, and 270.43.]
- I.B.2. This Permit may be renewed in accordance with 40 CFR § 270.30(b) and Permit Condition I.E.2. Review of any application for a Permit renewal shall consider improvements in the state of control and measurement technology, as well as changes in applicable regulations. [See 40 CFR § 270.30(b), RCRA Section 3005(c)(3).]

#### I.C. SEVERABILITY

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this Permit shall not be affected thereby. [See 40 CFR §124.16.]

#### I.D. DEFINITIONS

For purposes of this Permit, terms used herein shall have the same meaning as



those in 40 CFR Parts ~~61, 63,~~ 124, 260, 264, 266, 268, and 270, as appropriate, unless this Permit specifically provides otherwise. Where terms are not defined in the regulations or this Permit, the meaning associated with such terms shall be defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

AOC means Area of Concern.

CEMS means continuous emissions monitoring system.

CERCLA means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, (42 U.S.C. §§9601 et seq.,) as amended.

CFR means Code of Federal Regulations, latest edition.

CMS means continuous monitoring system.

CRIT or Tribes means the beneficial landowner of the land on which the Facility is located, the Colorado River Indian Tribes.

Day or days means a calendar day or days, even if the word “calendar” is absent, unless otherwise specified.

Director means the Director of the EPA Region 9 Land Division, or his or her designee or authorized representative.

Enforcement Director means the Director of the EPA Region 9 Enforcement Division, or his or her designee or authorized representative.

EPA means the United States Environmental Protection Agency.

Facility means the contiguous land, structures, appurtenances and improvements on the land at the carbon regeneration facility located at 2523 Mutahar Street, Parker, Arizona, 85344, on land of the Colorado River Indian Tribes ~~and all contiguous land, and structures, other appurtenances, and improvements on the land,~~ that are used for treating or storing, of ~~spent carbon~~ hazardous waste, as allowed by this Permit. The Facility does not include portions of the site used to manage Product or any spent carbon that is not a hazardous waste.

Facility mailing list means the most recent version of the interested parties mailing

list provided by the EPA Region 9 Land Division to the Permittee(s).

HWMU means Hazardous Waste Management Unit.

Method 21 means Method 21 from Appendix A-7 of 40 CFR Part 60.

PDT means Performance Demonstration Test.

Permit Attachment(s), Permit Attachment Section(s) and Permit Attachment Appendix or Appendices mean the attachments, sections and appendices to this Permit, which were transmitted to EPA by the Permittees in their Part B Permit Application dated April 2016.

Permittee, Permittees or Permit Applicants means either Evoqua Water Technologies, LLC, the operator of the Facility, or where the context requires it, the Colorado River Indian Tribes, the beneficial landowner of the tribal land on which the Facility is located, or both. [See comment on 1.A.6]

Product means the carbon that has been thermally treated and regenerated at the Facility. Product is not regulated as a hazardous waste under this Permit.

RCRA means the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976 and the Hazardous and Solid Waste Amendments of 1984, as amended, 42 U.S.C. §§ 6901 et seq.

Site means the land where the Facility is physically located, including adjacent land used in connection with the facility or activity, down to and including the groundwater zone.

SWMU means Solid Waste Management Unit.

## I.E. DUTIES AND REQUIREMENTS

### I.E.1. Duty to Comply

The ~~Permittees~~ Permittee shall comply with all conditions of this Permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any Permit noncompliance, other than noncompliance



authorized by an emergency permit, constitutes a violation of RCRA and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [See 40 CFR §270.30(a).]

I.E.2. Duty to Reapply

If the Permittees wish to continue an activity allowed by this Permit after the expiration date of this Permit, the Permittees shall submit a complete application for a new permit at least 180 days prior to the Permit's expiration, or as authorized pursuant to 40 CFR §270.10(h)(2). [See 40 CFR §§270.10(h) and 270.30(b).]

I.E.3. Permit Expiration

This Permit shall be effective for a fixed term not to exceed ten years. This Permit and all conditions herein will continue in force under 5 U.S.C. §558(c) until the effective date of a new permit if: (i) the Permittee has submitted a timely application under §270.14 and the applicable sections of §§270.15 – 270.29 which is a complete application for a new permit, and (ii) the Director, through no fault of the Permittee, does not issue a new permit with an effective date on or before the expiration date of the previous permit. Permits continued under this paragraph remain fully effective and enforceable, remain in effect and enforceable beyond the Permit's expiration date, if the Permittees have submitted a timely, complete application and, through no fault of the Permittees, the Director has not issued a new permit. [See 5 U.S.C. §558(c) and 40 CFR §§270.10, 270.13, 270.14, 270.50, and 270.51.]

I.E.4. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittees in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit. [See 40 CFR §270.30(c).]

I.E.5. Duty to Mitigate

In the event of noncompliance with this Permit, the Permittees shall take all reasonable steps to minimize releases to the environment and shall carry out such measures, as are reasonable, to prevent significant adverse impacts on human health or the environment. [See 40 CFR §270.30(d).]

I.E.6.

Proper Operation and Maintenance



The Permittees shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances), which are installed or used by the Permittees to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance/quality control procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Permit. [See 40 CFR §270.30(e).]

I.E.7. Duty to Provide Information

The Permittees shall furnish to the Director or the Enforcement Director, as appropriate, within a reasonable time, any relevant information which the Director or the Enforcement Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit, or to determine compliance with this Permit. The Permittees shall also furnish to the Director or the Enforcement Director, as appropriate, upon request, copies of records required to be kept by this Permit. [See 40 CFR §270.30(h).]

I.E.8. Inspection and Entry

The Permittees shall allow the Director or the Enforcement Director, as appropriate, or an authorized representative, upon presenting credentials and other documents, as may be required by law, to:

- I.E.8.a. Enter ~~during business hours or~~ at a reasonable time upon the Facility ~~and/or either Permittees' premises~~ where a regulated activity is located or conducted, or where records must be kept under the conditions of this Permit;
- I.E.8.b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;

- I.E.8.c. Inspect at reasonable times any equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and
- I.E.8.d. Sample or monitor, at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized by RCRA, any substances or parameters at any location at the Facility. [See 40 CFR §270.30(i).]

I.E.9. Monitoring and Records

- I.E.9.a. Samples and measurements taken by the Permittees for the purpose of monitoring shall be representative of the monitored activity. ~~The method used to obtain a representative sample of the waste must be the appropriate method from Appendix I of 40 CFR Part 261 or an equivalent method approved by the Director. Laboratory analytic methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods SW-846, Standard Methods of Wastewater Analysis, or an equivalent method, as specified in the Waste Analysis Plan (See Permit Condition II.C, Permit Attachment Section C and Permit Attachment Appendix IV).~~ [See 40 CFR §270.30(j)(1).]
- I.E.9.b. Commencing with the effective date of this Permit, tThe Permittees shall retain records of all monitoring information (including all calibration and maintenance records and all digital and original strip chart recordings for continuous monitoring instrumentation), copies of all reports and records required by this Permit, the certification required by 40 CFR § 264.73(b)(9) and Permit Condition II.A.6., and records of all data used to complete the application for this Permit, as provided in Appendix XXI of the Permit (Records Retention Requirements) for a period of at least 3 years from the date of the sample, measurement, report, record, certification, or application. These periods may be extended by request of the Director at any time and are automatically extended for the specific records involved during the course of any unresolved enforcement action



regarding this Facility. The Permittees shall maintain records for all ground-water monitoring wells and associated ground-water surface elevations for the active life of the Facility. ~~This provision does not apply to any records required to be maintained in accordance with Permit Condition V.G, which shall instead be subject to that requirement.~~ [See 40 CFR §§ 264.73(b)(9), 264.74(b) and 270.30(j)(2). ~~See also Permit Condition V.G.~~]

I.E.9.c. Records of monitoring information shall specify, to the extent applicable:

- I.E.9.c.i. The dates, exact place, and time of sampling or measurements;
- I.E.9.c.ii. The individual(s) who performed the sampling or measurements;
- I.E.9.c.iii. The date(s) analyses were performed;
- I.E.9.c.iv. The individual(s) who performed the analyses;
- I.E.9.c.v. The analytical technique(s) or method(s) used; and
- I.E.9.c.vi. The results of such analyses. [See 40 CFR §270.30(j)(3).]

I.E.10. Reporting Planned Changes

~~The Permittees shall give notice to the Director, as soon as possible, of any planned physical alterations or additions to the Facility. If any planned "changes" (as defined at 40 CFR § 63.1206(b)(5)(iii)), to the design, operation, or maintenance practices of the source may adversely affect compliance with any emission standard that is not monitored with a CEMS, the Permittees shall follow the procedures set forth at 40 CFR § 63.1206(b)(5)(i) for notification, performance testing and restrictions on~~

~~waste burning, or otherwise shall comply with the requirements of 40 CFR § 63.1206(b)(5)(ii). Any notice provided under this section shall include any necessary request for a permit modification pursuant to Permit Condition I.G.7. and 40 CFR § 270.42. [See 40 CFR §§ 63.1206(b)(5), 63.1207(j), 63.1210(d), 270.30(l)(1) and 270.42.]~~

I.E.11.

Reporting Anticipated Noncompliance

The Permittees shall give advance notice to the Director of any planned changes in the permitted Ffacility or activity which may result in noncompliance with Permit requirements. [See 40 CFR §270.30(l)(2).]



I.E.12. Transfer of Permits

This Permit is not transferable to any person, except after notice to the Director. The Director may require modification or revocation and reissuance of the Permit to change the name of a Permittee and incorporate such other requirements as may be necessary in accordance with 40 CFR §270.40. Before transferring ownership or operation of the Facility during its operating life, the Permittees shall notify the new owner or operator in writing of the requirements of 40 CFR Parts 264 and 270 and this Permit. [See 40 CFR §§264.12(c), 270.30(1)(3) and 270.40.]

I.E.13. Twenty-Four Hour Reporting

I.E.13.a. The Permittees shall report to the Director any noncompliance which may endanger human health or the environment. Any such information shall be reported orally within 24 hours from the time ~~whichever~~ Permittee first becomes aware of the circumstances. The report shall include the following:

I.E.13.a.i. Information concerning release of any hazardous waste that may cause an endangerment to public drinking water supplies; and

I.E.13.a.ii. Any information of a release or discharge of hazardous waste, or of a fire or explosion from the Facility which could threaten the environment or human health ~~inside~~ ~~or~~ outside the Facility. [See 40 CFR §270.30(1)(6)(i).];

I.E.13.b. The description of the noncompliance and its cause shall include:

I.E.13.b.i. Names, addresses, and telephone numbers of the Permittees;

- I.E.13.b.ii. Name, address, and telephone number of the Facility;
- I.E.13.b.iii. Date, time, and type of incident;
- I.E.13.b.iv. Name and quantity of materials involved;
- I.E.13.b.v. The extent of injuries, if any;
- I.E.13.b.vi. An assessment of actual or potential hazards to the environment and/or human health outside the Facility, where this is applicable; and
- I.E.13.b.vii. Estimated quantity and disposition of recovered material that resulted from the incident. [See 40 CFR §270.30(1)(6)(ii).]

I.E.13.c. A written submission shall also be provided within five days of the time that ~~whichever~~ Permittee first becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period(s) of noncompliance (including exact dates and times); whether the noncompliance has been corrected, and, if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Director may waive the five-day written notice requirement in favor of a written report within 15 days. [See 40 CFR §270.30(1)(6)(iii).]

I.E.14. Compliance Schedule Reporting

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Permit shall be submitted no later than 14 days following each schedule date. [See 40 CFR §270.30(1)(5).]



I.E.15. Other Noncompliance

The Permittees shall report all other instances of noncompliance not otherwise required to be reported in Permit Conditions I.E.10 through I.E.14, at the time monitoring reports are submitted. The reports of noncompliance shall contain the information listed in Permit Condition I.E.13. [See 40 CFR §270.30(l)(10).]

I.E.16. Other Information

Whenever either Permittee becomes aware that either Permittee failed to submit any relevant facts in a Permit application, or submitted incorrect information, in a Permit application or in any report to the Director, the Permittees shall promptly submit such facts or information. [See 40 CFR § 270.30(l)(11).]

I.F. SIGNATORY REQUIREMENT

All applications, reports, or information submitted to or requested by the Director, the Enforcement Director, or a designee or authorized representative of the Director or the Enforcement Director, shall be signed and certified in accordance with 40 CFR §§ 270.11 and 270.30(k). [See 40 CFR §§ 270.11 and 270.30(k).]

I.G. REPORTS, NOTIFICATIONS, AND DELIVERABLES

- I.G.1. All reports, correspondence, notices or other deliverables required by this Permit, or required to be submitted to EPA or the Regional Administrator under regulatory provisions cited in this Permit, shall be delivered (i) by U.S. Postal Service or private courier service to:

Director, Land Division  
US Environmental Protection Agency, Region IX  
75 Hawthorne St. (LND-1)  
San Francisco, CA 94105

or (ii) by electronic mail to an e-mail address provided by EPA or the Regional Administrator for such submittal.

- I.G.2. ~~All deliverables submitted in paper form pursuant to this Permit shall be printed on recycled paper and shall be copied double-sided, whenever practicable.~~ Additionally, all deliverables submitted in paper form pursuant to this Permit shall also be submitted in electronic format (e.g.,

CD ROM, flash drive). Permittees may submit such deliverables by electronic mail where ~~the Permittees and the Director have agreed in writing as to the appropriate EPA has provided an~~ email address for such electronic mail submissions.

I.G.3. For the computation of time periods set forth in this Permit, the Permittees shall conduct the following:

I.G.3.a. Any time period scheduled to begin on the occurrence of an act or event shall begin on the day after the act or event.

I.G.3.b. Any time period scheduled to begin before the occurrence of an act or event shall be computed so that the period ends on the day before the act or event.

I.G.3.c. If the final day of any time period falls on a weekend or legal holiday, the time period shall be extended to the next working day. [See, e.g., 40 CFR § 124.20.]

I.G.4. ~~Where this permit references or incorporates any standard from 40 CFR Part 63 for which a notice or notification is required to be submitted to EPA, including any notice or notification required under 40 CFR §§ 63.1206(b)(5), 63.1207(j) or 63.1210, the Permittees shall submit such notice or notification with reference to the specific provision of this Permit requiring the notice or notification. [See 40 CFR §§ 63.1206(b)(5), 63.1207(j) and 63.1210.]~~

I.G.5. Deliverables Submitted for the Director's Review and Approval

I.G.5.a. Deliverables that are explicitly required by this Permit to be submitted to the Director for review and approval must be post-marked by the due date specified in this Permit or by the specific schedules developed pursuant to the requirements of this Permit that apply to such deliverables. The Director shall review and respond to the deliverable in accordance with Permit Condition I.G.5.b.

I.G.5.b. Subject to the provisions of I.G.5.c., after review of any deliverable that is required to be approved by the Director pursuant to this Permit, the Director will either:



- (i) approve, in whole or in part, the submission;
- (ii) approve the submission on specified conditions;
- (iii) modify the submission to cure the deficiencies;
- (iv) disapprove, in whole or in part, the submission, directing that Permittee modify the submission; or
- (v) any combination of the above.

I.G.5.c. The Director will not modify or condition a deliverable under Permit Condition  
I.G.5.b.

without first providing the Permittees at least one notice of deficiency identifying the legal basis for each of EPA's conclusions that there are deficiencies in the deliverable, and an opportunity to cure within ~~ten (10)~~ days a reasonable period of time under the circumstances, except:

- (i) where the Director determines that to do so would cause serious disruption to the work required by this Permit or could present an unacceptable risk to human health or the environment; or
- (ii) where the Director has disapproved previous submission(s) due to material defects and the Director determines that the deficiencies in the submission under consideration indicate a bad faith lack of effort to submit an acceptable deliverable.

I.G.5.d. Upon approval of any deliverable pursuant to this Permit, including approval on conditions or modification by the Director, the Permittees may either (i) accept the approval, in which case it shall maintain a copy of the approved deliverable in the Operating Record and proceed to take any action required by and in accordance with the approved deliverable, or (ii) seek review of the conditions or modifications to the approval through the dispute resolution procedures in Section I.L. of this Permit.

I.G.5.e. Resubmission of Deliverable: Upon receipt of a notice of disapproval, in whole or in part, pursuant to this Permit Condition I.G.5., the Permittees shall, within ~~twenty one (21) days or such longer time as a reasonable period of time under the circumstances~~, as specified by the Director in such notice, correct the any deficiencies to the extent required by law and resubmit the deliverable for approval.

I.G.5.f. ~~Notwithstanding the receipt of a notice of disapproval pursuant to this Permit Condition I.G.5., the Permittees shall proceed, at the direction of the Director, to take any action required by any non-deficient portion of the submission. Implementation of any~~

~~non-deficient portion of a submission shall not relieve the Permittees of the obligation to address any deficient portion of the submission.~~



I.G.5.g. In the event that a resubmitted deliverable, or portion thereof, is disapproved by the Director, the Director may again require issue a notice of deficiency pursuant to Section I.G.5.c. providing the Permittees with an opportunity to correct the identified deficiencies, in accordance with this Permit Condition I.G.5.

I.G.5.h. If upon resubmission, a deliverable is disapproved or modified by the Director due to a material defect, and the conclusion that there was a material defect is not reversed through the dispute resolution process and/or judicial review, the Permittees shall be deemed to have failed to submit such deliverable in a timely or adequate manner.

I.G.5.i. The conditional approval, disapproval or modification of a deliverable by the Director pursuant to this Permit Condition I.G.5. is subject to the informal dispute resolution procedures set forth in Permit Condition I.L.

#### I.G.6. Modifications to Previously Approved Deliverables

I.G.6.a. If at any time during the life of this Permit, the Permittees identifies a need for a modification of any previously approved deliverable required by this Permit or of any deadline required by this Permit, the Permittees shall submit a memorandum documenting the need for the modification to the Director. Where appropriate, such memorandum shall be accompanied by a request for a Permit Modification pursuant to 40 CFR § 270.42. [See 40 CFR § 270.42.]

I.G.6.b. Where a Permit Modification is not requested by the Permittees, the Director will determine if the requested modification to the previously approved deliverable or to the deadline is warranted as soon as practicable after receipt of any memorandum submitted pursuant to Permit Condition I.G.6.a. and so inform the Permittees in writing that the proposed modification to the deliverable or deadline has been approved, modified or disapproved as provided in Permit Condition I.G.5.b. and subject to Permit Condition I.G.5.c. The procedures set forth in Section I.G.5 shall be followed for any such approval, modification or disapproval. Where the memorandum is accompanied by a request for a Permit Modification under 40 CFR § 270.42, RCRA's permit modification procedures shall apply. [See 40 CFR § 270.42.]

I.G.6.c. Requests for extensions of the due dates for deliverables may be granted by the Director in accordance with either the procedures in Permit Condition I.G.6.a. of this Permit or RCRA's permit modification processes. [See 40 CFR § 270.42.]

I.G.7. Deliverables that Require a Permit Modification

- I.G.7.a. Deliverables that are explicitly required by this Permit to be submitted with an accompanying request for a permit modification in accordance with this Permit Condition I.G.7., must specify the class of permit modification for which the request is being submitted in accordance with 40 CFR § 270.42 and Appendix 1 to that section. Or, if the request is for a permit modification not explicitly identified in Appendix 1 to 40 CFR § 270.42, the Permittees may submit a Class 3 modification request to the Director, or may request a determination by the Director that the modification should be reviewed and approved as a Class 1 with no prior Director approval, Class 1 with prior Director approval, or Class 2 modification. [See 40 CFR § 270.42 and Appendix 1 to 40 CFR § 270.42.]
- I.G.7.b. For any permit modification not explicitly identified in Appendix 1 to 40 CFR § 270.42, if the Permittees requests that the modification be classified as a Class 1 with no prior Director approval, Class 1 with prior Director approval, or Class 2 modification, the request must include the necessary information to support the requested classification in accordance with 40 CFR §270.42. [See 40 CFR § 270.42(d).]
- I.G.7.c. The Director's determination that the modification should or should not be treated as a Class 1 with no prior Director approval, Class 1 with prior Director approval, or Class 2 modification shall be subject to the Informal Dispute Resolution provisions of Permit Condition I.L., but any other decisions made by the Director as part of the permit modification process shall only be reviewable in accordance with 40 CFR Part 124. [See 40 CFR Part 124.]

I.G.8. Deliverables That May Trigger a Permit Modification

Where a report or other deliverable required by this Permit includes a recommendation that the Permit be modified, and the report or other deliverable is subject to approval by the Director under Permit Condition I.G.5., the request for the permit modification should only be submitted after the report or other deliverable recommending the modification has been approved by the Director.



#### I.H. CONFIDENTIAL INFORMATION

In accordance with 40 CFR §270.12, either Permittee may claim any information required to be submitted by this Permit as confidential. If Permittee asserts a claim, the information will be treated in accordance with the procedures in 40 C.F.R. Part 2. If no claim is made at the time of submission, the information may be made available to the public without further notice. [See 40 CFR Part 2, Subpart B, and § 270.12.]

#### I.I. DOCUMENTS TO BE MAINTAINED AT THE FACILITY

- I.I.1. The Permittees shall maintain at the Facility, until closure is completed and certified by an independent, registered professional engineer, the ~~following documents and all amendments, revisions, and modifications to these documents:~~  
~~Waste Analysis Plan, as required by 40 CFR §264.13 and this Permit;~~  
~~Inspection schedules, as required by 40 CFR §264.15(b)(2) and this Permit;~~  
~~Personnel training documents and records, as required by 40 CFR §264.16(d) and this Permit;~~  
~~Contingency Plan, as required by 40 CFR §264.53(a) and this Permit;~~  
~~Operating record, as required by 40 CFR §264.73 and this Permit;~~  
~~Closure Plan, as required by 40 CFR §264.112(a) and this Permit;~~  
~~Annually adjusted cost estimates for Facility closure, as required by 40 CFR §264.142(d) and this Permit;~~  
~~The Startup Shutdown and Malfunction Plan (SSMP), as required by this Permit;~~  
~~The Subpart FF Compliance Plan; and~~  
All other documents required to be maintained for the life of the Facility in accordance with 40 CFR §264.73 ~~the requirements of this Permit.~~

- I.I.2. All records, including plans, required under this Permit must be furnished upon request, and made available at all reasonable times for inspection by any officer, employee, or representative of EPA who is duly designated by the Director. [See 40 CFR § 264.74(a).]

#### I.J. INFORMATION REPOSITORY

- I.J.1. The Permittees must establish and maintain an information repository that meets the requirements of 40 CFR § 124.33 and includes the records identified in Permit Exhibit

I. [See 40 CFR §§124.33 and 270.30(m).]

I.J.2. The Permittees must update the information repository with appropriate information at least every five (5) years throughout the life of this Permit. [See 40 CFR §§ 124.33(f) and 270.30(m).]

I.J.3 Permittees shall send notice of the location of the information repository to all persons on the facility's mailing list. [See 40 CFR §§ 124.33(e) and 270.30(m).]

#### I.K. COMPLIANCE SCHEDULE

~~I.K.1. [See Module 5 Section of Permit] Performance Demonstration Test. The Permittees shall perform a periodic trial burns or "Performance Demonstration Tests" within 62 months of the effective date of the Permit in accordance with the following requirements. (The Performance Demonstration Test is a combination of the Comprehensive Performance Tests and traditional RCRA "Trial Burn" to address site specific risk assessments. Unless otherwise specified, references in this Permit to 40 CFR Part 63 testing and related requirements applicable to incinerators should be interpreted as applicable to the operating reactivation furnace (RF-2) and its associated equipment.)~~

~~I.K.1.a. — The Permittees shall submit a Performance Demonstration Test (PDT) Work Plan meeting the requirements of Permit Condition I.K.1.c. to the Director for approval in accordance with Permit Condition I.G.5. *within 120 days after the final Permit is made effective.*~~

~~I.K.1.b. — As for future PDTs, the Permittees shall conduct testing periodically in accordance with this Permit Condition I.K. and 40 CFR §§ 63.1207 and 63.1208. The date of commencement of each PDT is the basis for establishing the deadline to commence the subsequent PDT. The Permittees shall submit PDT Work Plans to the Director for approval *at least one year before the start date of each subsequent PDT.* The Permittees shall commence testing no later than 61 months after the date of commencing the previous PDT. Except as provided in Permit Condition I.K.1.c., the Permittees may conduct performance testing at any time prior to the required date. [See 40 CFR Part 60 and §§ 63.8(d) and (e), 63.9(g), 63.1206(e)(5)(ii), 63.1207, 63.1208, 264.344(a)(1) and 270.62.]~~

~~I.K.1.c. — The Permittees shall submit PDT Work Plans to the Director for approval in accordance with Permit Condition I.G.5. PDT Work Plans must include a~~



~~proposed schedule for performance of the PDT. The Permittees shall not undertake the performance of the PDT less than 60 days after the public notice required under Permit Condition I.K.1.f. Nor shall the Permittees undertake the performance of the PDT prior to the time the PDT Work Plan is approved by the Director. The PDT Work Plans shall be done in accordance with and must include the information listed at 40 CFR §§ 63.7, 63.8, 63.9(e), (f), (g) and (j), 63.1206(e)(5)(ii), 63.1207(b)(1), 63.1219 and 270.62(b)(2). The information provided in these regulatory provisions that are applicable to incinerators must be included in the PDT Work Plans, and address each performance parameter and emission limit set forth in Table V-4 of this permit. [See 40 CFR §§ 63.7, 63.8, 63.9(e), (f), (g) and (j), 63.1206(e)(5)(ii), 63.1207(b)(1), 63.1219, and 270.62(b)(2).]~~

~~I.K.1.d. The portions of the PDT Work Plans addressing provisions for testing for SO<sub>x</sub> and NO<sub>x</sub> emissions during the PDT, shall reference EPA Test Method 6 for SO<sub>x</sub> (as SO<sub>2</sub>) and EPA Test Method 7 for NO<sub>x</sub> as provided in Appendix A of 40 CFR Part 60. [See Appendix A of 40 CFR Part 60.]~~

~~I.K.1.e. Where appropriate, the Permittees shall incorporate into PDT Work Plans appropriate methods and/or performance specifications, as set forth in specifically applicable requirements and/or in the Appendices in 40 CFR Part 60. [See 40 CFR Part 60.]~~

~~I.K.1.f. The Permittees shall make the PDT Work Plans available to the public for review no later than 60 calendar days before initiation of the test. The Permittees must also provide a public notice to all persons on the facility's mailing list announcing the availability of the PDT Work Plan and the location where the PDT Work Plan is available for review. The PDT Work Plans must be accessible to the public for 60 calendar days, beginning on the date of the public notice. The location must be unrestricted and provide access to the public during reasonable hours and provide a means for the public to obtain copies. The notification must, at a minimum, include the information identified at 40 CFR § 63.1207(e)(2). [See 40 CFR § 63.1207(e).]~~

~~I.K.2. The Permittees shall complete performance testing *within 60 days* after the date of commencement of each of the PDTs in accordance with the approved PDT Work Plans. [See 40 CFR § 63.1207(d)(3).]~~



~~I.K.3. The Permittees shall submit to the Director for review and approval, in accordance with Permit Condition I.G.5., a PDT Report regarding the performance of the PDT *within 90 days* of the completion of each PDT.~~

~~I.K.3.a. The PDT Reports shall also include the results of the required CMS and CEMS Performance Tests, and the analysis of the parameters evaluated in accordance with Permit Condition I.K.1.~~

~~I.K.3.b. The PDT Reports shall also include the Permittees' recommendations, if any, regarding any appropriate modifications to permit conditions based on the results of one or more PDTs in accordance with Permit Condition I.G.8. and 40 CFR Part 270.~~

~~I.K.3.c. The PDT Reports shall also include the CMS and CEMS Performance Test results, and any other information that is required in notifications of compliance status and certifications for incinerators under 40 CFR § 63.9(h)(2).~~

~~I.K.4. PDT Reports must include an assessment as to whether the operating parameters and emission limits set forth in Module V are being met with specific reference to the Group A1, Group A2, Group B and Group C parameters set forth in Module V of this Permit at Table V-2—Operating Limits and Parameters.~~

~~I.K.4.a. If a PDT Report concludes that such parameters or limits are not being met, the Permittees must comply with the AWFCO requirements of the SSMP and otherwise comply with Permit Condition V.C.5.v., as appropriate for the particular parameter or limit not being met.~~

~~I.K.4.b. When a PDT Report concludes that such operating parameters or emission limits are not being met, the Permittees shall cease processing hazardous waste except in accordance with the provisions of 40 CFR §§ 63.1207(l)(1)(i) and (ii) and 63.1207(l)(2)(i),(ii) and (iii), as appropriate. [See 40 CFR § 63.1207(l).]~~

~~I.K.4.c. Where 40 CFR §§ 63.1207(l)(1)(ii)(A) or (C), and/or 63.1207(l)(2)(ii) and (iii) require the submittal of a revised Notification of Compliance, the Permittees shall submit Supplemental PDT Report(s) to the Director for review and approval in accordance with Permit Condition I.G.5. within 90 days of any subsequent test(s). [See 40 CFR § 63.1207(l).]~~



I.K.5. Human Health and Ecological Risk Assessment

~~I.K.5.a. — Within 90 days after the approval of a PDT Report, the Permittees shall submit a Human Health and Ecological Risk Assessment Work Plan to the Director for review and approval in accordance with Permit Condition I.G.5. The Work Plan should be consistent with good scientific principles. For example, the Permittees should consider EPA’s current risk assessment guidance for combustion facilities and proposing the use of the latest air dispersion modeling software. The Risk Assessment Work Plans must include a proposed schedule for performance and completion of the Human Health and Ecological Risk Assessment.~~

~~I.K.5.b. — In accordance with the schedule set forth in the approved Human Health and Ecological Risk Assessment Work Plan, the Permittees shall submit a Draft Human Health and Ecological Risk Assessment to the Director for approval in accordance with Permit Condition I.G.5.~~

~~I.K.5.c. — Where an approved Human Health and Ecological Risk Assessment includes a recommendation for a modification of this Permit, the Permittees shall submit a request for such modification in accordance with Permit Condition I.G.8. and 40 CFR § 270.42. [See 40 CFR § 270.42.]~~

I.K.6. RF-1 Closure. [Move to Closure Section of Permit.] Within 90 days after the final permit is effective, the Permittees shall submit to EPA a closure activity notification designating the start date for the implementation of the schedule as specified in Section 9.0 of the Permit Attachment Appendix XVI. This closure activity notification, which will trigger the closure and dismantling of the non-operational reactivation furnace (RF-1) in accordance with the schedule set forth in Section 8.0 of the Permit Attachment Appendix XVI, shall include a start date that allows for completion of RF-1’s closure no later than one (1) year from the effective date of this Permit. [See Sections 8.0 and 9.0 in Permit Attachment Appendix XVI.]

I.K.7. Hopper H-1 Containment. [Move to Module IV Section of Permit.] The Permittees shall submit a work plan for implementation of the requirements for the secondary containment for Hopper H-1 (H-1 Work Plan) to the Director for approval in accordance with Permit Condition I.G.5. **within 90 days after the final Permit is effective.** The H-1 Work Plan shall include a schedule for implementation of the requirements for the secondary containment for Hopper H-1 and otherwise conform



to the requirements of Permit Condition IV.F.6. This schedule shall provide for completion of implementation of the requirements for the secondary containment for Hopper H-1 no later than one (1) year from the effective date of this Permit. The Director's decision to approve, disapprove or condition approval of such work plan is subject to the dispute resolution procedures set forth in Permit Condition I.L. [See 40 CFR § 264.193.]

I.K.8. Integrity Assessment/Leak Test

~~I.K.8.a. — The Permittees shall have the integrity of Hopper H-1 assessed by a professional engineer *within 60 days after the final Permit is effective* in accordance with 40 CFR § 264.191. This assessment must include a leak test, as described in 40 CFR § 264.191, or other integrity examination that is certified by a qualified Professional Engineer in accordance with 40 CFR § 270.11(d), that addresses cracks, leaks, corrosion, and erosion. [See 40 CFR §§ 264.191, 264.193(i), and 270.11(d).]~~

~~I.K.8.b. Until such time as the secondary containment for Hopper H-1 is implemented in accordance with Permit Conditions I.K.7, and IV.F.6.a., the Permittees must conduct a leak test, (or other integrity examination that meets the requirements of 40 CFR § 264.191), in accordance with 40 CFR § 264.193(i) and Permit Condition IV.F.6.b. to ensure the integrity of Hopper H-1. [See 40 CFR §§ 264.191, 264.193(i), and 270.11(d).]~~

~~I.K.9. If the secondary containment for Hopper H-1 is not implemented within a year from the effective date of this Permit, as provided in accordance with Permit Conditions I.K.7., the Permittees shall submit to the Director a contingent closure plan and proof of financial responsibility meeting the requirements of 40 CFR § 264.197(e), incorporated herein by this reference. [See also Permit Conditions IV.F.6.b.iii. and IV.M.3., and 40 CFR § 264.197(e).]~~

I.K.10. 40 CFR Part 264, Subpart BB Compliance

~~I.K.10.a. The Permittees shall submit to the Director a request for a Permit Modification in accordance with Permit Condition I.G.7., with an accompanying revised Permit Attachment Section N and Subpart BB Compliance Plan (Permit Attachment Appendix XIX) within *120 days after the final permit is effective*. The revised Permit Attachment Section N and Subpart BB Compliance Plan shall identify the equipment subject to 40 CFR Part 264, Subpart BB at the facility and, for each piece of equipment so identified, whether the Permittees elects to determine compliance with this Permit either by documentation pursuant to 40 CFR Part 264,~~



~~Subpart BB, or by documentation of compliance with the regulations at 40 CFR Part 60, Part 61, or Part 63, pursuant to the relevant provisions of the regulations at 40 CFR Parts 60, 61, 63 and 264. [See 40 CFR Part 264, Subpart BB.]~~

~~I.K.10.b. The revised Subpart BB compliance plan shall identify each piece of equipment that contains or contacts a hazardous waste with organic concentration that equals or exceeds 10% by weight using one of the methods described in 40 CFR § 264.1063(d). [See 40 CFR § 264.1063(d).]~~

~~I.K.10.c. If revisions to Permit Attachment Section N and the Subpart BB Compliance Plan also necessitate any changes to the Waste Analysis Plan in order to comply with 40 CFR § 264.1063(d), the Permittees shall include a revised Waste Analysis Plan (WAP) with the Permit Modification request. [See 40 CFR § 264.1063(d).]~~

~~I.K.10.d. The documentation of compliance elected by the Permittees in accordance with 40 CFR § 264.1064(m) shall be included in the facility operating record in accordance with Permit Condition II.M.1.ii. [See 40 CFR § 264.1064(m).]~~

~~I.K.10.e. If the Permittees and EPA do not agree on whether a piece of equipment contains or contacts a hazardous waste with organic concentrations at least 10 percent by weight, the procedures in 40 CFR § 264.1063(d)(1) or (d)(2) shall be used to resolve the disagreement. [40 CFR § 264.1063(d)(1) or (d)(2) and Permit Attachment Appendix XIX.]~~

~~I.K.11. Waste Carbon Feed Monitoring for Sulfur. [Move to Module II, Section C of Permit.]  
The Permittees shall submit to the Director a request for a Permit Modification in accordance with Permit Condition I.G.7., with an accompanying revised Permit Attachment Section C, if necessary, and a revised Permit Attachment Appendix IV (Waste Analysis Plan) within **60 days after the final Permit is effective.**~~

~~I.K.11. a. The revised Waste Analysis Plan shall include sampling ~~for sulfur at~~ of the waste carbon feed for sulfur analysis. Sampling will consist of four daily samples combined and sub-sampled into 15 – 20 day composites. every 6 hours to be composited and sent to the lab for analysis every 14 days.~~

~~I.K.11.b. The revised Waste Analysis Plan shall include a feed limit for sulfur oxides with reference to the limit expressed in Table V-1 of Module V of this Permit.~~



~~I.K.11.c. Once the revised Waste Analysis Plan is incorporated into the Permit, the Permittees are not authorized to feed in the RF-2 spent activated carbon that contains sulfur in concentrations exceeding permissible feed limits set forth in the revised Waste Analysis Plan in accordance with Module V, Table V-1.~~

~~I.K.12. Information Repository. Within 120 days of the effective date of this Permit, the Permittees must establish an information repository that meets the requirements of 40 CFR § 124.33 and includes the records identified in Permit Exhibit I. Within 150 days of the effective date of this Permit, the Permittees shall send notice of the location of the information repository to all persons on the facility's mailing list. [See 40 CFR §§ 124.33, 270.30(m), Permit Condition I.J. and Permit Exhibit I.]~~

~~I.K.13. Training Outline. Within 120 days of the effective date of this Permit, the Permittees shall submit to the Director a request for a Permit Modification in accordance with Permit Condition I.G.7., with an accompanying revised and updated Permit Attachment Section H (Personnel Training Program) and Permit Attachment Appendix XIV (Training Syllabus Outline and Training Summary) that, in addition to addressing the requirements of 40 CFR § 264.16, specifically address the requirements of 40 CFR § 63.1206(e)(6). [See 40 CFR §§ 63.1206(e)(6) and 264.16.]~~

## I.L. INFORMAL DISPUTE RESOLUTION (IDR)

I.L.1. Where the informal dispute resolution procedures of this Permit Condition I.L. are expressly identified as applicable, the following procedures shall apply:

I.L.1.a. The Permittee(s) may invoke the dispute resolution procedures by sending an Informal Dispute Resolution ("IDR") Notice to the Director in writing in accordance with Permit Conditions I.G.1. and I.G.2. Within the first fourteen (14) days after receipt of any such Notice, (the "informal dispute resolution period"), the Permittee(s) and the EPA ~~Directorstaff person(s) responsible for the matter under dispute (the "permitting staff")~~ will attempt to resolve any disputes informally. If requested by either of the Permittees, a meeting should be held between the ~~Directorpermitting staff~~ and the Permittee(s) ~~and/or their representative(s)~~ to discuss the matter. Unless otherwise agreed to by the permitting staff, the meeting will be held at the EPA Region 9's office in San Francisco, California, or by video or teleconference.



I.L.1.b.If agreement is not reached between the ~~permitting staff~~Director and the Permittee(s) within the fourteen (14) day informal dispute resolution period, and the Permittee(s) wish to continue the IDR process, the Permittee(s) must submit written arguments and evidence to the Regional Administrator~~Director~~. The written arguments and evidence shall be submitted to the ~~Director~~Regional Administrator within thirty (30) days of the end of the informal dispute resolution period (*i.e.*, within 44 days after EPA's receipt of the IDR Notice) at the address identified in Permit Condition I.G.1.

I.L.1.c.If written arguments and evidence are submitted by the Permittee(s) to the ~~Director~~Regional Administrator the ~~Director~~Regional Administrator will resolve the dispute within a reasonably prompt time period. The ~~Director~~Regional Administrator's resolution of the dispute shall include a written response to the evidence and arguments submitted by the Permittee(s), and shall state the basis for EPA's decision

I.L.1.d. The Decision of the Regional Administrator will be deemed to be a final agency action. -The Permittee(s) shall comply with the Director's decision unless an appeal is filed with a federal court of appropriate jurisdiction challenging the Regional Administrator's decision within thirty (30) days of Permittee's receipt of the decision. ~~regardless of whether the Permittee(s) agree with the decision. The Director's resolution of the dispute is not subject to administrative or judicial appeal.~~

I.L.2. Unless otherwise agreed to by the Director, invocation of IDR by the Permittee(s) shall not extend, postpone, or affect in any way any obligation of the Permittee(s) under this Permit not directly in dispute.

## MODULE II - GENERAL FACILITY CONDITIONS

### II. GENERAL FACILITY DESCRIPTION

Spent carbon is trucked to the Facility in several kinds of containers (e.g., drums, vessels, supersacks, roll-off bins, etc.) or in tanker trucks. The spent carbon typically contains benzene or other volatile organic compounds (VOCs). Only a portion of the incoming spent carbon received by the Facility is classified as a hazardous waste when received. A substantial quantity of the incoming spent carbon is exempt from hazardous waste classification upon receipt, typically because it does not exhibit a characteristic and is not listed, or it is a characteristic sludge destined for reclamation (40 CFR 261.2(c)). The spent carbon is either introduced to the carbon regeneration system at the Facility upon receipt via one of two hoppers (H-1 or H-2) or it is moved to the Container Storage Area to be put in the hoppers later. The spent carbon is transferred from the hoppers to one of four Spent Carbon Storage Tanks (T-1, T-2, T-5, or T-6). During the transfer, water is added to the spent carbon, creating a slurry, to help in pumping the spent carbon from the hoppers to the storage tanks. From the storage tanks, the spent carbon is transferred in slurry form to the furnace Feed Tank (T-18). The spent carbon in its slurry form then gets sent from T18 through a dewatering screw where the carbon ~~slurry gets is~~ dewatered. The dewatered carbon ~~then gets onis then fed to~~ the weigh belt where it is weighted and sampled, before it is fed to the ~~operating~~ Carbon Regeneration Furnace (RF-2). The regenerated carbon is cooled in a cooling screw and is then sent to the product storage area for commercial packaging. Wastewater is processed through ~~thea~~ waste water treatment system and is discharged to the local publically owned treatment works pursuant to a Clean Water Act discharge permit issued by the Colorado River Sewer Systems Joint Venture. The Facility's waste water treatment system is exempt from this Permit pursuant to 40 CFR 270.1(c)(2)(v).

### II.A. DESIGN AND OPERATION OF FACILITY

- II.A.1. The Permittees shall maintain and operate the Facility to minimize the possibility of a fire, explosion, or any unplanned, sudden or non-sudden release of hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment. [See 40 CFR § 264.31.]
- II.A.2. Except for those requirements set forth in 40 CFR §§270.4(a)(1)(i) – (iv), the Permittees ~~are isprohibited from~~ only authorized to conduct any hazardous waste storage or and treatment activity not specifically as described in this Permit, ~~except insofar as the Permittees' hazardous waste generation, accumulation or less than~~



90 day storage activities are governed by authorized by 40 CFR Parts 262, 264, 270, 273 and 279. [See 40 CFR Part 262 and §§ 270.1(c) and 270.4(a)(1)(i) – (iv).]

- II.A.3. ~~The Permittees shall not store on land or land dispose of any hazardous waste on or at the Facility, whether temporarily or permanently.~~ The Permittees shall comply with all applicable land disposal restriction requirements in 40 CFR Part 268, including the ~~prohibition on storage of restricted waste for over a year~~applicable storage provisions in 40 CFR § 268.50. [See 40 CFR Part 268].
- II.A.4. Any Permittee-initiated ~~modifications~~changes to the units designated in this Permit which require modifications to the Permit pursuant to 40 CFR 270.42 shall ~~first~~ be the subject of a Permit Modification ~~request~~ in accordance with Permit Condition I.G.7. where applicable, and the permit modification procedures of 40 CFR § 270.42. [See 40 CFR § 270.42.]
- II.A.5. The Permittees may store hazardous waste generated on-site in accordance with the provisions of 40 CFR Part 262. Any hazardous waste generated on-site that is to be treated on-site, or disposed of or transported off-site must be stored, handled, treated, transported and otherwise managed in accordance with the regulations applicable to hazardous waste generators at 40 CFR Part 262 and any other applicable requirements, such as 40 CFR Part 265 Subpart BB or requirements listed under 40 CFR §§ 270.4(a)(1)(i)-(iv), or this Permit. [See 40 CFR Part 262, 40 CFR Part 265, Subpart BB and §§ 270.1(c) and 270.4(a)(1)(i)-(iv).]
- II.A.6. No less often than annually, the Permittees must certify, in accordance with 40 CFR § 264.73(b)(9), that there is a program in place to reduce the volume and toxicity of hazardous waste that is generated on-site to the degree determined by the Permittee to be economically practicable and that the proposed method of treatment, storage or disposal is that practicable method currently available to the Permittees which minimizes the present and future threat to human health and the environment. A copy of the certification must be maintained in the operating record in accordance with Permit Conditions I.E.9.b and II.M.1. [See 40 CFR § 264.73(b)(9) and Permit Conditions I.E.9.b., and II.M.1.]

## II.B. REQUIRED NOTICES

- II.B.1. If the Permittees expect to receive hazardous waste from a foreign source, the Permittees shall notify the Regional Administrator in writing at the address below



at least four weeks in advance of the date the waste is expected to arrive at the facility. Notice of subsequent shipments of the same waste from the same foreign source in the same calendar year is not required. [See 40 CFR § 264.12(a)(1).]

Regional Administrator  
US EPA, Region 9  
Mail Code: ORA-1  
75 Hawthorne St.  
San Francisco, CA 94105

II.B.2. When the Permittees ~~are~~is to receive hazardous waste from an off-site source (except where either Permittee is also the generator), they must inform the generator in writing that they have the appropriate hazardous waste Permit, and will accept the waste the generator is shipping. The Permittees must keep a copy of this written notice as part of the Facility's operating record in accordance with 40 CFR § 264.73. [See 40 CFR §§ 264.12(b) and 264.73.]

## II.C. GENERAL WASTE ANALYSIS

- II.C.1. The Permittees shall follow the waste analysis procedures in accordance with 40 CFR § 264.13, Permit Attachment Section C, and the Waste Analysis Plan, Permit Attachment Appendix IV. [See 40 CFR §264.13.]
- II.C.2. The Permittees shall review the analysis of each waste stream provided by the generator as part of their quality assurance program in accordance with the frequencies set forth in the Waste Analysis Plan, Permit Attachment Appendix IV.
- II.C.3. If an on-site lab is used, then the Permittees shall maintain proper functional instruments, use approved sampling and analytical methods, verify the validity of sampling and analytical procedures, and perform correct calculations.
- II.C.4. If the Permittees ~~uses~~ a contract or other off-site laboratory to perform analyses, then the Permittees shall inform the laboratory in writing that it must operate under the waste analysis conditions set forth in this Permit. Any failure of the

laboratory to operate under the waste analysis conditions set forth in this Permit shall constitute a violation of the Permit by the Permittees. [See 40 CFR §264.13 and the Waste Analysis Plan, Permit Attachment Appendix IV.]

- II.C.5. The Director, the Enforcement Director, or either's designee reserve the right to audit the on-site laboratory or the off-site laboratory utilized by the Permittees at any time.
- II.C.6. The Director, the Enforcement Director, or either's designee reserve the right to sample the waste stream at the weigh belt to ensure compliance with this Permit.
- II.C.7. The Permittees shall review the Waste Analysis Plan at least every two calendar years to determine if it is in compliance with current RCRA regulations and otherwise meets the needs of the Facility in accordance with Section 7.0 of the Waste Analysis Plan, Permit Attachment Appendix IV, incorporated herein by this reference. [See Section 7.0 of the Waste Analysis Plan, Permit Attachment Appendix IV.]
- II.C.8. The Permittees shall comply with the test methods and procedural requirements described in 40 CFR § 264.1063 in accordance with the RCRA Subpart BB standards, where applicable, Permit Attachment Section N and Permit Attachment Appendix XIX, incorporated herein by this reference. [See 40 CFR § 264.1063, Permit Attachment Section N and Permit Attachment Appendix XIX. See also Permit Condition I.K.10.]
- II.C.9. At the request of the Director, the Permittees shall perform a waste determination for a hazardous waste managed in any tank or container exempted from using air emission controls under the provisions of 40 CFR § 264.1082. [See 40 CFR § 264.1082(d).]

#### II.D. SECURITY

- II.D.1. The Permittees shall comply with the security provisions of 40 CFR §264.14. The treatment process and operating areas of the Facility are surrounded by a fence as depicted on the Reactivation Facility Site Plan (D14789-08) contained



in Permit Attachment Appendix III. This Reactivation Facility Site Plan also shows gates for the Facility. All gates and building entrances must be locked or monitored when open. Additional access control requirements for the Facility are contained in Permit Attachment Section F (Procedures to Prevent Hazards), incorporated herein by this reference. [See 40 CFR § 264.14.]

- II.D.2. The Permittees shall prevent, and minimize the possibility for, livestock and unauthorized people from entering the Facility. [See 40 CFR § 264.14(a).]
- II.D.3. The Permittees shall post and maintain a sign at each entrance to the Facility, and at other prominent locations, in sufficient numbers to be seen from any approach to the Facility. The sign shall bear the legend "Danger - Unauthorized Personnel Keep Out". The legend shall be in English and in Spanish and must be legible from a distance of at least 25 feet. The Permittees may use existing signs with a legend other than "Danger--Unauthorized Personnel Keep Out" if the legend on the sign indicates that only authorized personnel are allowed to enter the Facility, and that entry onto the Facility can be dangerous. [See 40 CFR § 264.14(c).]

#### II.E. GENERAL INSPECTION REQUIREMENTS

- II.E.1. The Permittees shall follow the inspection schedule as per Permit Attachment Section F and Permit Attachment Appendix XII and shall comply with the requirements of 40 CFR § 264.15. [See 40 CFR § 264.15.]
- II.E.2. The Permittees shall inspect the facility in compliance with the requirements of 40 CFR § 264.15(a) for malfunctions and deterioration, operator errors, and discharges that may be causing, or may lead to any release of hazardous waste constituents to the environment or any threat to human health. The Permittees shall conduct these inspections often enough to identify problems in time to correct them before they result in harm to human health or the environment. [See 40 CFR § 264.15(a).]
- II.E.3. Inspections shall include the requirements of 40 CFR § 264.15(b). The inspection should include at a minimum, monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment (such as dikes and sump pumps) that are important to preventing, detecting, or responding to environmental or human health hazards. Areas subject to spills,

~~such as loading and unloading areas, shall be inspected daily when in use.~~ [See 40 CFR 264.15(b). See also Table V-3 in Module V.]

II.E.4. The Permittees shall remedy any deterioration or malfunction of Permit-regulated equipment or structures discovered by an inspection in accordance with 40 CFR §§ 264.15(c) and 264.171. [See 40 CFR §§ 264.15(c) and 264.171.]

II.E.5. The Permittees shall record all inspections as required by 40 CFR § 264.15 (d). ~~The Permittees shall keep these records for at least three years from the date of inspection. At a minimum, the Permittees must include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.~~ [See 40 CFR § 264.15(d).]

#### II.F. [DELETED] MAINTENANCE AND OPERATION

~~II.F.1. The Permittees shall maintain, calibrate, and operate the Facility in accordance with this Permit and Table V-3 in Module V. [See 40 CFR § 264.15 and Table V-3 in Module V.]~~

~~II.F.2. The Permittees shall maintain the SWMUs, HWMUs, and AOCs and their equipment in good operating condition.~~

#### II.G. PERSONNEL TRAINING

II.G.1. The Permittees shall conduct personnel training in accordance with 40 CFR § 264.16, and in accordance with Permit Attachment Section H and Permit Attachment Appendix XIV, both of which are incorporated herein by this reference. [See 40 CFR § 264.16.]

II.G.2. The Permittees shall maintain training documents and records in accordance with 40 CFR §§ 264.16(d) and (e). [See 40 CFR §§ 264.16(d) and (e).]

#### II.H. SPECIAL PROVISIONS FOR CERTAIN WASTES

II.H.1. The Permittee may store and treat the hazardous wastes identified in Table C-1 in Permit Attachment C. The Permittees are prohibited from storing or treating hazardous waste that is not identified in Table ~~H-2.C-1.~~



~~TABLE II 2 PERMITTED HAZARDOUS WASTE~~

<del>Description of permitted hazardous waste</del>
<del>D001, D004, D005, D006, D007, D008, D009, D010, D011, D012, D013, D014, D015, D016, D017, D018, D019, D020, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D031, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043.</del>
<del>F001, F002, F003, F004, F005, F006, F012, F019, F025, F035, F037, F038, F039 (except for F039 that contains dioxin or furans).</del>
<del>K001, K002, K003, K004, K005, K006, K007, K008, K009, K010, K014, K015, K016, K017, K018, K019, K020, K022, K023, K024, K025, K026, K029, K030, K031, K032, K033, K034, K035, K036, K037, K038, K039, K040, K041, K042, K046, K048, K049, K050, K051, K052, K061, K064, K065, K066, K071, K073, K083, K084, K085, K086, K087, K088, K090, K091, K093, K094, K095, K096, K097, K098, K100, K101, K102, K103, K104, K105, K106, K112, K113, K114, K115, K116, K117, K118, K125, K126.</del>
<del>P001, P002, P003, P004, P005, P007, P008, P010, P011, P012, P013, P014, P015, P016, P017, P018, P020, P021, P022 (rust), P023, P024, P026, P027, P028, P029, P030, P031, P033, P034, P036, P037, P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048, P049, P050, P051, P054, P056, P057, P058, P059, P060, P062, P063, P064, P066, P067, P068, P069, P070, P071, P072, P073, P074, P075, P077, P078, P082, P084, P085, P087, P088, P089, P092, P093, P094, P095, P096, P097, P098, P099, P101, P102, P103, P104, P105, P108, P109, P110, P113, P114, P115, P116, P118, P119, P120, P121, P123.</del>
<del>U001, U002, U003, U004, U005, U007, U008, U009, U010, U011, U012, U014, U015, U016, U017, U018, U019, U022, U024, U025, U026, U027, U028, U029, U030, U031, U032, U034, U035, U036, U037, U038, U039, U041, U042, U043, U044, U045, U046, U047, U048, U049, U050, U051, U052, U053, U055, U056, U057, U058, U059, U060, U061, U062, U063, U064, U066, U067, U068, U069, U070, U071, U072, U073, U074, U075, U076, U077, U078, U079, U080, U081, U082, U083, U084, U085, U086, U087.</del>

U088, U089, U090, U091, U092, U093, U094, U095, U097, U098, U099, U101, U102, U103, U105, U106, U107, U108, U109, U110, U111, U112, U113, U114, U115, U116, U117, U118, U119, U120, U121, U122, U124, U125, U126, U127, U128, U129, U130, U131, U132, U135, U136, U137, U138, U140, U141, U142, U143, U144, U145, U146, U147, U148, U149, U150, U151, U152, U153, U154, U155, U156, U157, U158, U159, U161, U162, U163, U164, U165, U166, U167, U168, U169, U170, U171, U172, U173, U174, U176, U177, U178, U179, U180, U181, U182, U183, U184, U185, U186, U187, U188, U190, U191, U192, U193, U194, U196, U197, U200, U201, U202, U203, U204, U206, U207, U208, U209, U210, U211, U213, U214, U215, U216, U217, U218, U219, U220, U221, U222, U225, U226, U227, U228, U235, U236, U237, U238, U239, U240, U243, U244, U246, U247, U248, U249, U328, U353, U359.

II.H.2. The Permittees shall follow the procedures for handling ignitable and incompatible waste and otherwise comply with the requirements of 40 CFR § 264.17. The Permittees shall follow the procedures for handling ignitable wastes set forth in Permit Attachment Section C, incorporated herein by this reference. [See 40 CFR § 264.17 and Permit Attachment Section C, at C.2.4.]

II.H.3. Hazardous Waste received from off-site may only be stored at the Facility if it is to be regenerated through thermal treatment in RF-2.

II.H.4. The Permittees shall comply with the requirements for Air Emission Standards for Equipment Leaks (40 CFR Part 264, Subpart BB) in accordance with Permit Application Appendix XIX and Permit Attachment Section N, incorporated herein by this reference. [See 40 CFR § 264.1050 *et seq.*, including 40 CFR § 264.1063(f), and Permit Condition I.K.10.]

II.H.5. The Permittees shall not accept, store, consolidate or treat any of the following:

II.H.5.a. Radioactive or nuclear wastes regulated by the U.S. Department of Energy and U.S. Nuclear Regulatory Commission including any spent carbon contaminated with such material;

II.H.5.b. Hazardous Wastes associated with dioxins and/or furans (*e.g.* F020, F021, F022, F023, F026, F027, F028, F032, K043, K099, K156, K158, K174, K178, P127, and/or P189)



including any spent carbon contaminated with such material;

II.H.5.c. ~~Leachate from the disposal of more than one restricted waste (F039) including any spent carbon contaminated with such material if it contains wastes associated with dioxins and/or furans (e.g. F020, F021, F022, F023, F026, F027, F028, F032, K043, K099, K156, K158, K174, K178, P127, and/or P189), [See definition of "Dioxins and furans" in 40 CFR 260.10.];~~

II.H.5.d. Wastes regulated under the Toxic Substances Control Act (TSCA) that contain levels of polychlorinated biphenyls (PCBs) equal to or greater than 50 mg/Kg (ppm), or where the source of the PCBs is equal to or greater than 50 ppm including any spent carbon contaminated with such material;

II.H.5.e. Medical or infectious wastes including any spent carbon contaminated with such material; or

II.H.5.f. RCRA mixed waste (radioactive and hazardous waste) including any spent carbon contaminated with such material.

II.H.5.g. Corrosive (D002) or reactive waste (D003) including spent carbon containing corrosive or reactive waste.

II.H.5.h. ~~Benzedine-contaminated waste (U021) including spent carbon containing benzedine.~~

## II.I. LOCATION STANDARDS

The Facility is not within a 100-year floodplain. In the event of a flood, the Permittees shall remove all hazardous waste, before flood waters can reach the Facility, to a location where the wastes will not be vulnerable to the flood waters. [See 40 CFR § 264.18(b), Permit Attachment Section B and Permit Attachment Appendix II.]

## II.J. PREPAREDNESS AND PREVENTION

### II.J.1. Required Equipment

At a minimum, the Permittees shall maintain the following at the Facility:

- An internal communications or alarm system at or near areas of the Facility where hazardous waste is stored, treated or otherwise managed that is or are capable of providing immediate emergency instruction (voice or signal) to facility personnel;
- A device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or State or local emergency response teams;
- Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and
- Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems. [See 40 CFR § 264.32.]

#### II.J.2. Testing And Maintenance Of Emergency Equipment

The Permittees shall test and maintain all the communications and alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required and as necessary, to assure its proper operation in time of emergency. Specific testing and maintenance procedures are included in the inspection schedule in Permit Attachment Section F and in Permit Attachment Appendix XII. [See 40 CFR § 264.33.]

#### II.J.3. Access To Communications Or Alarm System

Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, the Permittees shall ensure that all personnel involved in the operation have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee. If there is ever just one employee on the premises while the Facility is operating, the Permittees shall ensure that he or she has immediate access to a device, such as a telephone (immediately available at the scene



of operation) or a hand-held two-way radio, capable of summoning external emergency assistance. [See 40 CFR § 264.34.]

#### II.J.4. Required Aisle Space

The Permittees shall maintain adequate aisle space at the Facility in accordance with Permit Attachment Section D, Permit Attachment Appendix III, and Permit Attachment Appendix VII. At a minimum, the Permittees shall maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency and for the purposes of conducting inspections, unless it can be demonstrated to the Director that aisle space is not needed for any of these purposes. [See 40 CFR § 264.35.]

#### II.J.5. Arrangements with Local Authorities

The Permittees shall attempt to makemaintain arrangements with the appropriate state, local, and Colorado River Indian Tribes (CRIT) authorities in accordance with 40 CFR § 264.37. The Permittees shall periodically update the arrangements, at least every five years from the effective date of this Permit. If state, local, or CRIT officials refuse to renew the preparedness and prevention arrangements with the Permittees, the Permittees must getseek to confirm this refusal in writing and document this refusal and maintain such documentation in the Facility's operating record until closure is completed and certified for five years or until the next attempt to make arrangements as provided above. The Permittees shall also notify the Director of the Waste Management Division of this refusal by the local authority(ies). [See 40 CFR §§ 264.37, Permit Attachment Section G and Permit Appendix XIII.]

### II.K. CONTINGENCY PLAN

#### II.K.1. Implementation of Plan

The Permittees shall comply with the requirements of 40 CFR §§264.50 through 264.56. The Permittees must immediately carry out the provisions of the Contingency Plan, Permit Attachment Section G and Permit Attachment Appendix XIII, whenever there is a fire, explosion, or release of hazardous waste or constituents which could threaten human health or the environment. [See 40 CFR §§ 264.50 through 264.56.]

## II.K.2. Copies of Plan

The Permittees shall maintain a copy of the Contingency Plan at the Facility, including all revisions to the plan and must submit a copy (and a copy of all revisions) to all local police departments, fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services. The Contingency Plan, Permit Attachment Section G and Permit Attachment Appendix XIII is hereby incorporated into this Permit by this reference. [See 40 CFR § 264.53.]

## II.K.3. Amendments to Plan

II.K.3.a. The Permittees shall review and immediately amend, if necessary, the Contingency Plan, whenever:

II.K.3.a.i. The facility permit is revised;

II.K.3.a.ii. The plan fails in an emergency;

II.K.3.a.iii. The facility changes—in its design, construction, operation, maintenance, or other circumstances—in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;

II.K.3.a.iv. The list of emergency coordinators changes; or

II.K.3.a.v. The list of emergency equipment changes. [See 40 CFR § 264.54.]

II.K.3.b. The Permittees shall submit to the Director a request for a Permit Modification in accordance with Permit Condition I.G.7., with the accompanying amended Contingency Plan. [See 40 CFR § 270.42.]

## II.K.4. Emergency Coordinator

The Permittees shall ensure that a trained emergency coordinator is available at all times at the Facility or on call in case of an emergency, in accordance with 40 CFR § 264.55.



[See 40 CFR §§ 264.52(d) and 264.55.]

## II.L. MANIFEST SYSTEM

II.L.1. The Permittees shall comply with the manifest requirements of 40 CFR §§264.70, 264.71, 264.72, and 264.76. [See 40 CFR §§ 264.70, 264.71, 264.72, and 264.76. See also § 270.30(1)(7) and (8).]

II.L.1.a. If a significant ~~discrepancy~~difference in quantity or type of waste listed on a manifest is discovered as set forth in 40 CFR 264.72(a)(1), the Permittees must attempt to reconcile the discrepancy. If not resolved within fifteen days, the Permittees must submit a letter report, including a copy of the manifest, to the Director as set forth in 40 CFR 264.72(c). [See 40 CFR §§264.72 and 270.30(1)(7).]

II.L.1.b. If the Facility accepts for treatment or storage any hazardous waste from an off-site source without an accompanying manifest, An unmanifested waste report must be submitted to the Director within 15 days of receipt of the unmanifested waste. [See 40 CFR §§264.76 and 270.30(1)(8).]

II.L.1.c. Pursuant to 40 CFR § 264.71, electronic manifests that are obtained, completed, and transmitted in accordance with §262.20(a)(3) and used in accordance with 40 CFR § 264.71 in lieu of the paper manifest form are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement to obtain, complete, sign, provide, use, or retain a manifest. [See 40 CFR §§ 262.20(a)(3) and 264.71.]

## II.M. RECORDKEEPING AND REPORTING

In addition to the recordkeeping and reporting requirements specified elsewhere in this Permit, the Permittees shall do the following:

### II.M.1. Operating Record

II.M.1.a. The Permittees shall maintain a written operating record at the facility in accordance with 40 CFR § 264.73. [See 40 CFR § 264.73.]

II.M.1.b. ~~The Permittees shall record and maintain, in the operating record for this Permit, all monitoring, inspection, and other data compiled under the requirements of this Permit in accordance with 40 CFR §§ 63.1211, 264.73 and 264.1064. The Permittees shall also maintain the test burn reports, data, and calculations in the operating record. [See Permit Condition I.K. and 40 CFR §§ 63.1211, 264.73 and 264.1064.]~~

II.M.1.c. The Permittees shall maintain, in the operating record for this Permit, the manuals listed in the Operating and Maintenance Manuals Maintained on Site Table identified in Permit Attachment Appendix XXI. Whenever the list of manuals needs to be revised, the Permittees shall submit a request for a Permit Modification in accordance with Permit Condition I.G.7. along with the accompanying revised Table. [See 40 CFR §§ 63.8(c)(3) and 63.1209(b)(2).]

II.M.1.d. ~~The Permittees shall maintain, in the operating record for this Permit, the site specific CMS quality control performance evaluation test plan procedures in accordance with 40 CFR § 63.8(d). [See 40 CFR § 63.8(d).]~~

#### II.M.2. Reporting Requirements

The Permittees shall comply with the reporting requirements of 40 CFR §§ 61.357, ~~63.1211~~, 264.77, 264.1089 and 264.1090, as appropriate. To the extent that the cited regulatory requirements call for overlapping reporting of information, the Permittees may merge the information into one or more reports and need not provide duplicative information. [See 40 CFR §§ 61.357, ~~63.1211~~, 264.77, 264.1089 and 264.1090.]

#### II.M.3. Biennial Report

The Permittees shall comply with the biennial reporting requirements of 40 CFR §264.75. [See 40 CFR §§ 264.75 and 270.30(1)(9).]

#### II.M.4. Subpart BB Recordkeeping and Reporting



In accordance with 40 CFR § 264.1064(m), if any “equipment” at the facility, as defined at 40 CFR § 264.1031, contains or contacts hazardous waste with an organic concentration of at least 10 percent by weight for 300 hours or more per calendar year and is subject to regulations at 40 CFR Part 60, Part 61, or part 63 and the Permittees elect to determine compliance with 40 CFR Part 264, Subpart BB by documentation of compliance with the regulations at 40 CFR Part 60, Part 61, or Part 63 pursuant to the relevant provisions of the regulations at 40 Part 60, Part 61, or Part 63, the documentation of compliance under the regulations at 40 CFR Part 60, Part 61, or Part 63 shall be kept with or made readily available with the facility operating record. Otherwise, the Permittees shall comply with the recordkeeping and reporting requirements described in 40 CFR §§ 264.1064 and 264.1065 in accordance with the RCRA Subpart BB standards, Permit Attachment Section N and Permit Attachment Appendix XIX, incorporated herein by this reference. [See 40 CFR §§ 264.1031, 264.1064 and 264.1065, Permit Attachment Section N and Permit Attachment Appendix XIX. See also Permit Condition I.K.10.]

#### II.M.5. Application Recordkeeping

Except as provided in Permit Condition I.J., the Permittees shall comply with the recordkeeping requirements described in 40 CFR § 270.10(i). [See 40 CFR § 270.10(i).]

### II.N. GENERAL CLOSURE REQUIREMENTS

#### II.N.1. Performance Standard

II.N.1.a. The Permittees shall close the Facility in accordance with Permit Conditions III.L., IV.M., and V.H., and 40 CFR Part 264, Subpart G, (40 CFR §§264.110 *et seq.*), Permit Attachment Section I, and Permit Attachment Appendices XV and XVII, each of which is incorporated herein by this reference. [See 40 CFR Part 264, Subpart G, (40 CFR §§264.110 *et seq.*), the RCRA Facility Closure Plan, Permit Attachment Section I, and Permit Attachment Appendices XV and

XVII.]

II.N.1.b. The Permittees shall close RF-1 in accordance with Permit Conditions I.K, and V.H., and 40 CFR Part 264, Subpart G, (40 CFR §§264.110 *et seq.*), RF-1 Closure Plan, Permit Attachment Section I, and Permit Attachment Appendices XVI and XVII, each of which is incorporated herein by this reference. [See 40 CFR Part 264, Subpart G, (40 CFR §§264.110 *et seq.*), RF-1 Closure Plan, Permit Attachment Section I, and Permit Attachment Appendices XVI and XVII.]

II.N.2. Closure Plan Review

The Director reserves the right to review the closure plans at any time to ensure both contain all the requirements to meet the closure requirements of 40 CFR Part 264, Subpart G, (40 CFR §§264.110 *et seq.*). This review may include any unusual activities, notices of violation, and inspection reports. [See 40 CFR Part 264, Subpart G.]

II.N.3. Amendment to Closure Plans

II.N.3.a. The Permittees shall amend either or both the RCRA Facility Closure Plan and the RF-1 Closure Plan, in accordance with 40 CFR §264.112(c), whenever necessary. [See 40 CFR § 264.112.]

II.N.3.b. If the Director determines at any time that either or both closure plans require modification, the Permittees shall modify either or both closure plans as appropriate to incorporate findings identified by the Director's review in accordance with 40 CFR §§264.112(c)(4) and 270.42. [See 40 CFR §§ 264.112 and 270.42.]

II.N.3.c. If, prior to the time the notice of closure required by Permit Condition II.N.4. is submitted, the Permittees determine that an amendment to the Closure Plan is appropriate, the Permittees shall submit to the Director a request for a Permit Modification in accordance with Permit Condition I.G.7., with an accompanying revised closure plan at least



180 days before initiation of closure activities in accordance with 40 CFR § 270.42. [See 40 CFR § 270.42.]

II.N.4. Notification of Closure

In addition to the Notice of Closure of RF-1 required by Permit Condition I.K., the Permittees shall notify the Director in writing at least 60 days prior to the date on which they expect to begin closure of any additional part of the Facility or to begin final closure of the Facility. [See 40 CFR § 264.112(d).]

II.N.5. Time Allowed For Closure

Within 90 days after receiving the final volume of hazardous waste, the Permittees shall treat, remove from the unit or Facility, or dispose of on-site all hazardous waste and shall complete closure activities, in accordance with 40 CFR § 264.113 and the schedules specified in the Closure Plans, Permit Attachment Section I and Appendices XV and XVI. [See 40 CFR §§ 264.113 and 270.42.]

II.N.6. Disposal or Decontamination of Equipment, Structures, and Soils

The Permittees shall decontaminate and dispose of all contaminated equipment from the Facility, support structures, and soils in accordance with 40 CFR § 264.114 and the Closure Plans, Permit Attachment Section I, and Permit Attachment Appendices XV and XVI. [See 40 CFR § 264.114.]

II.N.7. Certification of Closure

The Permittees shall certify that the Facility has been closed in accordance with 40 CFR § 264.115 and the specifications in the Closure Plans, Permit Attachment Section I, and Permit Attachment Appendices XV and XVI. [See 40 CFR § 264.115.]

II.O. GENERAL POST-CLOSURE REQUIREMENTS

If waste is left in place (*e.g.* equipment, platforms, SWMUs), the Permittees shall submit

a post-closure permit application in accordance with the requirements of 40 CFR Part 264, Subpart G. [See 40 CFR §§ 264.117 through 264.120.]

## II.P. COST ESTIMATE FOR FACILITY CLOSURE

II.P.1. The Permittee's<sup>2</sup> most recent closure cost estimates, for facility-wide closure and RF-1 closure, respectively, are specified in Attachment 4 to the Closure Plan, Permit Attachment Section I, and Permit Attachment Appendix XV and Attachment 4 to the RF-1 Closure Plan, Permit Attachment Section I and Permit Attachment Appendix XVI, which are each incorporated herein by this reference. [See 40 CFR §§ 264.142, 264.144, 264.197(c)(3) and (5), 264.228(c)(2), and 264.258(c)(2).]

### II.P.2.

II.P.2.a. The Permittees must adjust the closure cost estimate for inflation within 60 days prior to each annual anniversary date of the establishment of the financial instrument(s) used to comply with 40 CFR § 264.143. Such adjustments will not be considered a change to this Permit and no application for Permit modification will be required. [40 CFR § 264.142(b).]

II.P.2.b. If at any time during the operation of the Facility, the Permittees uses a financial test or corporate guarantee to meet the financial responsibility requirements in accordance with 40 CFR §264.143(f), the Permittees must adjust the closure cost estimate for inflation within 30 days after the close of owner or operator's fiscal year, as appropriate, and before submission of updated information to the Director in accordance with 40 CFR § 264.142(b). [See 40 CFR § 264.142(b).]

II.P.3. The Permittees must revise either or both closure cost estimates whenever there is a change in either or both of the Facility's Closure Plans in accordance with 40 CFR § 264.142(c). [See 40 CFR § 264.142(c).]

II.P.4. The Permittees must keep the latest closure cost estimates (for RF-1 and the Facility-wide closure) at the Facility in accordance with 40 CFR § 264.142(d). [See 40 CFR § 264.142(d).]



- II.P.5. New, updated or revised financial assurance instruments and updated cost estimates must be submitted to the Director in accordance with 40 CFR §§ 264.142 and 264.143. [40 CFR §§ 264.142 and 264.143.]

II.Q. FINANCIAL ASSURANCE FOR FACILITY CLOSURE

The Permittees shall demonstrate continuous compliance with the requirements of 40 CFR § 264.143 by providing documentation of financial assurance, as required by and in accordance with 40 CFR § 264.151, in at least the amount of the cost estimates required by Permit Condition II.P. Requests for changes in financial assurance mechanisms demonstrating compliance with this Permit Condition II.Q. shall be submitted to the Director for review and approval in accordance with Permit Condition I.G.5. before being implemented. Such changes will not be considered a change to this Permit and no application for Permit modification will be required. [See 40 CFR §§ 264.143 and 264.151.]

II.R. LIABILITY REQUIREMENTS

The Permittees shall demonstrate continuous compliance with the requirement of 40 CFR § 264.147(a) to have and maintain liability coverage for sudden and accidental occurrences in the amount of at least \$1 million per occurrence, with an annual aggregate of at least \$2 million, exclusive of legal defense costs. Changes to liability coverage will not be considered a change to this Permit and no application for Permit modification will be required. [See 40 CFR § 264.147(a).]

II.S. INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS

The Permittees shall comply with 40 CFR § 264.148, whenever applicable. [See 40 CFR § 264.148.]

MODULE III - CONTAINERS

III.A. APPLICABILITY

This Module provides requirements for any containers used to store or treat hazardous waste at the Facility, including those received from off-site sources. Waste analysis requirements are contained in Module II, in Permit Condition II.C., in Permit Attachment Section C, and in Permit Attachment Appendix IV, the Waste Analysis Plan. [See 40 CFR § 264.13.]

III.B. GENERAL REQUIREMENTS FOR CONTAINERS

- III.B.1. The Permittees shall not manage, store, treat, and/or consolidate hazardous waste in containers other than in the designated container storage areas listed in Table III-1 below. [See 40 CFR § 264.170.]
- III.B.2. The Permittees must maintain the Spent Carbon Container Storage Area containment capacity of at least 10,000 gallons. [See 40 CFR § 264.175(b)(3).]
- III.B.3. The Permittees shall not manage, store, and/or consolidate containers of hazardous wastes in excess of the maximum capacities for each individual container storage area identified in Table III-1.

TABLE III-1  
CONTAINER STORAGE AREAS, ~~SATELLITE ACCUMULATION AREAS,~~  
AND DESIGN CAPACITIES

Description	Location*	Capacity
Spent Carbon Container Storage	Warehouse	100,000 gallons
<del>Satellite accumulation area</del>	<del>North side of container storage area</del>	<del>55 gallons</del>
<del>Satellite accumulation area</del>	<del>South side of container storage area</del>	<del>55 gallons</del>
<del>Satellite accumulation area</del>	<del>East of control room</del>	<del>55 gallons or less</del>



Description	Location*	Capacity
Satellite accumulation area	Facility on-site screening laboratory	55 gallons or less
Container storage area for waste generated on-site	South-east of H-1 hopper	40 cubic yards or less per bin

\* Note: Locations may vary due to facility needs. Permit Attachment Appendix III contains diagrams and maps with unit locations

III.B.3. The Permittees must manage all containers used to store or otherwise manage hazardous waste at the Facility in accordance with 40 CFR Part 264, Subpart I. [See 40 CFR Part 264, Subpart I.]

III.B.4. Closure requirements for containers used to store or otherwise manage hazardous waste are included in Module II, in Permit Condition II.N, in this Module III, in Permit Condition III.L., Permit Attachment Section I and Permit Attachment Appendices XV and XVI. [See 40 CFR §§ 264.111 and 264.178.]

### III.C. CONDITION OF CONTAINERS

~~The Permittees shall maintain containers in good condition (e.g., no severe rusting, apparent structural defects, etc.). If a container holding hazardous waste is not in good condition or, if the container begins to leak, the Permittees shall repair the container or place it into another suitable container or transfer the waste from such a container into a container that is in good condition. [See 40 CFR § 264.171.]~~

### III.D. COMPATIBILITY OF WASTE WITH CONTAINER

~~III.D.1. — The Permittees must use containers that are made of or lined with materials that will not react with, and are otherwise compatible with, the hazardous wastes to be stored, so that the ability of the containers to contain the waste is not impaired. [See 40 CFR § 264.172.]~~

~~III.D.2. — For all containers within a singular secondary containment system, the Permittees shall ensure that the containers are compatible with all wastes within that containment system. [See 40 CFR § 264.172.]~~

~~III.D.3. — The Permittees shall assure compliance with Permit Condition III.D.1. by utilization of the procedures (e.g., testing of waste and containers) and equipment specified in the Waste Analysis Plan, Permit Attachment Section C and Permit Attachment Appendix IV.~~

III.D.4. The Permittees shall conduct pre-acceptance characterization of waste, as specified in the Waste Analysis Plan, Permit Attachment Section C and Permit Attachment Appendix IV, and ensure proper precautions are taken so as to prevent accidental ignition or reaction of ignitable or incompatible wastes. [See 40 CFR §§ 264.172, 264.176 and 264.177.]

### III.E. MANAGEMENT OF CONTAINERS

~~III.E.1. — The Permittees shall always keep all containers holding hazardous waste closed during storage, except when it is necessary to add or remove waste. [See 40 CFR § 264.173(a).]~~

~~III.E.2. — The Permittees shall never open, handle, or store a container holding hazardous waste in a manner that may rupture the container or cause the container to leak. [See 40 CFR § 264.173(b).]~~

#### III.E.3. Storage Configuration

~~III.E.3.a. — The Permittees shall maintain adequate aisle space between rows of containers to allow for the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of the facility. [See 40 CFR § 264.35.]~~

~~III.E.3.b. — A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak. [See 40 CFR § 264.173(b).]~~

III.E.3.c. The Permittees shall not exceed the maximum volumes of hazardous waste for each category of containers listed in Table III-2. [See 40 CFR § 264.173.]



TABLE III-2

LIST OF CONTAINER TYPES AND VOLUMES

Container Type	Volume (ft <sup>3</sup> )	Volume (US Gallons)
VSC/ASC 200/Drums	7.9	59
VSC/ASC 400	17.5	131
VSC/ASC 1000	44.9	336
VSC/ASC 2000	82.0	614
VSC 3000	164	1228
PV1000	44.9	336
PV2000	82.0	614
“Supersack”	Up to 67	Up to 500

This table represents information for the major types of containers managed at the Facility. Other containers of various volume and configuration may also be received.

III.F. CONTAINMENT SYSTEMS

III.F.1. The Permittees shall provide secondary containment for all hazardous waste containers in accordance with 40 CFR § 264.175(b) except that storage areas that store containers holding only wastes that do not contain free liquids need not have such a containment system so long as the storage area meets the requirements of 40 CFR § 264.175(c). [See 40 CFR §§ 264.175(b) and (c).]

III.F.2.

III.F.2.a. The Permittees shall remove ~~all accumulated liquid, including~~ spilled ~~and/or~~ leaked wastes and ~~all~~ accumulated precipitation ~~or run-on~~ from the sump or collection area in a timely manner to prevent overflow of the collection system. [See 40 CFR § 264.175(b)(5).]

~~III.F.2.b. At a minimum, removal of liquid shall occur within 24 hours of the initial accumulation of liquid, or sooner, based on inspection of the containment area. [See Permit Attachment Section F and Permit Appendix XII.]~~

- III.F.2.c. If the collected material from a secondary containment system is a hazardous waste, it must be managed as a hazardous waste in accordance with all applicable requirements of this Permit and RCRA. [See 40 CFR § 264.175(b).]
- III.F.2.d. The Permittees shall address any spills or leaks from the pad and, if applicable, containment system in accordance with 40 CFR §§264.15(c) and 264.171. [See 40 CFR §264.15(c) and 264.171.]

### III.G. AIR EMISSION CONTROLS FOR CONTAINERS

III.G.1. The Permittees shall store and manage hazardous waste in containers in accordance with the requirements specified in 40 CFR Part 264, Subpart CC, Permit Attachment Section O and Permit Attachment Appendix XX. [See 40 CFR §264.179, and Part 264, Subpart CC.]

~~III.G.2. For containers exempted under 264.1082(e), the Permittees shall determine the average volatile organic concentration of the waste at the point of waste generation, in accordance with the procedures specified in 40 CFR § 264.1083(a). The average volatile organic concentration shall be determined over an annual timeframe, as specified in 40 CFR § 264.1083(a). [See 40 CFR §§ 264.1082(e) and 264.1083(a).]~~

~~III.G.3. In accordance with 40 CFR § 264.1082(e)(1), for containers exempted under 264.1082(e)(1), the Permittees shall review and update, as necessary, the determination of average volatile organic concentration of the waste at the point of waste generation at least once every 12 months following the date of the initial determination for the hazardous waste streams managed and/or stored in entering such containers. [See 40 CFR §§ 264.1082 and 264.1083.]~~

III.G.4. For any hazardous waste that has been treated at the Facility, the Permittees shall perform the applicable waste determinations for each treated hazardous waste placed in containers exempted under the provisions of 40 CFR § 264.1082(e)(2)(i) through (e)(2)(vi) in accordance with the procedures specified in 40 CFR §§ 264.1082(e)(2) and 264.1083(b). [See 40 CFR §§ 264.1082(e)(2) and 264.1083.]

This draft permit has been created in accordance with 40 CFR § 124.6 as part of US EPA's proposed RCRA hazardous waste permit decision for the hazardous waste facility (EPA ID # AZD982441263) located on trust land of the Colorado River Indian Tribes at 2523 Mutahar Street, Parker, Arizona, 85344, and operated by Evoqua Water Technologies LLC.



~~III.G.5. Certain hazardous wastes or volumes of hazardous wastes managed at the facility trigger air emission control requirements under the RCRA air emission control provisions at 40 CFR Part 264, Subpart CC (referred to as "CC"). For wastes subject to the requirements of RCRA CC that are not subject to one of the exemptions listed at 40 CFR § 264.1082(e), that are received in containers at the facility, in addition to any other applicable provisions in this Module, the Permittees shall:~~

~~III.G.5.a. — Visually observe container condition and record the material (carbon size) and how full the container is by percentage as per Permit Attachment Appendix IV, Appendix B Tally Sheet;~~

~~III.G.5.b. — This Permit Condition III.G.5.b. applies to: (1) any hazardous waste containers having a design capacity greater than 0.1 cubic meters and less than or equal to 0.46 cubic meters for which all hazardous waste in or entering the unit has an average volatile organic concentration at the point of waste origination of more than 500 parts per million by weight; and (2) any hazardous waste containers having a design capacity greater than 0.46 cubic meters that is not "in light material service" as that term is defined in 40 CFR § 265.1081, for which all hazardous waste in or entering the unit has an average volatile organic concentration at the point of waste origination of more than 500 parts per million by weight. These containers must comply with the "Container Level 1 standards" in accordance with 40 CFR Part 264, Subpart CC. [See 40 CFR § 264.1086(b) and (e).]~~

~~III.G.5.c. — This Permit Condition III.G.5.c. applies to any hazardous waste containers having a design capacity greater than 0.46 cubic meters that is "in light material service" as that term is defined in 40 CFR § 265.1081, for which all hazardous waste in or entering the unit has an average volatile organic concentration at the point of waste origination of more than 500 parts per million by weight. These containers must comply with the "Container Level 2 standards" in accordance with 40 CFR Part 264 Subpart CC. [See 40 CFR § 264.1086(b) and (d).]~~

~~III.G.5.d. — This Permit Condition III.G.5.d. applies to any hazardous waste containers having a design capacity greater than 0.1 cubic meters that is used for~~

~~treatment of a hazardous waste by a waste stabilization process, for which all hazardous waste in or entering the unit has an average volatile organic concentration at the point of waste origination of more than 500 parts per million by weight. These containers must comply with the "Container Level 3 standards" in accordance with 40 CFR Part 264 Subpart CC. [See 40 CFR § 264.1086(b) and (e).]~~

~~III.G.6. For containers that contain or contact hazardous wastes with organic concentrations of 10% by weight or less, the Permittees shall comply with 40 CFR §§ 264.1063 and 264.1064. [See 40 CFR §§ 264.1050(b), 264.1063(d), and 264.1064(k).]~~

### III. H. INSPECTION SCHEDULES AND PROCEDURES

III.H.1. The Permittees shall, upon receipt of containers of hazardous waste, inspect the containers in accordance with Permit Attachment F and Permit Appendices IV and XII and shall also ensure the container is in good condition within the meaning of 40 CFR § 264.171. Pursuant to 40 CFR § 264.171, if any container is determined to be not in good condition or if it begins to ~~or has leaked~~, the Permittees must transfer the hazardous waste from the container to a container that is in good condition or manage the waste in some other way that complies with the provisions of this Permit. [See 40 CFR § 264.171.]

III.H.2. The Permittees shall conduct daily inspections of the Spent Carbon Container Storage Area and the containers stored there in accordance with Permit Attachment F and Permit Appendix XII and shall maintain daily records of inspections at the facility.

~~III.H.3. The Permittees shall, at a minimum, conduct weekly inspections of all areas where hazardous waste containers are stored or managed, in accordance with the provisions of and inspection schedule in Permit Attachment F and Permit Appendix XII, to detect leaking containers and deterioration of containers or the containment system, which may be caused by corrosion or other factors. [See 40 CFR § 264.174.]~~

~~III.H.4. The Permittees' inspections shall include inspection and monitoring of any air emission control equipment used to comply with the provisions of Permit~~



~~Condition III.G. in accordance with a written plan and schedule in accordance with 40 CFR § 264.1088.~~

~~III.H.5.~~

~~III.H.5.a. — Prior to their receipt, identify any hazardous waste containers subject to the Container Level 1 Standards that will not or may not be emptied within 24 hours of their receipt at the Facility and conduct an inspection on or before receipt of such containers as follows:~~

~~III.H.5.a.i. — Visually inspect the container, cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position;~~

~~III.H.5.a.ii. — Repair defects, if detected, in accordance with the requirements, including time frames, of 40 CFR § 264.1086(e)(4)(iii);~~

~~III.H.5.a.iii. — If a container used for managing hazardous waste remains at the facility for a period of 1 year or more, the owner or operator shall visually inspect the container and its cover and closure device(s) initially and thereafter, at least once every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. [See 40 CFR § 264.1086(e)(4).]~~

~~III.H.5.b. — Prior to their receipt, identify any hazardous waste containers subject to the Container Level 2 Standards that will not or may not be emptied within 24 hours of their receipt at the Facility and conduct an inspection on or before receipt of such containers in accordance with the requirements of 40 CFR § 264.1086(d)(4). [See 40 CFR § 264.1086(d)(4).]~~

~~III.H.5.c. — Prior to their receipt, identify any hazardous waste containers subject to the Container Level 3 Standards and inspect and monitor the closed vent systems and control devices on such containers in accordance with the~~

~~requirements of 40 CFR § 264.1086(e)(4). [See 40 CFR §  
264.1086(e)(4).]~~

### III.I. RECORD KEEPING AND REPORTING

- III.I.1. For hazardous waste containers subject to the requirements of RCRA Subpart CC, ~~including those subject to one of the exemptions listed at 40 CFR § 264.1082(c)~~, the Permittees shall comply with the applicable recordkeeping requirements of 40 CFR §§ 264.1086 and 264.1089. [See 40 CFR §§ 264.1086 and 264.1089.]
- III.I.2. For hazardous waste containers subject to the requirements of RCRA Subpart CC, including those subject to one of the exemptions listed at 40 CFR § 264.1082(c), the Permittees shall comply with the applicable reporting requirements of 40 CFR § 264.1090. [See 40 CFR § 264.1090.]
- III.I.3. The Permittees shall retain sketches, drawings, or data demonstrating compliance with Permit Condition III.J.1., (location of buffer zone [15 m or 50 ft] and containers holding ignitable ~~or reactive~~ wastes). [See 40 CFR §§ 264.176.]
- III.I.4. The Permittees shall retain sketches, drawings, or data demonstrating compliance with Permit Condition III.K.3., (location of incompatible wastes in relation to each other), where applicable. [See Permit Appendix IV (Waste Analysis Plan) and 40 CFR § 264.177.]
- III.I.5. The Permittees has submitted in the Part B application, Appendix VII, and shall maintain at the Facility until closure is completed and certified by an independent, registered professional engineer, the following ~~hazardous waste container specific documents and information and all amendments, revisions, and modifications to these documents and information:~~
- III.I.5.a. For storage areas that store hazardous waste containers having free liquids, a description of the containment system to demonstrate compliance with container storage area provisions of 40 CFR § 264.175. This description must showinclude the following:
- III.I.5.a.i. Basic design parameters, dimensions, and materials of construction;



- III.I.5.a.ii. How the design promotes drainage or how containers are kept from contact with standing liquids in the containment system;
- III.I.5.a.iii. Capacity of the containment system relative to the number and volume of hazardous waste containers to be stored;
- III.I.5.a.iv. Provisions for preventing or managing run-on; and
- III.I.5.a.v. How accumulated liquids can be analyzed and removed to prevent overflow.
- III.I.5.b. For storage areas that store containers holding hazardous wastes that do not contain free liquids, a demonstration of compliance with 40 CFR 264.175(c), including:
  - III.I.5.b.i. Test procedures and results, management systems or other documentation or information to show that the hazardous wastes managed in these areas do not contain free liquids; and
  - III.I.5.b.ii. A description of how the storage area is designed or operated to drain and remove liquids or how containers are kept from contact with standing liquids.
- III.I.6. When management of ignitable ~~or reactive~~ waste or incompatible waste occurs at the Facility, the Permittees must document compliance with Permit Conditions III.J. and III.K. This documentation may be based on references to published scientific or engineering literature, data from trial tests (e.g., bench scale or pilot scale tests), waste analyses (as specified in the Waste Analysis Plan), or the results of the treatment of similar wastes by similar treatment processes and under similar operating conditions. [See Permit Appendix IV (Waste Analysis Plan) and 40 CFR § 264.17(c).]

III.J. SPECIAL CONTAINER PROVISIONS FOR IGNITABLE ~~AND REACTIVE~~ WASTES

III.J.1. The Permittees shall not locate containers holding ignitable ~~or reactive~~ hazardous waste

within 50 feet (15 meters) of the facility property line. The physical location of this 50-foot boundary shall be permanently marked and maintained while the facility is in operation. [See 40 CFR § 264.176.]

III.J.2. The Permittees shall prevent accidental ignition or reaction of ignitable ~~or reactive~~ hazardous waste. The Permittees shall follow the procedures specified in the Waste Analysis Plan (Permit Appendix IV) regarding the identification of ignitable ~~and reactive~~ wastes. [40 CFR §§ 264.177(a) and 264.176.]

III.J.3 The Permittees shall comply with the general requirements of 40 CFR § 264.17 for ignitable ~~or reactive~~ hazardous wastes managed or stored in containers at the Facility. [See 40 CFR § 264.17.]

~~III.J.4. Containers of ignitable and reactive hazardous wastes shall be stacked no more than two~~

~~containers high.~~

III.K. SPECIAL CONTAINER PROVISIONS FOR INCOMPATIBLE WASTE

III.K.1. The Permittees shall not place incompatible hazardous wastes, or incompatible hazardous wastes and materials, in the same container unless such placement is performed in accordance with the provisions of 40 CFR § 264.17(b). [See 40 CFR §§ 264.17(b) and 264.177(a).]

III.K.2. The Permittees shall not place hazardous waste in an unwashed container that previously held an incompatible waste or material. [See 40 CFR § 264.177(b).]

III.K.3. The Permittees shall separate containers of incompatible hazardous wastes as specified in the Waste Analysis Plan. Storage containers with incompatible hazardous wastes shall be separated from other material or be protected from other materials by means of a berm, dike, wall, or other device. [See 40 CFR § 264.177(c).]



September 2016

III.K.4. The Permittees shall ensure that the management of any incompatible hazardous wastes at the Facility will not result in any leak, corrosion, compromise or failure of any secondary containment required by this Permit. [See 40 CFR § 264.175.]

III.L. CLOSURE

III.L.1. At closure, all hazardous waste and hazardous waste residues must be removed from the containment system. Remaining containers, liners, bases and soil containing or contaminated with hazardous waste or hazardous waste residues must be decontaminated or removed. [See 40 CFR § 264.178.]

III.L.2. At closure, the Permittees must manage any hazardous waste removed from the containment system in accordance with the requirements of this Permit. [See comment to 40 CFR § 264.178.]

## MODULE IV - STORAGE IN TANKS

### IV.A. APPLICABILITY

- IV.A.1.** All hazardous waste tank systems ~~and tank-like systems~~ managed at the Facility must comply with the design, installation, and other requirements for “new tank systems” at 40 CFR § 264.192, incorporated herein by this reference, as opposed to the requirements for “existing tank systems” at 40 CFR § 264.191. [See 40 CFR §§ 260.10, 264.191 and 264.192.]
- IV.A.2.** Except as otherwise specifically set forth in this Permit, the requirements of 40 CFR § 264, Subpart J, Subpart BB (Subpart BB), and/or Subpart CC (Subpart CC), ~~and 40 CFR § 61, Subpart FF (Subpart FF)~~ are applicable to portions of the hazardous waste tanks systems (T-1, T-2, T-5, T-6, and T-18) that are used to store or ~~otherwise manage/treat~~ hazardous waste at the Facility. Map of Tanks systems’ locations can be found in the Permit Attachment Appendix III. Certain air emission control requirements also apply to Tank T-11, as indicated in Permit Condition IV.G.1. and Table IV-2.
- IV.A.3.** This module also contains Permit Conditions for the Hoppers H-1 and H-2, which are ancillary equipment to Tank Systems T-1, T-2, T-5 and T-6 and are used to transport or feed hazardous waste to these Tank Systems. These Hoppers are ~~defined/construed~~ as “open valves or lines” under RCRA’s air emissions requirements found at 40 CFR Part 264, Subpart BB, and as “individual drain systems” under the Clean Air Act’s air emission control requirements for individual drain systems found at 40 CFR Part 61, Subpart FF.
- IV.A.4.** Table IV-1 below provides descriptions of the hazardous waste tank systems that are discussed in this Module and that are subject to the permit conditions of this Module.



**TABLE IV-1**  
**INFORMATION ABOUT HAZARDOUS WASTE TANK SYSTEMS**

<i>Tank/Ancillary Equipment No. &amp; Description</i>	<i>Tank/Ancillary Equipment Materials Of Construction</i>	<i>Tank/Ancillary Equipment Dimensions</i>	<i>Tank/Ancillary Equipment Design Capacity (Gallons)</i>	<i>Tank/Ancillary Equipment Maximum Allowable Design Vapor Pressure (kPa)</i>
T-1 spent carbon storage tank	300 Series Stainless Steel, Fixed Roof	16'-0" Straight Side 10'-0" Diameter 8'-0" 62° Bottom Cone	8,319 gal.	Atmospheric
T-2 spent carbon storage tank	300 Series Stainless Steel, Fixed Roof	16'-0" Straight Side 10'-0" Diameter 8'-0" 62° Bottom Cone	8,319 gal.	Atmospheric
T-5 spent carbon storage tank	300 Series Stainless Steel, Fixed Roof	16'-0" Straight Side 10'-0" Diameter 8'-0" 62° Bottom Cone	8,319 gal.	Atmospheric
T-6 spent carbon storage tank	300 Series Stainless Steel, Fixed Roof	16'-0" Straight Side 10'-0" Diameter 8'-0" 62° Bottom Cone	8,319 gal.	Atmospheric
T-18 RF-2 Feed Tank	300 Series Stainless Steel	7'-6" Straight Side 10'-4.5" Diameter 9'-4.75" 60° Bottom Cone	6,500 gal.	Atmospheric
H-1 Outdoor spent	Mild Steel <u>(in process of</u>	14' length x 8' width	5000 lb. capacity <u>(to be</u>	Atmospheric

<i>Tank/Ancillary Equipment No. &amp; Description</i>	<i>Tank/Ancillary Equipment Materials Of Construction</i>	<i>Tank/Ancillary Equipment Dimensions</i>	<i>Tank/Ancillary Equipment Design Capacity (Gallons)</i>	<i>Tank/Ancillary Equipment Maximum Allowable Design Vapor Pressure (kPa)</i>
carbon unloading hopper		x 7' height <u>(to be replaced by hopper sized 7' x 14' x 9')</u>		
H-2 Indoor spent carbon unloading hopper	Mild Steel <u>(in</u>	4' length x 4' width x 4' height <u>(to be replaced</u>	5000 lb. Capacity <u>(to be replaced with 50 cubic feet)</u>	Atmospheric

**IV.B. GENERAL REQUIREMENTS FOR TANK SYSTEMS**

**IV.B.1.** Tank design capacities for the tanks and the hoppers are shown in Table IV-1. This design capacity for each tank or hopper shall not be exceeded.

**IV.B.2.** Prior to the installation of any new hazardous waste tank systems,  ~~tank-like systems~~ or components, the Permittees shall submit to the Director the information required in a Part B permit application for new tank systems or components in accordance with 40 CFR §§ 264.192, along with an accompanying request for a permit modification in accordance with Permit Condition I.G.7. (See 40 CFR §§ 264.192 and 270.42.)

**IV.B.3.** Hoppers H-1 and H-2, described in Table IV-1, are regulated under this permit ~~aseonsidered~~ ancillary equipment to Tanks T-1, T-2, T-5 and T-6 and, when used to feed hazardous waste, ~~-~~ must meet each of the requirements applicable to ancillary equipment that are set forth in 40 CFR Part 264, Subpart J, ~~which is incorporated herein by this reference.~~ (See 40 CFR § 264.190 *et seq.*)

**IV.B.4.** ~~Pursuant to the Schedule of Compliance set forth in Permit Condition I.K., the Permittees must obtain and submit written assessments for Hoppers H-1 and H-2 that meet the requirements of 40 CFR § 264.192(a) as follows:~~



~~IV.B.4.a. Pursuant to the Schedule of Compliance set forth in Permit Condition I.K., the Permittees must obtain and submit written assessments for Hopper H-1 that meet the requirements of 40 CFR § 264.192(a) and that demonstrate compliance with 40 CFR § 264.192. The Permittees must maintain a copy of these assessments on file at the Facility in accordance with 40 CFR § 264.192(g). [See 40 CFR § 264.192 and Permit Condition I.K.]~~

~~IV.B.4.b. Pursuant to the Schedule of Compliance set forth in Permit Condition I.K., the Permittees must obtain and submit written assessments for Hopper H-2 that meet the requirements of 40 CFR § 264.192(a) and that demonstrate compliance with 40 CFR § 264.192. The Permittees must maintain a copy of these assessments on file at the Facility in accordance with 40 CFR § 264.192(g). [See 40 CFR § 264.192 and Permit Condition I.K.]~~

#### IV.C. CONDITION OF TANK SYSTEMS

~~IV.C.1. The Permittees shall maintain hazardous waste tank systems in good condition (e.g., no severe rusting, apparent structural defects, etc.). If a tank system holding hazardous waste is not in good condition or, if the tank system begins to leak, the Permittees shall repair the tank system or transfer the waste from such a tank system into one or more tanks systems or containers that are in good condition. [See 40 CFR § 264.171.]~~

#### IV.D. COMPATIBILITY OF WASTE WITH TANK SYSTEMS

IV.D.1. Hazardous wastes or treatment reagents must not be placed in a tank system if they could cause the tank, its ancillary equipment, or the tank's containment system to rupture, leak, corrode, or otherwise fail. [See 40 CFR § 264.194(a).]

#### IV.E. MANAGEMENT OF TANK SYSTEMS

IV.E.1. The Permittees must use appropriate controls and practices to prevent spills and overflows of hazardous waste from tank systems or containment systems. [See 40 CFR § 264.194(b).]

~~IV.E.2. These include, at a minimum: Permittees must utilize~~ appropriate spill prevention controls (e.g., check valves, dry disconnect couplings), overflow prevention controls (e.g., level sensing devices, high level alarms, automatic feed cutoff, or bypass to a standby tank), and maintenance of sufficient freeboard in uncovered tanks ~~and H-1~~ to prevent overtopping by wind action or by precipitation. [See 40 CFR § 264.194(b).]

**IV.E.3.** The Permittees shall ensure that the unloading and feeding of hazardous waste into H-1 and H-2 are done in a manner that prevents the migration of hazardous waste from these units. The Permittees may not use the units H-1 or H-2 for hazardous waste storage and are required to pump any waste fed into H-1 or H-2 into Tanks T-1, T-2, T-5 or T-6 as soon as practical, even if carbon regeneration operations at the Facility have ceased or been curtailed.

#### **IV.F. CONTAINMENT SYSTEMS**

**IV.F.1.** The Permittees must maintain secondary containment in accordance with the requirements of 40 CFR § 264.193. [See 40 CFR § 264.193.]

**IV.F.2.** The secondary containment must be designed or operated to contain 100 percent of the capacity of the largest hazardous waste tank within its boundary, and must be designed and operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. [See 40 CFR §§ 264.193(e)(1)(i), (ii), (iii) and (iv) and Permit Attachment Appendix IX.]

**IV.F.3.** The Permittees shall maintain the secondary containment in a manner so as to prevent any migration of wastes or accumulated liquid out of the system to the soil, ground water, or surface water at any time during the use of the tank systems. The Permittees must ensure that the secondary containment is free from cracks or gaps by maintaining a sealant on any such areas that is compatible with the spent carbon. [See 40 CFR §§ 264.193(b)(1) and (e)(1)(iii).]

**IV.F.4.** The Permittees must retain the containment volume of secondary containment within the concrete pad that serves as the secondary containment for Tanks T-1, T-2, T-5 and T-6 at or above the 9,847 gallons at all times. that these tanks remain in service. The maximum spent carbon tank volume for each of Tanks T-1, T-2, T-5 and T-6 is 8,319 gallons and the calculated applicable rainfall volume for the secondary containment area for Tanks T-1, T-2, T-5 and T-6 is 1,528 gallons. The secondary containment volume in this area must therefore meet the total required volume of 9,847 gallons. [See 40 CFR § 264.193(e) and Permit Attachment Appendix IX.]

**IV.F.5.** The Permittees shall maintain the double walled tank T-18 in accordance with 40 CFR 264.193(e)(3). [See 40 CFR § 264.193(e)(3).]



#### **IV.F.6. Spent Carbon Unloading Hopper H-1**

**IV.F.6.a.** ~~In accordance with the Compliance Schedule set forth in Permit Condition I.K., the Permittees shall submit to EPA for approval a work plan with a schedule for providing secondary containment for the spent carbon unloading Hopper H-1 in accordance with 40 CFR § 264.193. [See 40 CFR § 264.193.]~~

**IV.F.6.b.i.** ~~Until such time as the secondary containment for Hopper H-1 is provided in accordance with Permit Condition IV.F.6.a., the Permittees must conduct a leak test or other integrity assessment to ensure the integrity of Hopper H-1 annually from the date of the leak test or other integrity assessment required in Permit Condition I.K. and maintain a record of the results of each such assessment in the operating record at the Facility and otherwise comply with the requirements of 40 CFR § 264.193(i), incorporated herein by this reference. [See 40 CFR § 264.193(i).]~~

**IV.F.6.b.ii.** ~~Until such time as the secondary containment for Hopper H-1 is provided in accordance with Permit Condition IV.F.6.a., the Permittees must perform daily inspections of the spent carbon unloading Hopper H-1 in accordance with 40 CFR § 264.195(f). [See 40 CFR § 264.195(f).]~~

**IV.F.6.b.iii.** ~~If the secondary containment for Hopper H-1 is not implemented within a year from the effective date of this Permit, as provided in accordance with Permit Conditions I.K.7. and IV.F.6.a., the Permittees shall be subject to the requirements of Permit Conditions I.K.9. and H.M.3., and 40 CFR § 264.197(e), incorporated herein by this reference. [See 40 CFR § 264.197(e).]~~

**IV.F.7.** ~~The Permittees shall maintain the secondary containment for the spent carbon unloading Hopper H-2 in the container storage warehouse in accordance with 40 CFR § 264.193(e)(1). The pad under H-2 serves as a liner external to the hopper, providing secondary containment. [See 40 CFR § 264.193(e)(1).]~~

#### **IV.G. AIR EMISSION CONTROLS**

**IV.G.1.** Tank systems T-1, T-2, T-5, T-6, ~~T-11~~ and T-18 are subject to air emission control requirements pursuant to this Permit. Tanks T-1, T-2, T-5, T-6 and T-18 and hoppers H-1 and H-2 are equipped with closed vent systems leading to air pollution control devices. The Permittees must comply with the RCRA ~~and CAA~~



regulations that are identified in the column labeled “Air Emission Control Regulations Applicable to this Unit” in Table IV-2 and that relate to the emissions standards, monitoring records, reporting and management requirements for the correlating units, *i.e.*, tanks T-1, T-2, T-5, T-6, T-11 and T-18, and their associated ancillary equipment, (H-1 and H-2), and the carbon adsorbers WS-1, WS-2, and WS-3, and their associated closed vent systems (e.g. hoses/piping and connections). Permittee may elect to comply with the listed air regulations in lieu of the Part 264 Subpart BB and CC requirements, as provided in 40 CFR 264.1064(m) and 264.1080(b)(7). [See Permit Attachment Sections N and O, Permit Attachment Appendices XIX and XX, Permit Attachments Subpart BB Compliance Plan and Subpart FF Compliance Plan and 40 CFR Part 61 and §§ 264.1050 *et seq.*, 264.1087, 264.1088, 264.1089, and 264.1090. The Subpart FF Compliance Plan is attached for informational purposes only and is not considered a part of this Permit.]

#### IV.G.2.

- IV.G.2.a.** If sampling and analysis or operator knowledge of the waste entering Tank T-11 demonstrates that the average annual Volatile Organic concentration of the waste entering the unit is greater than or equal to 500 parts per million by weight, the Permittees shall ensure that tank T-11 complies with the “Air Emission Control Regulations Applicable to this Unit” in Table IV-2.
- IV.G.2.b.** For Hoppers H-1 and H-2, the Permittees must ensure that H-1 and H-2 are at all times in compliance with either 40 CFR Part 264, Subpart BB requirements for open ended valves or lines or alternatively Permittee may choose to comply with 40 CFR Part 61, Subpart FF requirements for individual drain systems, as set forth in the column labeled “Air Emission Control Regulations Applicable to this Unit” in Table IV-2. Permittee shall be authorized to open the hoppers during spent carbon feed operations involving both hazardous and non-hazardous waste streams, and for maintenance and repair activities. [See 40 CFR §§ 264.1050 *et seq.*, and §§ 61.340 *et seq.* See also Permit Condition I.K.10.]
- IV.G.2.c.** For carbon adsorber WS-2 and the piping, connections, and any flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to WS-2, the Permittees must ensure that WS-2, and any such piping, connections and devices, are at all times in compliance with either 40 CFR Part 264, Subpart BB requirements for closed-vent systems and control devices or alternatively Permittee may choose to comply with 40 CFR Part 61, Subpart FF requirements for closed vent systems and control devices, as set forth in the column labeled “Air Emission Control Regulations Applicable to this Unit” in Table IV-2. [See 40 CFR §§ 264.1050 *et seq.*, and §§ 61.340 *et seq.* See also



Permit Condition I.K.10.]

**IV.G.3.** In accordance with Permit Attachment Section N and Permit Attachment Appendix XIX, the Permittees must comply with the applicable requirements of 40 CFR Part

264, Subpart BB. [See 40 CFR Part 264, Subpart BB. See also Permit Condition I.K.10.]

~~IV.G.4. In accordance with Permit Attachment Section O and Permit Attachment Appendix XX, the Permittees must comply with the record-keeping and reporting requirements of 40 CFR §§ 264.1089(f)(1) and 264.1090(a) when operating the scrubber, recycler, boiler and cooling tower blow-down storage tank, T-11. [See Permit Attachment Section O, Permit Attachment Appendix XX, and 40 CFR §§ 264.1089(f)(1) and 264.1090(a).]~~

~~IV.G.5. The Permittees shall maintain and operate the air pollution control equipment at the Facility in a manner consistent with good air pollution control practice for minimizing emissions. [See, e.g., 40 CFR §264.31.]~~

TABLE IV-2  
MANAGEMENT OF EACH TANK SYSTEM, HOPPERS  
AND THE AIR POLLUTION CONTROL DEVICES

Tank or Unit No.	Description	Air Emission Control Requirements Applicable to this Unit
T-1	Spent Carbon Storage Tank. Tank T-1 vapors are controlled by a closed vent system leading to a carbon adsorber (WS-1).	40 CFR Part 61, Subparts A and FF and 40 CFR §264.1089(j-)), or <u>alternatively 40 CFR Part 264, Subpart CC.</u>
T-2	Spent Carbon Storage Tank. Tank T-2 vapors are controlled by a closed vent system leading to a carbon adsorber (WS-1).	40 CFR Part 61, Subparts A and FF and 40 CFR §264.1089(j-)), or <u>alternatively 40 CFR Part 264, Subpart CC.</u>
T-5	Spent Carbon Storage Tank. Tank T-5 vapors are controlled by a closed vent system leading to a carbon adsorber (WS-1).	40 CFR Part 61, Subparts A and FF and 40 CFR §264.1089(j-)), or <u>alternatively 40 CFR Part 264, Subpart CC.</u>
T-6	Spent Carbon Storage Tank. Tank T-6 vapors are controlled by a closed vent system leading to carbon adsorber (WS-1).	40 CFR Part 61, Subparts A and FF and 40 CFR §264.1089(j-)), or <u>alternatively 40 CFR Part 264, Subpart CC.</u>
T-11	Scrubber/ <del>Reecyle/</del>	40 CFR §§ 264.1082(c)(1),



Tank or Unit No.	Description	Air Emission Control Requirements Applicable to this Unit
	<del>Boiler and</del> Cooling Tower Blow-Down Water Storage Tank/ <u>Pad Washdown</u>	264.1089(f)(1) and 264.1090(a). Tank T-11 is subject to monitoring and record keeping requirements of 40 CFR Part 264, Subpart CC. If sampling and analysis or operator knowledge of the waste entering Tank T-11 demonstrates that the average annual Volatile Organic concentration of the waste entering the unit is greater than or equal to 500 parts per million by weight, the Permittees shall at such time ensure that tank T-11 meets the additional requirements of 40 CFR §§ 264.13(b)(8), 264.1082, 264.1084 and 264.1087.
T-18	<del>Hearth-Furnace</del> feed tank or spent carbon feed tank. Tank T-18 vapors are controlled by a closed vent system leading to a carbon adsorber (WS-3).	40 CFR Part 61, Subparts A and FF and 40 CFR §264.1089(j-),, or <u>alternatively 40 CFR Part 264, Subpart CC.</u>
H-1	Outdoor spent carbon unloading hopper (open ended line; individual drain system). Hopper H-1 vapors are controlled by a closed vent system leading to a carbon adsorber (WS-2).	40 CFR §§ 61.01 through 61.19, 61.346 (or <u>alternatively</u> 40 CFR Part 264, Subpart BB), and Permit Conditions I.K.10., II.H.4. and IV.G.3.
H-2	Indoor spent carbon unloading hopper (open ended line; individual drain system). Hopper H-2 vapors are controlled by a closed vent system leading to a carbon adsorber (WS-2).	40 CFR §§ 61.01 through 61.19, 61.346 and 264.1064(m) (or <u>alternatively</u> 40 CFR Part 264, Subpart BB), and Permit Conditions I.K.10., II.H.4. and IV.G.3.
WS-1	Carbon Adsorber No.1 and associated Closed Vent System (e.g. connections and hoses/piping) for tanks T-1, T-2, T-5, and T-6. WS-1, and the piping, connections, and any flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to WS-1, is an air pollution control device.	40 CFR §§ 61.01 through 61.19, 61.349, 61.354(d), 264.1089(j), or <u>alternatively 40 CFR Part 264, Subpart CC,</u> and Permit Conditions II.H.4. and IV.G.3.

Tank or Unit No.	Description	Air Emission Control Requirements Applicable to this Unit
WS-2	Carbon Adsorber No.2 and associated Closed Vent System (e.g. connections and hoses/piping) for hoppers H-1 and H-2. WS-2, and the piping, connections, and any flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to WS-2, is an air pollution control device.	40 CFR §§ 61.01 through 61.19, 61.349, 61.354(d), and 264.1064(m) (or <u>alternatively</u> 40 CFR Part 264, Subpart BB, for closed vent systems and control devices) and Permit Conditions I.K.10., II.H.4. and IV.G.3.
WS-3	Carbon Adsorber No.3 and associated Closed Vent System (e.g. connections and hoses/piping) for tank T-18. WS-3, and the piping, connections, and any flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to WS-3, is an air pollution control device.	40 CFR §§ 61.01 through 61.19, 61.349, 61.354(d), 264.1089(j), <u>or alternatively 40 CFR Part 264, Subpart CC,</u> and Permit Conditions II.H.4. and IV.G.3..
Closed Vent Systems Connected to WS-1 and WS-3	Hoses/piping and connections leading from tanks to adsorbers. The piping, connections, and any flow-inducing devices that transport gas or vapor from the hazardous waste tanks to air pollution control devices, such as WS-1, and WS-3, are closed vent systems.	40 CFR §§ 61.01 through 61.19, 61.349, 61.354(d), 264.1089(j), <u>or alternatively 40 CFR Part 264, Subpart CC,</u> and Permit Conditions II.H.4. and IV.G.3.
Closed Vent Systems Connected to WS-2	Hoses/piping and connections leading from hoppers to adsorbers. The piping, connections, and any flow- inducing devices that transport gas or vapor from the hoppers to an air pollution control device, such as WS-2, are closed vent systems.	40 CFR §§ 61.01 through 61.19, 61.349, 61.354(d), 264.1064(m), (or <u>alternatively</u> 40 CFR Part 264, Subpart BB, for closed vent systems) and Permit Conditions I.K.10., II.H.4. and IV.G.3.

**IV.G.6.** For hazardous waste managed and/or stored on site in any tank systems that are not equipped with air pollution control devices installed prior to December 6, 1996, the Permittees shall determine the average volatile organic concentration of the waste at the point of waste generation, in accordance with the procedures



specified in 40 CFR § 264.1083(a). The average shall be determined over an annual timeframe, as specified in 40 CFR § 264.1083(a). In accordance with 40 CFR § 264.1082(c)(1), the Permittees shall review and update, as necessary, this determination at least once every 12 months following the date of the initial determination for the hazardous waste streams managed and/or stored in such containers. [See 40 CFR §§ 264.1082 and 264.1083.]

~~IV.G.7. For any hazardous waste that has been treated at the Facility, the Permittees shall perform the applicable waste determinations for each treated hazardous waste placed in tanks that are exempted under the provisions of 40 CFR § 264.1082(c)(2)(i) through (c)(2)(vi) in accordance with the procedures specified in 40 CFR § 264.1083(b). [See 40 CFR § 264.1083.]~~

~~IV.G.8. Certain hazardous wastes or volumes of hazardous wastes managed at the facility trigger air emission control requirements under either the RCRA air emission control provisions at 40 CFR Part 264, Subpart CC or the Clean Air Act air emission control provisions at 40 CFR Part 61, Subpart FF, or both. For wastes subject to the requirements of either RCRA Subpart CC or CAA Subpart FF or both that are not subject to one of the exemptions listed at 40 CFR § 264.1082(e), that are managed in tank systems at the Facility, in addition to the requirements in Permit Condition III.G.1, the Permittees shall:~~

~~IV.G.8.a.i. This Permit Condition IV.G.8.a.i. applies to any hazardous waste tank that meets all of the conditions specified in 40 CFR § 264.1084(b)(1)(i) through (iii), which is not equipped with a carbon canister meeting the requirements of 40 CFR § 61, Subpart FF. The Permittees must control air pollutant emissions from such tanks in accordance with the Tank Level 1 controls specified in 40 CFR § 264.1084(c) or the Tank Level 2 controls specified in 40 CFR § 264.1084(d). If Tank Level 1 or Tank Level 2 controls apply, the Permittees must perform inspections, recordkeeping and reporting required for tanks subject to Tank Level 1 or Tank Level 2 controls, as applicable. [See 40 CFR §§ 264.1084(b)(1), (c) and (d).]~~

~~IV.G.8.a.ii. This Permit Condition IV.G.8.a.ii. applies to any hazardous waste tank that does not meet all of the conditions specified in 40 CFR § 264.1084(b)(1)(i) through (iii), and which is not equipped with a carbon canister meeting the requirements of 40 CFR § 61, Subpart FF. The Permittees must control air pollutant emissions from such tanks in accordance with the Tank Level 2 controls specified in 40 CFR § 264.1084(d). If Tank Level 2 controls~~



~~apply, the Permittees must perform inspections, recordkeeping and reporting required for tanks subject to Tank Level 2 controls. [See 40 CFR §§ 264.1084(b)(2), and (d).]~~

~~**IV.G.8.a.iii.** This Permit Condition IV.G.8.a.iii. applies to any hazardous waste tank for which air pollution emissions are controlled by venting the tank to a control device, other than those tanks equipped with a carbon canister meeting the requirements of 40 CFR § 61, Subpart FF. The Permittees shall control air emissions from such tanks in accordance with the requirements set forth at 40 CFR § 264.1084(g)(1) through (g)(3). If the requirements of 40 CFR § 264.1084(g)(1) through (g)(3) apply, the Permittees must perform inspections, recordkeeping and reporting required for tanks subject to 40 CFR 264.1084(g). [See 40 CFR §§ 264.1084(g).]~~

~~**IV.G.8.a.iv.** This Permit Condition IV.G.8.a.iv. applies to the transfer of hazardous waste to any hazardous waste tank where the average volatile organic concentration is above the standard set forth at 40 CFR 264.1082(c)(1) (*i.e.*, 500 ppmw) other than to a tank equipped with a carbon canister meeting the requirements of 40 CFR § 61, Subpart FF. The Permittees shall transfer hazardous waste to any such tank in accordance with the requirements of 40 CFR § 264.1084(j). [See 40 CFR § 264.1084(j).]~~

~~**IV.G.8.b.** This Permit Condition IV.G.8.b. applies to any tank equipped with a carbon canister meeting the requirements of 40 CFR Part 61, Subpart FF. The Permittees shall operate and maintain a fixed roof and closed vent system that routes all organic vapors vented from the tank to the carbon canister either in compliance with the requirements of 40 CFR Subpart CC, or in accordance with the following requirements of 40 CFR Part 61, Subpart FF.:~~

~~**IV.G.8.b.i.** The fixed roof shall meet the requirements set forth at 40 CFR § 61.343(a)(1)(i).~~

~~**IV.G.8.b.ii.** The closed vent system and control device (*i.e.*, carbon canister) shall be designed and operated in accordance with the requirements of 40 CFR § 61.349. [See 40 CFR Part 61, Subpart FF.]~~

**IV.G.9.** The Permittees shall change-out the carbon in WS-1, WS-2 and WS-3, respectively, in accordance with the schedule set forth in the Permit Attachment Appendix XXIII, Section 4.5 and the engineering calculations in Appendix C thereto to ensure control of emissions from volatile organic compounds (VOCs)



into ambient air.

**IV.G.10.** The Permittees shall comply with the record keeping requirements of 40 CFR §§ 264.1064(m) and 264.1089(j) for any tank or equipment equipped with and operating air emission controls in accordance with CAA requirements set forth in 40 CFR Parts 60, 61, or 63, which are deemed in compliance with 40 CFR Part 264 Subpart BB or Subpart CC, as appropriate. [See 40 CFR §§ 264.1064(m) and 264.1089(j). See also Permit Condition I.K.10.]

#### **IV.H. INSPECTION SCHEDULES AND PROCEDURES**

**IV.H.1.** The Permittees shall inspect the tank systems, in accordance with the Inspection Schedule in Permit Attachment Section F and Permit Attachment Appendix XII. [See 40 CFR § 264.195, Permit Attachment Section F and Permit Attachment Appendix XII.]

~~**IV.H.2.** The Permittees shall visually inspect the spent carbon storage tank systems, (T-1, T-2, T-5, T-6 and T-18), daily at least once each operating day or as provided in 40 CFR 264.195(d). This inspection shall include, at a minimum:~~

~~**IV.H.2.a.** — A visual inspection of the above-ground portions of the tank systems to detect corrosion or releases of waste in accordance with 40 CFR § 264.195(e)(1);~~

~~**IV.H.2.b.** — A visual inspection of the construction materials and the area immediately surrounding the externally accessible portion of each tank system, including the secondary containment systems (e.g., dikes) to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation) in accordance with 40 CFR § 264.195(e)(2);~~

~~**IV.H.2.c.** — Ancillary equipment that is not provided with secondary containment, as described in 40 CFR § 264.193(f)(1) through (4), must be inspected at least once each operating day in accordance with 40 CFR § 264.195(f); and~~

~~**IV.H.2.d.** — For ancillary equipment not contained or located over secondary containment, a leak test or other integrity assessment as approved by EPA must be conducted annually in accordance with 40 CFR § 264.193(i). [See 40 CFR § 264.193(i).]~~

~~**IV.H.3.** The Permittees shall conduct daily inspections of the overfill/spill control equipment (e.g., waste feed cutoff systems, bypass systems, and drainage~~

~~systems) to ensure that this equipment is in good working order. [See 40 CFR § 264.195.]~~

~~**IV.H.3.a.** — The Permittees shall conduct daily visual inspections of the tank walls and pad for wetness, cracks, holes, or other evidence of malfunction. [See Permit Attachment Section F.]~~

~~**IV.H.3.b.** — The Permittees shall, on a daily basis, check for leaks around the valve areas, couplings, and threaded nipples, as applicable. [See Permit Attachment Section F.]~~

~~**IV.H.3.c.** — The Permittees shall, on a daily basis, check tank markings for weathering and proper identification of tank contents. [See Permit Attachment Section F.]~~

~~**IV.H.3.d.** — The Permittees shall, on a daily basis, check external tank walls for signs of corrosion and pitting. [See Permit Attachment Section F.]~~

~~**IV.H.4.** At least once each operating day, the Permittees shall conduct reviews of the data gathered from monitoring and leak detection equipment (e.g., pressure or temperature gauges, monitoring wells) to ensure that the tank systems are being operated according to their designs. [See 40 CFR § 264.195(b).]~~

~~**IV.H.5.** The Permittees shall visually inspect daily the valve position and level monitoring systems for proper operation. [See Permit Attachment Section F.]~~

~~**IV.H.6.** The Permittees shall perform inspections of each hazardous waste tank to ensure that no cracks or gaps occur and that access doors and other openings are closed and gasketed properly. [See 40 CFR § 264.1084.]~~

#### **IV.H.7. Ultrasonic Thickness Testing**

**IV.H.7.a.** The Permittees shall conduct annual ultrasonic thickness testing at the bottom of the cylinder wall above the cone-cylinder intersection and at the previous locations of minimum shell thickness readings (as recommended in the tank assessment in the Permit Attachment Appendix IX) for each major component (top head, cylinder wall, bottom cone and support skirt) on each of tanks T-1, T-2, T-5, T-6 and T-18. If any of these tanks is replaced with a new tank in the future, this condition will not apply to the new tank. [See Permit Attachment Section F and Permit Attachment Appendix IX.]



**IV.H.7.b.** In addition, the Permittees shall conduct comprehensive ultrasonic thickness testing every five (5) years for each major component (top head, cylinder wall, bottom cone, and support skirt) on each of ~~the and~~ tanks T1, T-2, T-5, T-6 and T-18 as recommended in the tank assessment in the Permit Attachment Appendix IX. [See Permit Attachment Section F and Permit Attachment Appendix IX.]

**IV.H.7.c.** The Permittees shall remove from service and repair or replace any tank with cylindrical wall thickness that is less than or equal to 0.157 inches. [See Permit Attachment Section F and Permit Attachment Appendix IX.]

~~**IV.H.7.d.** The Permittees shall replace all carbon steel components and fittings of any hazardous waste tank system that are in direct contact with spent carbon and recycle water slurry with 300 series stainless steel components and fittings prior to performing the next set of comprehensive ultrasonic thickness test measurements. [See Permit Attachment Section F and Permit Attachment Appendix IX.]~~

~~**IV.H.8.** The Permittees shall inspect the air emission control equipment in accordance with the following requirements and Permit Attachment Section F and Permit Attachment Appendix XII. The Permittees shall visually inspect the carbon adsorption systems (WS-1, WS-2, and WS-3) and their closed vent systems on a daily basis at least once each operating day to ensure there are no leaks from these devices and that they are properly operated. The visual inspection shall include inspection of ductwork and piping and connections to covers and control devices for evidence of visible defects such as holes in ductwork or piping and loose connections. [See Permit Attachment Section F and Permit Attachment Appendix XII.]~~

**IV.H.9.** The Permittees shall maintain the paint coating on exterior surfaces of all tank system components that are carbon steel by repainting if visual observation indicates that 20% or greater of the component's paint coating is damaged. [See Permit Attachment Section F and Permit Attachment Appendix IX.]

~~**IV.H.10.** If a tank system or component is found to be leaking or unfit for use as a result of the leak test or assessment, the Permittees shall comply with Permit Condition IV.C. of this Permit and notify the Director in accordance with Permit Condition IV.J. of this Permit. [See 40 CFR § 264.193(i)(5).]~~

#### IV.I. RESPONSE TO LEAKS, SPILLS OR DEFECTS

**IV.I.1.** In the event of: (1) a leak or a spill from a tank system, (2) a leak or spill from a secondary containment system, (3) a system becomes unfit for continued use due to defects or a state of disrepair, ~~or (4) a defect in a carbon adsorber is detected,~~ the Permittees shall remove the system from service immediately and complete the following actions:

**IV.I.1.a.** Immediately stop the flow of hazardous waste into the system and inspect the system to determine the cause of the release. [See 40 CFR § 264.196(a).]

**IV.I.1.b.** ~~Remove~~ if the release was from the tank system, Remove waste and accumulated precipitation from the system within 24 hours of the detection of the leak, or if that is not possible, at the earliest practicable time, remove as much of the waste as is necessary to prevent further release of hazardous waste to the environment and to allow inspection and repair of the tank system to be performed. [See 40 CFR § 264.196(b).]

**IV.I.1.b.i.** ~~If the Permittees find that it will be impossible to meet this time period, the Permittees shall, at the earliest practicable time, remove as much of the waste as is necessary to prevent further release of hazardous waste to the environment and to allow inspection and repair of the system to be performed and in as timely a manner as is possible to prevent harm to human health or the environment. In such event, the Permittees shall also provide prompt notification (i.e., within 24 hours of detection of the leak) to the Director regarding any additional time that may be required to complete removal of waste and accumulated precipitation from the system. The Director may approve the additional time required or set another time frame to complete removal of the leaked material in their sole discretion.~~

**IV.I.1.b.ii.** If the collected material is a RCRA hazardous waste, it must be managed in accordance with all applicable requirements of this Permit. The Permittees shall note that if the collected material is discharged through a point source to U.S. waters or to a Publicly Owned Treatment Works (POTW), such discharge is subject to requirements of the Clean Water Act. If the collected material is released to the environment, it may be subject to additional reporting requirements pursuant to 40 CFR Part 302.

**IV.I.1.c.** Contain visible releases to the environment. The Permittees shall immediately



conduct a visual inspection of all releases to the environment and based on that inspection:

- IV.I.1.c.i. Prevent further migration of the leak or spill to soils or surface water; and
- IV.I.1.c.ii. Remove and properly dispose of any visible contamination of the soil or surface water. [See 40 CFR § 264.196(c).]

~~IV.I.1.d. Close the system~~ Following a leak or spill from a tank system, unless Permittee satisfies the following applicable requirement of this subsection, the tank ~~Close the system must be closed~~ in accordance with the Closure Plan, Permit Attachment I, ~~unless the following actions are taken:~~

IV.I.1.d.i. For a release caused by a spill that has not damaged the integrity of the system, the Permittees may return the system to service as soon as ~~shall remove~~ the released waste is removed and ~~make any necessary repairs, if necessary, are made to the system before returning the system to service.~~ [See 40 CFR § 264.196(e)(2).]

IV.I.1.d.ii. For a release caused by a leak from a ~~tank system to a secondary~~ primary tank system into a secondary containment system, the Permittees shall repair the tank system prior to returning it to service. [See 40 CFR § 264.196(e)(3).]  
~~containment system, the Permittees shall repair the tank system prior to returning it to service. [See 40 CFR § 264.196(e)(3).]~~

IV.I.1.d.iii. ~~For~~ If the source of a release was a leak to the environment ~~caused by a leak~~ from a component of a tank system that does not have secondary containment, the Permittees shall repair the tank system in accordance with 40 CFR § 264.196(e)(4) before returning it to service. [See 40 CFR § 264.196(e)(4).]

~~IV.I.1.d.iv. For a defect or other problem detected during equipment inspections, repairs must be performed within the time frames outlined in Table 1 of the Permit Attachment Appendix XXIII, Subpart FF Compliance Plan.~~

IV.I.1.e. ~~For all major repairs~~ For all major repairs conducted pursuant to 40 CFR 264.196(e), where the repairs have been extensive (e.g., installation of an internal liner, or repair of a ruptured primary tank or secondary containment

~~vault) to eliminate leaks or restore the integrity of the tank systems, the Permittees must obtain a certification by an independent, qualified, registered Professional Engineer in accordance with 40 CFR § 270.11(d) and notify the Director that the repaired system is capable of handling hazardous wastes without release for the intended life of the system, before returning the system to service. Examples of major repairs are: installation of an internal liner, repair of a ruptured tank, or repair of~~



~~replacement of a secondary containment vault.~~ [See 40 CFR § 264.196(f).]

**IV.I.2.** In the event a defect in the air emission control equipment associated with a fixed roof tank that is subject to 40 CFR 264.1084 is detected during any of the inspections required under

Permit Condition IV.H.8., the Permittees shall repair each defect detected in accordance with 40 CFR §§ 264.1084(k)(1) and (2). [See 40 CFR §§ 264.1084(k)(1) and (2).]

#### IV.J. RECORDKEEPING AND REPORTING

~~**IV.J.1.** For any existing tank system that does not have secondary containment meeting the requirements of 40 CFR § 264.193, the Permittees must maintain and keep on file at the Facility a written assessment in accordance with 40 CFR § 264.191. [See 40 CFR § 264.191.]~~

**IV.J.2.** Unless a leak or spill of hazardous waste is exempted from the reporting requirements in accordance with 40 CFR § 264.196(d)(2), the Permittees shall report to the Director, within 24 hours of detection, regarding any leak or spill of hazardous waste ~~to the environment from a tank system to the environment.~~ If the release has been reported pursuant to 40 CFR Part 302, that report will satisfy this requirement. [See 40 CFR §§ 264.196(d)(1) and (2).]

**IV.J.3.** Within 30 days of detecting a release to the environment from a tank system ~~or~~ secondary containment system, the Permittees shall report the following information to the Director:

- IV.J.3.a.** Likely route of migration of the release;
- IV.J.3.b.** Characteristics of the surrounding soil (including soil composition, geology, hydrogeology, and climate);
- IV.J.3.c.** Results of any monitoring or sampling conducted in connection with the release, if available. (If sampling or monitoring data relating to the release are not available within 30 days, these data must be submitted to the Director as soon as they become available.);
- IV.J.3.d.** Proximity of down gradient drinking water, surface water, and populated areas; and
- IV.J.3.e.** Description of response actions taken or planned. [See 40 CFR § 264.196(d)(3).]

- IV.J.4.** If the Permittees have repaired a tank system in accordance with permit condition IV.I.1.e., the Permittees shall maintain the required Professional Engineer certification in the operating record at the Facility until closure of the Facility is completed. [See 40 CFR § 264.196(f).]
- IV.J.5.** The Permittees shall maintain at the Facility a record of the most recent results of leak tests and integrity tests for each tank system or secondary containment system conducted in accordance with this Permit. [See 40 CFR §§ 264.193(i)(4).]
- IV.J.6.** The Permittees shall document compliance with Permit Conditions IV.H.1. through IV.H.6 and IV.H.8. and place this documentation in the operating record for the Facility for at least three (3) years from the date such inspection or test occurs. The Permittees shall maintain records of the Ultrasonic Thickness testing for at least 5 years from the date such testing occurs. [See 40 CFR §§ 264.73 and 264.195(h).]
- IV.J.7.** The Permittees shall maintain a copy of the Permit Attachment Subpart FF Compliance Plan in the Facility's operating record for the operating life of the facility.
- IV.J.8.** In accordance with 40 CFR § 264.1064, the Permittees shall maintain documentation pertaining to WS-1, WS-2 and WS-3 as required by either 40 CFR § 61.355 or 40 CFR §§ 264.1060 and 264.1064, as elected in the [revised] Subpart BB Compliance Plan, Permit Attachment Appendix XIX, pursuant to Permit Condition I.K.10. [See 40 CFR § 61.355 and 40 CFR §§ 264.1060 and 264.1064. See also Permit Condition I.K.10.]

**IV.K. SPECIAL TANK PROVISIONS FOR IGNITABLE ~~OR REACTIVE~~ WASTES**

- IV.K.1.** The Permittees shall not place ignitable waste in a tank ~~or secondary containment~~ system unless one of the following conditions is met:
- IV.K.1.i.** The waste is treated, rendered, or mixed before or immediately after placement in the tank system so that it meets the requirements of 40 CFR § 264.198(a)(1)(i) and (ii);
- IV.K.1.ii.** The waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to ignite; or



**IV.K.1.iii.** The tank system is used solely for emergencies. [See 40 CFR § 264.198(a). See also Permit Condition II.H.1.]

**IV.K.2.** If ignitable waste is stored or treated in a tank system at the Facility, the Permittees must comply with the requirements for the maintenance of protective distances between the waste management area and any public ways, streets, alleys, or an adjoining property line that can be built upon, as required in Tables 2-1 through 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code," (1977 or 1981). [See 40 CFR § 264.198(b). See also Permit Condition II.H.1.]

#### IV.L. SPECIAL TANK PROVISIONS FOR INCOMPATIBLE WASTES

**IV.L.1.** The Permittees shall not place incompatible wastes, or incompatible wastes and materials, in the same tank system ~~or the same secondary containment system~~, unless they are doing so in compliance with 40 CFR § 264.17(b) and Permit Condition II.H.1. [See 40 CFR §§ 264.17(b) and 264.199(a).]

**IV.L.2.** The Permittees shall not place hazardous waste in a tank system that has not been decontaminated and that previously held an incompatible waste or material, unless they are doing so in compliance with 40 CFR § 264.17(b) and Permit Condition II.H.1. [See 40 CFR §§ 264.17(b) and 264.199(b).]

#### IV.M. CLOSURE AND POST-CLOSURE CARE

**IV.M.1.** At closure of each tank system, the Permittees shall follow the procedures in the Closure Plan and in Permit Attachment Section I and Permit Attachment Appendix XV. [See 40 CFR § 264.197(a). See also Permit Attachment Section I and Permit Attachment Appendix XV.]

**IV.M.2.** If the Permittees demonstrates that not all contaminated soils can be ~~practically~~practicably removed or decontaminated in accordance with the Closure Plan, then the Permittees shall close such tank system(s) and perform post-closure care following the contingent procedures in the Closure Plan (Permit Attachment Section I and Permit Attachment Appendix XV) and in Permit Condition II.N. [See 40 CFR § 264.197(b). See also Permit Attachment Section I and Permit Attachment Appendix XV.]

~~**IV.M.3.** If the secondary containment for Hopper H-1 is not implemented within a year~~

DRAFT RCRA PERMIT  
Evoqua Water Technologies,  
LLC Colorado River Indian  
Tribes EPA ID # AZD982441263  
MODULE IV, Page 21  
September 2016

~~from the effective date of this Permit, the contingent closure plan and proof of financial responsibility requirements of 40 CFR § 264.197(e) shall be implemented in accordance with Permit Condition I.K.9. [See also Permit Condition IV.F.6.b.iii. and 40 CFR § 264.197(e).]~~



## MODULE V

### THERMAL TREATMENT UNIT/CARBON REGENERATION FURNACE

#### V.A. APPLICABILITY

- V.A.1.** This module contains Permit Conditions for the operating Carbon Regeneration Furnace (RF-2), which consists of a five hearth furnace and the Afterburner (AB-2), and is classified as a miscellaneous unit, as defined in 40 CFR § 260.10. RF-2 and AB-2 are subject to the requirements set forth at 40 CFR Part 264, Subpart X. The RF-2 unit is used to regenerate spent activated carbon via thermal treatment. Process flow diagrams and a description of the carbon reactivation process are included in Permit Attachment Appendix VI. [See 40 CFR §§ 260.10, 264.600 to 264.603, and 270.23.]
- V.A.2.** This module also includes permit conditions for the Air Pollution Control Equipment (APCE) for RF-2, AB-2, ancillary equipment of RF-2 and AB-2, and the feed system from Tank T-18. The APCEs are the Quench (Gas Cooling)/Venturi Scrubber (SC-11), Caustic Packed Bed Scrubber (SC-12), Wet Electrostatic Precipitator (W-11), Induced Draft Fan, and Stack. The five hearth furnace (RF-2), AB-2, and all their associated components (ancillary equipment [e.g., piping, weigh belt] and the APCEs) are collectively referred to herein as the “RF-2.” [See 40 CFR §§ 264.600 to 264.603, and 270.23.]
- V.A.3.** RF-2 is subject to the conditions and requirements set forth in this Module. Based on the authority contained in the regulations at 40 CFR §§ 264.600 *et seq.*, additional requirements are included in this Module to ensure protection of human health and the environment. ~~These additional requirements are also based on 40 CFR Part 264 Subpart O, (Incinerators) and 40 CFR Part 63, Subpart EEE (Hazardous Waste Combustor, Maximum Achievable Control Technology Standards).~~ [See 40 CFR §§ 63.1200 *et seq.*, 260.10, 264.600 to 264.603, and 270.23.]

#### V.B. GENERAL REQUIREMENTS FOR RF-2

##### V.B.1. Waste Processing and Handling Requirements

**V.B.1.i.** The Permittees receives ~~hazardous wastes, i.e.,~~ spent activated carbon from different off-site generators, for treatment in RF-2. Some of this spent carbon constitutes a hazardous waste and other spent carbon does not constitute a hazardous waste. The Permittees also generates spent activated carbon onsite, some of which ~~that~~ constitutes a hazardous waste. The Permittees shall abide by the requirements established in Permit Condition V.B.2. for all hazardous wastes permitted for treatment in RF-2.

~~V.B.1.ii. The Permittees shall ensure that carbon loading operations are safe for field workers engaged in these operations.~~

**V.B.1.iii.** The Permittees shall ensure that the residence time for the solid carbon in the RF-2 is a minimum of 38 minutes (on the basis of ~~at~~ a shaft speed of 1 rotation ~~per minute~~ for approximately every 54 seconds) ~~(rpm).~~

#### **V.B.2. Permitted Wastes for Treatment in RF-2**

**V.B.2.i.** The Permittees shall not only treat in RF-2 any spent carbon ~~generated off-site containing that bears a~~ hazardous waste identified in waste codes that are is not listed on Table II-2 in Module II of this permit.

**V.B.2.ii.** The Permittees may ~~also~~ treat in RF-2 (i) any spent activated carbon that is not classified as a hazardous waste under 40 CFR Part 261; (ii) any spent activated carbon that constitutes a hazardous waste and bears any hazardous waste codes identified on Table II-2 in Module II of this permit; and (iii) any spent activated carbon generated on-site as a result of the Permittees' hazardous waste storage or treatment activities (such as, for example, carbon from the absorbers used to control emissions from ~~The sources of on-site generated spent activated carbon shall be limited to the adsorbers that are used for control of gaseous emissions from the hazardous waste storage tanks (Tanks T-1, T-2, T-5, and T-6 and T-18, and H-1 and H-2).~~ ]. [See Permit Attachment Appendix IV.]

#### **V.B.3. Prohibited Wastes for Treatment in RF-2**

~~V.B.3. The Permittees shall not accept, store or treat in RF-2 any hazardous waste other than as set forth in Permit Condition II.H.~~

### **V.C. OPERATION OF RF-2**

#### **V.C.1. General Operating Conditions**



V.C.1.i. The Permittees shall only feed hazardous wastes to RF-2 at or below the feed rates-limits shown in Table V-1. The Permittees are not authorized to ~~treat or feed hazardous waste into the RF-2 spent activated carbon that contains hazardous constituents in concentrations in excess of the~~ exceeding permissible feed rate limits. ~~The applicable permissible feed limits are~~ set forth in Permit Condition Table V-1. Periodic Performance Demonstration Tests, performed in accordance with Permit Condition I.K.1., shall also be used to demonstrate compliance with each of the parameters set forth in Table V-1, Performance Limits.

V.C.1.ii. The Permittees are not authorized to treat or feed hazardous waste spent activated carbon that contains hazardous constituents in concentrations that would cause exceedances of ~~permissible~~ emission limits shown in Table V-1; provided however, that the emission standards and operating requirements set forth in this Module V shall not apply during periods of startup, shutdown and malfunction, and when hazardous waste is not in the reactivation furnace (RF-2). ~~In addition, for each of the parameters listed in Table V-1, the Permittees shall ensure that the permissible emission limit shown in Table V-1 is not exceeded.~~ [See 40 CFR § 63.1206(b) and 63.1209.]

Table V-1 - PERFORMANCE LIMITS

Parameter	Emission Limits <del>from</del> <b>40 CFR § 63.1219</b>	How to Ensure Emission Limits are Met <sup>1</sup>
Low Volatile Metals <sup>2</sup>	<del>Emission Limits</del> <b>92 µg<sup>3</sup>/dsem<sup>4</sup></b>	Feed Rate Limit: 1.5 lbs/hr <sup>5</sup> (12 hour rolling average)
Semi Volatile Metals <sup>6</sup>	<del>Emission Limit:</del> <b>230 µg/dsem</b>	Feed Rate Limit: 0.1 lbs/hr (12 hour rolling average)
Carbon Monoxide	Emission Limit: 100 ppm <sub>v</sub> <sup>7</sup> as corrected to 7% oxygen.	CEMS <sup>8</sup> at the stack.

<sup>1</sup> The Permittees must comply with 40 CFR § 63.1209 for monitoring for all Emission Limits below. See Permit Condition V.C.1.IX.

<sup>2</sup> Low volatile metal feed rate limits apply to arsenic, beryllium, and chromium, combined.

<sup>3</sup> µg – micrograms.

~~dsem – dry standard cubic meter.~~

<sup>5</sup> lbs/hr – pounds per hour.

<sup>6</sup> Semi-volatile metal feed rate limits apply to lead and cadmium, combined.

<sup>7</sup> ppm<sub>v</sub> - parts per million on a dry volumetric basis.

\* CEMS – Continuous Emissions Monitoring System.



Parameter	Emission Limits from 40 CFR § 63.1219	How to Ensure Emission Limits are Met <sup>9</sup>
Total Hydrocarbons	<del>Emission Limit: 10 ppm<sub>dv</sub> as corrected to 7% oxygen.</del>	Performance Demonstration Tests (PDT). <sup>9</sup>
Chlorine/ Chloride	<del>Emission Limits: 32 ppm<sub>dv</sub></del>	Feed Rate Limit: 60 lbs/hr (12 hour rolling average).
Mercury <sup>10</sup>	<del>Emission Limit: 130 µg/dsem</del>	Feed Rate Limit: 1.8E-3 lbs/hr (12 hour rolling average).
Particulate Matter	<del>Emission Limits: 0.013 gr/dscf<sup>11</sup> corrected to 7 percent oxygen.</del>	PDT
<del>Dioxins and Furans</del>	<del>Emission Limit: 0.40 ng TEQ<sup>12</sup>/dsem, corrected to 7 percent oxygen.</del>	<del>PDT</del>
Sulfur Oxides	Emission Limit: 30.01 tpy	Feed Rate Limited - as <u>necessary to ensure emissions do not exceed the annual limit set forth in</u>
Nitrogen Oxides	Emission Limit: 22.22 tpy	Monitoring of the Natural Gas usage and PDT.

<sup>9</sup> The rate of emissions below the applicable emission limit will be demonstrated during the PDTs.

<sup>10</sup> The mercury feed rate to be calculated per 40 CFR § 264.1209(l)(1)(i)

<sup>11</sup> gr/dscf – grains per dry standard cubic foot

<sup>12</sup> TEQ – Toxic Equivalency, which means the international method of expressing toxicity equivalents for dioxins and furans as defined in U.S. EPA, Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-dioxins and dibenzofurans (CDDs and CDFs) and 1989 Update, March 1989.

<sup>13</sup> This limit will not be in effect until the WAP has been modified in accordance with Permit Condition I.K.11.

- V.C.1.iii.** Throughout operation, the Permittees shall conduct analysis in accordance with the Waste Analysis Plan, Permit Attachment C and Permit Attachment Appendix IV and Permit Condition II.C. to verify that hazardous waste fed to RF-2 is within the physical and chemical composition limits specified in this Permit. [See 40 CFR §§ 264.341(b) and 270.23.]
- V.C.1.iv.** The Permittees ~~are~~ required to inspect, ~~safely~~-operate, and ~~properly~~ monitor RF-2 in accordance with the conditions of this Permit to protect human health and the environment during operation, maintenance, start-up, shut-down and malfunction of RF-2.
- V.C.1.v.** The Permittees shall maintain RF-2 in accordance with the design plans, design specifications, stack layout drawing, and maintenance procedures contained in Permit Attachment B, Permit Attachment Appendices VI and X.
- V.C.1.vi.** The operating parameters are grouped into the following categories: Groups A1, A2, B and C; and are categorized as defined in EPA guidance document: Handbook: Guidance on Setting Permit Conditions and Reporting Trial Burn Results, (EPA/625/6-89/019), Table 2-1.
- V.C.1.vi.a.** Group A1 parameters shall be continuously monitored and recorded using existing field instruments, and shall be interlocked with the automatic waste feed cutoff system. Group A1 parameter limits were established from test operating data, and are used to ensure that system operating conditions are equal to or are more rigorous than those demonstrated during the test.
- V.C.1.vi.b.** Group A2 parameters shall be continuously monitored and recorded using existing field instruments, and shall be interlocked with the automatic waste feed cutoff system. Group A2 parameter limits have been established based on regulatory requirements rather than on the test operating conditions, e.g., the maximum stack CO concentration.
- V.C.1.vi.c.** Group B parameters shall be continuously monitored and recorded; using procedures established in the Waste Analysis Plan (except for allowable hazardous constituents, which shall be based on the latest stack test



results), but are not required to be interlocked with the

automatic waste feed cutoff system. Operating records are required to ensure that established limits for these parameters are not exceeded. The Group B parameter limits were established based on the operation of the system during the performance test.

**V.C.1.vi.d.** Group C parameters shall be continuously monitored and recorded using existing field instruments, but are not required to be interlocked with the automatic waste feed cutoff system. Group C parameter limits are based on manufacturer’s recommendations, operational safety, and good operating practice considerations rather than on the test operating conditions, e.g., the minimum packed bed scrubber pressure differential.

**V.C.1.vii.** The following Table V-2 includes critical operating conditions. The term “AWFCO” in the comments column indicates that the operating parameter shall be interlocked with the automatic waste feed cutoff system. The Permittees shall comply with the Operating Limits in Table V-2.

**Table V-2 - OPERATING LIMITS AND PARAMETERS**

<b>Control Parameters<sup>14</sup></b>	<b>Permit Limit</b>	<b>Comments</b>
<b>GROUP A1 PARAMETERS</b>		
Maximum spent carbon feed rate (lbs/hr)	3049	Block hour AWFCO
Minimum afterburner temperature (°F)	1760	Hourly rolling average AWFCO
Minimum hearth #5 temperature (°F)	1350	Hourly rolling average AWFCO
Minimum venturi scrubber pressure differential (in. w.c.)	18	Hourly rolling average AWFCO
Minimum quench/venturi scrubber total liquid flow rate (gpm)	75	Hourly rolling average AWFCO
Minimum packed bed scrubber pH	4.4	Hourly rolling average AWFCO

<sup>14</sup> Groups A1, A2, B, and C Parameters are explained in detail in Permit Condition V.C.1.vi.



<b>Control Parameters<sup>14</sup></b>	<b>Permit Limit</b>	<b>Comments</b>
Minimum packed bed scrubber liquid flow rate (gpm)	63	Hourly rolling average AWFCO
Minimum wet scrubber blowdown flow rate (gpm)	58	Hourly rolling average AWFCO
Minimum WESP secondary voltage (kVDC)	22	Hourly rolling average AWFCO
Maximum stack gas flow rate (acfm)	9,550	Hourly rolling average AWFCO
<b>GROUP A2 PARAMETERS</b>		
Maximum stack gas carbon monoxide (ppmdv, @7% oxygen) <sup>15</sup>	100	Hourly rolling average AWFCO
<b>GROUP B PARAMETERS</b>		
Allowable hazardous constituents	All except dioxin wastes and TSCA PCBs	Class 1 POHC demonstrated to meet the 99.99% Destruction Removal Efficiency per Permit Attachment Appendix V
Maximum total chlorine and chloride feed rate (lbs/hr)	60	12-hour rolling average
Maximum mercury feed rate (lbs/hr)	1.8E-3 <sup>16</sup>	12-hour rolling average
Maximum semivolatile metal (Cd + Pb) feed rate (lbs/hr)	1.0E-01	12-hour rolling average
Maximum low volatility metal (As + Be + Cr) feed rate (lbs/hr)	1.5E+00	12-hour rolling average
<b>GROUP C PARAMETERS</b>		
Minimum packed bed scrubber pressure differential (in. w.c.)	0.1	Hourly rolling average

As = Arsenic  
 AWFCO = Automatic Waste Feed Cutoff  
 Be = Beryllium  
 Cd = Cadmium

<sup>15</sup> AWFCO interlock is not active during the daily continuous emission monitor CEM calibration period.

<sup>16</sup> 1.8E-3 = 1.8 x 10<sup>-3</sup>.

Cr = Chromium  
lbs/hr = pounds per hour  
WESP = Wet electrostatic precipitator  
Pb = Lead  
POHC = Principal organic hazardous constituent  
TSCA = Toxic Substances Control Act  
PCBs = Polychlorinated Biphenyls  
in. w.c. = inches of water column  
kVDC = kilovolts Direct Current  
gpm = gallons per minute  
acfm = actual cubic feet per minute  
ppmdv = parts per million on a dry volumetric basis in the stack gas  
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**V.C.1.viii.** Waste shall not be fed to the RF-2 if any of the continuous monitoring instruments malfunction or otherwise fail to operate properly.

~~V.C.1.ix. All monitoring must be conducted in accordance with the requirements of 40 CFR § 63.1209 applicable to incinerators. [See 40 CFR § 63.1209.]~~

~~V.C.1.x. Failure to comply with the operating requirements in this Permit is failure to ensure compliance with the emission standards included in this Permit. [See 40 CFR § 63.1206(e)(1)(iii).]~~

**V.C.2. Start Up, Shutdown, and Malfunction Plan**

**V.C.2.a.** The Permittees shall implement the Start-up, Shutdown, and Malfunction Plan (SSMP) to minimize emissions of toxic compounds from startup, shutdown, and malfunction events. The Permittees' SSMP is found in the Application in Appendix XXII and is incorporated into this Permit by this reference as Permit Attachment Appendix XXII.

**V.C.2.b.** The Permittees shall follow the requirements of the SSMP, whenever RF-2 is in a start-up, shutdown or malfunction event which results in a condition that would otherwise violate a condition non-compliance with the provisions of this Permit.

**V.C.2.c.** The Permittees shall submit to the Director a request for a Permit Modification in accordance with Permit Condition I.G.7., with an accompanying revised SSMP whenever they determine that one or more changes to the SSMP are appropriate.



**V.C.2.d.** The Permittees must maintain a copy of the SSMP in the operating record at the Facility for the operating life of RF-2.

**V.C.3. Monitoring Equipment**

The Permittees shall maintain, calibrate, and operate monitoring equipment and record the data required by this Permit while processing hazardous waste.

**V.C.4. Regulatory Compliance Instrumentation**

**V.C.4.i.** The Permittees shall operate RF-2 and calibrate the RF-2-related instrumentation listed in Table V-3 pursuant to the parameters – including the frequencies -- set forth in Table V-3. Quality assurance and quality control shall be done in accordance with 40 CFR Part 60 QA/QC requirements.

**TABLE V-3 - REGULATORY COMPLIANCE INSTRUMENTATION**

<i>Parameter</i>	<i>Identification Number of Sensor/ Transmitter<sup>17</sup></i>	<i>Instru- ment Type</i>	<i>Units</i>	<i>Range</i>	<i>Operating Point or Range</i>	<i>Calibration Frequency</i>	<i>Averaging</i>	<i>AWFCO (Y/N)</i>
Feed rate of spent activated carbon	WE/WT-427	Weigh <del>cell</del> belt	lbs/hr	0-6000	Less than or equal to 3049	Semi-annually	1-hr Block	Y
Total feed rate of mercury	Computer	Calcu- lated	lbs/hr	NA	0 – Less than or equal to 1.8E-03	NA	12-hr RA	N
Total feed rate of SVM	Computer	Calcu- lated	lbs/hr	NA	Less than or equal to 0 – 1.0	NA	12-hr RA	N

<sup>17</sup> Instrument identification from P&IDs.

<i>Parameter</i>	<i>Identification Number of Sensor/ Transmitter<sup>17</sup></i>	<i>Instrument Type</i>	<i>Units</i>	<i>Range</i>	<i>Operating Point or Range</i>	<i>Calibration Frequency</i>	<i>Averaging</i>	<i>AWFCO (Y/N)</i>
Total feed rate of LVM	Computer	Calculated	lbs/hr	NA	Less than or equal to 0 – Less than or equal to 1.5	NA	12-hr RA	N
Afterburner gas temperature	TE-464A/B	Thermocouple	°F	0-2400	Greater than or equal to 1760	Semi-annually	1-hr RA	Y
Venturi scrubber pressure differential	PDIT-556	Pressure sensor	in. w.c.	0-50	Greater than or equal to 18	Annually	1-hr RA	Y
Venturi / Quench scrubber recycle liquid flow rate (Total Flow)	FI-562 (Total of FE/FIT-553, 554, & 555)	Sum of Magnetic flow meters (Dynac Function)	gpm	0-656	Greater than or equal to 75	Annually	1-hr RA	Y
Packed bed scrubber pH	AE/AIT-590	pH probe	pH	0-14	Greater than or equal to 4.4	Quarterly	1-hr RA	Y
Packed bed scrubber recycle liquid flow	FE/FIT-552	Magnetic flow meter	gpm	0-200	Greater than 63	Annually	1-hr RA	Y



<i>Parameter</i>	<i>Identification Number of Sensor/ Transmitter<sup>17</sup></i>	<i>Instru-ment Type</i>	<i>Units</i>	<i>Range</i>	<i>Operating Point or Range</i>	<i>Calibration Frequency</i>	<i>Averaging</i>	<i>AWFCO (Y/N)</i>
Packed bed scrubber pressure differential	PDIT-560	Pressure sensors	in. w.c.	0-10	Greater than 0.1	Annually	1-hr RA	N
Scrubber blowdown flow rate	FE/FIT-605	Magnetic flow meter	gpm	0-691	Greater than 58	Annually	1-hr RA	Y
WESP secondary DC	EI-558	Voltmeter	kV DC	0-80	14-22	NA	1-hr RA	Y
Stack gas flow rate	FE/FIT-700	Ultrasonic meter	acfm	Not available	Less than or equal to 9,550	Semi-annually	1-hr RA	Y
Stack gas carbon monoxide <sup>18</sup>	AE-575	Non-dispersive infrared CEMS	ppmdv @7% O <sub>2</sub>	0-100 0-1000	Less than 100	Daily/ Quarterly/ Annually	1-hr RA	Y
Stack gas oxygen <sup>19</sup>	AE-576	Para-magnetic CEMS	vol%, dry	0-25	7	Daily/ Quarterly/ Annually	None	N
<b>Weigh belt</b>						<b>Calibrated Semi-Annually</b>		

RA = Rolling average as defined in 40 CFR § 63.1209(a)(6).  
 AWFCO = Automatic Waste Feed Cut Off.

<sup>18</sup> Continuous Emissions Monitoring System (CEMS) calibrations shall include daily zero and span check, quarterly cylinder gas audit, and annual performance specification test.

<sup>19</sup> Continuous Emissions Monitoring System (CEMS) calibrations shall include daily zero and span check, quarterly cylinder gas audit, and annual performance specification test.

SVM = Semi-Volatile Metals

LVM = Low-Volatile Metals

in. w.c. = inches of water column

kVDC = kilovolts Direct Current

gpm = gallons per minute

acfm = actual cubic feet per minute

ppmdv @ 7% O<sub>2</sub> = parts per million on a dry volumetric basis in the stack gas as corrected to 7% oxygen

~~V.C.4.ii. The Permittees must keep the necessary parts for routine repairs of the continuous monitoring system (CMS) equipment, including the CEMS equipment, readily available.~~

~~V.C.4.iii. The Permittees shall conduct daily calibrations of its oxygen and carbon monoxide CMS for every day the Facility treats hazardous waste in RF-2. the CMS performance and test protocols, including all record keeping and reporting, set forth in 40 CFR § 63.8.~~

#### V.C.5. Automated Waste Feed Cutoff Requirements

~~V.C.5.i. The Permittees shall operate RF-2 with an functioning automatic waste feed cutoff system (AWFCO) that immediately and automatically cuts off the hazardous waste feed to RF-2 in accordance with 40 CFR § 63.1206(e)(3). Section V.C.1 and V.C.5 of this Permit [See 40 CFR § 63.1206(e)(3).]~~

~~V.C.5.ii. The Permittees shall set the automatically waste feed cut off system to stop the hazardous waste feed to RF-2 if any of the following ~~occurs~~ occurs:~~

~~V.C.5.ii.a. Operating limits for Groups A1 and A2 parameters listed in Table V-2 or the emission limits for Carbon Monoxide listed in Table V-4 are not met/exceeded.~~

~~V.C.5.ii.b. When the span value of any CMS detector, except a CEMS, is met or exceeded; [See 40 CFR § 63.1206(e)(3)(i)(B).]~~

~~[Note: Parameter CMSs are process instruments that continuously monitor and record parameter data from the operation of the carbon reactivation process. The instruments consist of weigh belts, flow meters, pressure transducers, thermocouples and other devices that collect process information on key regulatory parameters.]~~

~~V.C.5.ii.c. Upon malfunction of a CMS; [See 40 CFR § 63.1206(e)(3)(i)(C).] or~~



~~V.C.5.ii.d. When any component of the AWFCO system fails. [See 40 CFR § 63.1206(e)(3)(i)(D).]~~

V.C.5.iii. During an AWFCO, the Permittees must continue to duct combustion gases to the air pollution control equipment while hazardous waste remains in RF-2 (*i.e.*, if the hazardous waste residence time has not transpired since the hazardous waste feed cutoff system was activated). After an AWFCO, the remainder of the system shall continue to operate until residence time has transpired to ensure all waste remaining in the system has been processed with the APCE still operational. [See 40 CFR § 63.1206(e)(3)(ii).]

V.C.5.iv. In the event of an AWFCO, the Permittees shall implement the SSMP and operate RF-2 under the provisions of the SSMP. [See 40 CFR §§ 63.1206(e)(2) and (e)(3).]

V.C.5.v. During malfunctions that require implementation of the SSMP, the Permittees shall comply with the AWFCO requirements of the SSMP, and 40 CFR § 63.1206(e)(3), except for sections 63.1206(e)(3)(v) and (vi). [See 40 CFR § 63.1206(e)(2)(v)(A)(1).]

~~V.C.5.v.a. If the Permittees fail to meet an emission standard listed in Table V-4 or a Group A-1 or Group A-2 parameter specified in Table V-2, the AWFCO system must immediately and automatically cut off the hazardous waste feed. If the malfunction itself prevents immediate and automatic cut off of the hazardous waste feed, however, the Permittees must cease feeding hazardous waste as quickly as possible. [See 40 CFR § 63.1206(e)(2)(v)(A)(1).]~~

V.C.5.v.b.(1). The AWFCO requirements continue to apply during a malfunction. If an exceedance of an emission standard listed in Table V-4 or a Group A-1 or Group A-2 parameter specified in Table V-2 occurs, the Permittees shall undertake the corrective measures prescribed in the SSMP. [See 40 CFR § 63.1206(e)(2)(v)(A)(2).]

~~V.C.5.v.b.(2). For the purposes of determining the duration of an exceedance as a result of a malfunction (including power outages), the exceedance will begin once an emission standard or operating limit is exceeded~~

~~while spent carbon is in RF 2. The exceedance will end once the spent activated carbon has cleared RF 2 or once the emissions and operating parameters are reestablished within their respective permit limits, whichever occurs sooner. Thus one incident may constitute one exceedance, which may include multiple emissions or operating parameters not being met.~~

~~V.C.5.v.c. For each set of 10 exceedances of an emission standard or operating requirement while hazardous waste remains in the combustion chamber (*i.e.*, when the hazardous waste residence time has not transpired since the hazardous waste feed was cutoff) during a 60-day block period, the Permittees must comply with the requirements of 40 CFR § 63.1206(e)(2)(v)(A)(3) as follows:~~

~~V.C.5.v.c.(1). Within 45 days of the 10<sup>th</sup> exceedance, the Permittees must complete an investigation of the cause of each exceedance and evaluation. The evaluation is to include approaches to minimize the frequency, duration, and severity of each exceedance, and revise the SSMP as warranted by the evaluation to minimize the frequency, duration, and severity of such exceedances. [See 40 CFR § 63.1206(e)(2)(v)(A)(3)(i).]~~

~~V.C.5.v.c.(2). The Permittees must record the results of the investigation and evaluation in the operating record, and include a summary of the investigation and evaluation, and any changes to the SSMP in an excess emissions report that meets the requirements of 40 CFR § 63.10(e)(3) but need only submitted to the Director for approval in accordance with Permit Condition V.C.5.v.c.(3) after each 10<sup>th</sup> exceedance as described in Permit Condition V.C.5.v.c.(1). [See 40 CFR § 63.1206(e)(2)(v)(A)(3)(ii).]~~

~~V.C.5.v.c.(3). The Permittees must submit to the Director for approval in accordance with Permit Condition I.G.5. an excess emissions report that otherwise meets the requirements of 40 CFR § 63.10(e)(3) within 60 days following each 10<sup>th</sup> exceedance as described in Permit Condition V.C.5.v.c.(1). [See 40 CFR § 63.1206(e)(2)(v)(A)(3)(ii).]~~



**V.C.5.v.d.** If, after any AWFCO, there is an exceedance of a parameter in **Table**

~~V~~**Table V-2** required to be interlocked with the AWFCO system, or when an exceedance of a Group A-1 or Group A-2 parameter specified in Table V-2 occurs, irrespective of whether the exceedance occurred while hazardous waste remained in the combustion chamber (*i.e.*, whether the hazardous waste residence time has transpired since the hazardous waste feed cutoff system was activated), the Permittees must investigate the cause of the AWFCO, take appropriate corrective measures to minimize future AWFCOs, and record the findings and corrective measures in the Facility's operating record. ~~[See 40 CFR § 63.1206(e)(3)(v).]~~

**V.C.5.vi.** The Permittees shall not feed waste carbon during startups and shutdowns. ~~[See 40 CFR § 63.1206(e)(2)(v)(B).]~~

**V.C.5.vii.** Restarting Waste Feed

The Permittees must not start feeding waste until the operating parameters specified in Table V-2 and the CEMS have returned to within the operating limits. ~~[See 40 CFR § 63.1206(e)(3)(iii).]~~

~~**V.C.5.viii.** Failure of an AWFCO~~

~~If the AWFCO system fails to automatically and immediately cut off the flow of hazardous waste upon exceedance of a parameter in Table V-2 required to be interlocked with the AWFCO system, or when an exceedance of a Group A-1 or Group A-2 parameter specified in Table V-2 occurs, the Permittees must cease feeding hazardous waste as quickly as possible. [See 40 CFR § 63.1206(e)(3)(iv).]~~

~~**V.C.5.ix.** Testing AWFCO~~

~~The Permittees must test the AWFCO system and associated alarms at least monthly to verify operability. The Permittees must document and record AWFCO operability test procedures and results in the Facility's~~

~~operating record. [See 40 CFR §§ 63.1206(e)(3)(vii) and 264.347(e) and (d).]~~

**V.C.6. Burning of Natural Gas**

**V.C.6.i.** RF-2 (including all its APCE and ancillary equipment) shall be powered by natural gas only. Alternative fuel cannot be used unless this permit is modified. Any such modification request may require additional performance testing and/or an updated risk analysis.

**V.C.6.ii.** The amount of natural gas burned in RF-2 (including all its APCE and ancillary equipment) shall be recorded monthly ~~in millions of standard cubic feet (MMSCF)~~ and such records shall be maintained in the operating record.

**V.C.6.iii.** ~~Each month, the Permittees shall calculate and record in the operating record the 12-month rolling sum in tons per year of nitrogen oxides (NOx) emissions from RF-2 (including all its APCE and ancillary equipment), based on: (1) the amount of natural gas burned in MMSCF; and (2) the emission factor in pounds per MMSCF, based on the most recent Performance Demonstration Test.~~

**V.D. AIR POLLUTION CONTROL EQUIPMENT**

**V.D.1.** ~~The Permittees~~The Permittees Emissions from the RF-2 stack, as measured using the test protocols specified in this Permit, shall not exceed the Performance and Emission Limits specified in Table V-4.

**TABLE V-4 - PERFORMANCE AND EMISSION LIMITS FOR RF-2**

<b>Parameter</b>	<b>Purpose</b>	<b>Limit<sup>20</sup></b>
Destruction and Removal Efficiency (DRE)	To limit organic emissions	99.99%

<sup>20</sup> All values except DRE are corrected to 7% oxygen in the stack gas.



Parameter	Purpose	Limit <sup>20</sup>
Particulate Matter (PM)	To limit particulate matter emissions	0.013-gr/dscf <sup>21</sup>
HCl/Chlorine	To limit HCl/chlorine combined emissions	32 ppmdv <sup>22</sup>
SO <sub>2</sub> <sup>23</sup>	To limit SO <sub>2</sub> emissions	30.01 tons per consecutive 12 month period
NO <sub>2</sub> <sup>24</sup>	To limit NO <sub>2</sub> emissions	22.22 tons per consecutive 12 month period
Mercury	To limit mercury emissions	130-µg/dsem <sup>25</sup>
Semi-volatile metals <sup>26</sup>	To limit Pb and Cd emissions	230-µg/dsem
Low volatile metals <sup>27</sup>	To limit As, Be and Cr emissions	92-µg/dsem
Dioxin and furans	To limit dioxin and furan emissions	0.4 ng-TEQ/dsem <sup>28,29</sup>
Carbon monoxide <sup>30</sup>	To ensure good combustion	100 ppmdv
Total hydrocarbons	To limit organic emissions	10 ppmdv

V.D.2. The Permittees shall continuously operate, ~~and maintain~~ the hearth, afterburner, Quench (Gas Cooling)/Venturi Scrubber (SC-11), Caustic Packed Bed Scrubber (SC-12), Wet Electrostatic Precipitator (W-11), Induced Draft Fan, and Stack at all times that the reactivation furnace (RF-2) is in operation treating hazardous waste.

<sup>21</sup>“gr/dscf” is grains per dry standard cubic foot of stack gas.

<sup>22</sup>“ppmdv” is parts per million on a dry volumetric basis in the stack gas.

<sup>23</sup>Based on the Tribal New Source Rule registration by Evoqua dated Aug 2012.

<sup>24</sup>Based on the Tribal New Source Rule registration by Evoqua dated Aug 2012.

<sup>25</sup>“µg/dsem” is micrograms per dry standard cubic meter of stack gas.

<sup>26</sup>Semi-volatile metals are lead and cadmium.

<sup>27</sup>Low volatile metals are arsenic, beryllium and chromium.

<sup>28</sup>“ngTEQ/dsem” is nanograms TEQ per dry standard cubic meter.

<sup>29</sup>TEQ means the international method of expressing toxicity equivalents for dioxins and furans as defined in U.S. EPA, Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-dioxins and dibenzofurans (CDDs and CDFs) and 1989 Update, March 1989.

<sup>30</sup> 100 ppm by volume on a dry gas basis using a one hour rolling average.

**V.D.3.** The Permittees shall perform any necessary operations and air pollution control equipment maintenance to minimize emissions so that emissions are at or below the emission limits specified in this Permit.

~~**V.D.4.** The Permittees shall, to the extent practicable, maintain and operate equipment in a manner consistent with good air pollution control practice for minimizing emissions. [See 40 CFR § 61.12(e).]~~

**V.D.5.** The Permittees shall maintain the APCE in accordance with the design plans and specifications contained in Permit Attachment Appendices VI and X.

#### **V.E. FUGITIVE EMISSIONS CONTROLS**

~~**V.E.1.** The Permittees shall control fugitive emissions from the combustion zone in accordance with 40 CFR §§ 61.348(e), 63.1206(e)(5), and 264.345(d). [See 40 CFR §§ 61.348(e), 63.1206(e)(5), and 264.345(d).]~~

~~**V.E.2.** The Permittees shall ensure that fugitive emissions from process units and ancillary components (tanks, furnace, APCEs, and piping) do not exceed 500 ppmv (parts per million by volume) of VOCs above background in accordance with the procedures spelled out in 40 CFR § 61.355(h). [See 40 CFR § 61.355(h), 63.1206(e)(5), and 40 CFR § 264.1082(e)(1).]~~

#### **V.F. INSPECTION REQUIREMENTS**

**V.F.1.** The Permittees shall inspect RF-2 in accordance with the Inspection Schedule and Checklist, Permit Attachment Section F, Permit Attachment Appendix XII, and Permit Condition II.E. [40 CFR 264.15]

~~**V.F.2.** The Permittees shall thoroughly, visually inspect RF-2 at least daily, for leaks, spills, fugitive emissions, and signs of tampering. [See 40 CFR § 264.347(b).]~~

~~**V.F.3.** The Permittees shall thoroughly, visually inspect the instrumentation for out-of-tolerance monitored and/or recorded operational data.~~



~~V.F.4. Upon request of the Director, the Permittees shall perform sampling and analysis of the waste and exhaust emissions to verify that the operating requirements established in this Permit are being met.~~

#### V.G. RECORDKEEPING AND REPORTING

- V.G.1. The monitoring and inspection data required by this Module V must be recorded and the records must be placed in the operating record required by Permit Condition II.M.1.i. and maintained in the operating record for ~~five~~three years. [~~See 40 CFR §§ 63.10, 63.1211, and 264.34715(d).~~]
- V.G.2. The Permittees shall record in the operating record for this Permit the date and time of all automatic waste feed shut-offs, including the triggering parameters, reason for the shut-off, and corrective actions taken. The Permittees shall also record all failures of the automatic waste feed shut-offs to function properly and corrective actions taken. [See 40 CFR §§ 63.10 and 63.1211.]
- V.G.3. The Permittees shall record in the operating record for this Permit the date and time of all shutdowns or malfunctions, the reason(s) for the shut-down or malfunction, and corrective actions taken. [See ~~40 CFR §§ 63.10 and 63.1211~~SSMP.]
- ~~V.G.4. In addition to the excess emissions report(s) required by Permit Condition V.C.5.v.c., if, despite the requirement to comply with the SSMP, an action taken by the Permittees during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the SSMP and there is an exceedance of any applicable emission limitation in the relevant emission standard, then the Permittees must record the actions taken for that event and must report such actions to the Director within 2 working days after commencing actions inconsistent with the plan, followed by a letter to the Director within 7 working days after the end of the event, in accordance with 40 CFR §63.10(d)(5). [See 40 CFR §§ 63.6(e)(3)(iv) and 63.10(d)(5).]~~
- ~~V.G.5. The Permittees shall maintain in the operating record for the Facility required by Permit Condition II.M.1. the any applicable site specific CMS quality control performance~~

~~evaluation test plan procedures in accordance with 40 CFR § 63.8(d). [See 40 CFR § 63.8(d).]~~

## V.H. CLOSURE

- V.H.1.** At closure the owner or operator must remove all hazardous waste and hazardous waste residues (including, but not limited to, ash, scrubber waters, and scrubber sludges) from RF-2. [See 40 CFR § 264.351.]
- V.H.2.** The Permittees shall follow the procedures in Permit Attachment Section I and in the RCRA Facility Closure Plan for the Closure of RF-2 in Permit Attachment Appendices XV and XVII.
- V.H.3.** The Permittees shall follow the procedures in Permit Attachment Section I and in the Closure Plan for the Closure of RF-1 in Permit Attachment Appendices XVI and XVII. The Permittees shall initiate closure of RF-1 in accordance with the Closure Schedule contained in the RF-1 Closure Plan contained in Permit Attachment Appendix XVI and the Compliance Schedule set forth in Permit Condition I.K. [See 40 CFR § 264.112(d).]
- V.H.4.** The Permittees shall submit a post-closure plan with a schedule to EPA for approval if, after implementation of either the Closure Plan for Closure of RF-1 or the Closure Plan for Closure of RF-2, soil contamination is present and the Permittees are unable to adequately remediate that contamination. Upon approval by EPA, the Permittees shall implement the Post-Closure Plan as approved. EPA's decision to approve, disapprove or condition the approval of such plan is subject to the dispute resolution procedures set forth in Permit Condition I.L.

## V.I. ADDITIONAL INVESTIGATIONS

~~Upon request by the Director, sampling and analysis of the waste, soil and/or groundwater at or around the Facility, and exhaust emissions must be conducted to verify that the operating requirements established in this Permit achieve the performance standards set forth in this Permit. A report shall be submitted to the Director for approval in accordance with Permit Condition I.G.5. within the time frame specified in the Director's request. [See, e.g., 40 CFR § 264.347(a)(3).]~~

## V.I. PDTS



V.I.1 The Permittee shall submit a Performance Demonstration Test (PDT) Work Plans to the Director for approval within 48 months after the final Permit is made effective, and within 96 months after the final Permit is made effective. The Permittee shall conduct testing within six (6) months following receipt of the Director's approval of each PDT Work Plan. The Permittees may conduct performance testing at any time prior to the required date.

V.I.2. The portions of the PDT Work Plans addressing provisions for testing for SO<sub>x</sub> and NO<sub>x</sub> emissions during the PDT, shall reference EPA Test Method 6 for SO<sub>x</sub> (as SO<sub>2</sub>) and EPA Test Method 7 for NO<sub>x</sub> as provided in Appendix A of 40 CFR Part 60. [See Appendix A of 40 CFR Part 60.]

V.I.3. Where appropriate, the Permittee shall incorporate into PDT Work Plans appropriate methods and/or performance specifications, as set forth in specifically applicable requirements and/or in the Appendices in 40 CFR Part 60. [See 40 CFR Part 60.]

V.I.4. The Permittee shall make the PDT Work Plans available to the public for review no later than 60 calendar days before initiation of the test. The Permittee must also provide a public notice to all persons on the facility's mailing list announcing the availability of the PDT Work Plan and the location where the PDT Work Plan is available for review. The PDT Work Plans must be accessible to the public for 60 calendar days, beginning on the date of the public notice.

V.I.5. The Permittee shall complete performance testing within 60 days after the date of commencement of each of the PDTs in accordance with the approved PDT Work Plans.

V.I.6. The Permittee shall submit to the Director for review and approval a PDT Report regarding the performance of the PDT within 90 days of the completion of each PDT.

V.I.7. The PDT Reports shall include the Permittee's recommendations, if any, regarding any appropriate modifications to permit conditions based on the results of one or more PDTs in accordance with 40 CFR Part 270.

V.I.8. Any EPA decisions to disapprove or condition an approval of a plan or report under this Section V.I. is subject to the dispute resolution procedures set forth in Permit Condition I.L

1



MODULE VI  
CORRECTIVE ACTION

VI.A. Standard Conditions

- VI.A.1.** The Permittees must take corrective action as necessary to protect human health and the environment from all releases of hazardous waste and/or constituents from any Hazardous Waste Management Unit (HWMU), Solid Waste Management Unit (SWMU) and/or Area of Concern (AOC) at the Facility, regardless of the time at which waste was placed in such unit or area, in accordance with §3004(u) of RCRA, 42 USC Section 6924(u), 40 CFR §§ 264.90(a) and 264.101. [See RCRA Section 3004(u) and 40 CFR §§ 264.90(a) and 264.101. See also Permit Attachment Section J and the Final RCRA Facility Assessment (RFA), incorporated herein as Permit Attachment RFA. To the extent that there are any discrepancies between Section J and the RFA, the language in the RFA shall control.]
- VI.A.2.** The Permittees must take corrective action beyond the facility property boundary where necessary to protect human health and the environment, in accordance with §3004(v) of RCRA, 42 USC Section 6924(v), and 40 CFR §264.101. [See 40 CFR §264.101.]
- VI.A.3.** Any noncompliance with approved plans, schedules ~~or reports~~ required in accordance with this Permit shall be deemed noncompliance with this Permit.
- VI.A.4.** If the Director determines that further corrective action beyond the requirements of this Permit is warranted, then the Director may modify this Permit according to the permit modification processes under 40 CFR § 270.41. [See 40 CFR §§ 264.100(e)(2) and 270.41. See also Permit Condition I.B.1.]
- ~~**VI.A.5.** All raw data and reports, including inspection reports, laboratory reports, drilling logs, geological and hydrogeological investigations, bench-scale or pilot-scale data, laboratory data and other supporting information gathered or generated during activities undertaken pursuant to this Permit, including any reissued permits, shall be provided at the request of the Director.~~
- ~~**VI.A.6.** Failure to timely submit the information required in this Permit, or falsification of any submitted information, is grounds for termination of this permit in accordance with 40 CFR §270.43.~~

**VI.A.7.** All work performed pursuant to this Corrective Action Module shall be under the direction and supervision of qualified personnel. At least ~~forty-five (45)~~fifteen (15) days prior to initiating any phase of work pursuant to this Module, the Permittees shall notify the Director in writing of the following:

**VI.A.7.a.** The names ~~, titles, and qualifications of the personnel, including of the Corrective Action Coordinator and the prime contractors, subcontractors, consultants and laboratories,~~ to be used in carrying out such work; and

**VI.A.7.b.** The name, address, phone number, electronic mail address and qualifications of the Corrective Action Project Coordinator.

**VI.A.7.b.i.** The Permittees have the right to change their Corrective Action Project Coordinator. Notification of a change in the Permittees' Corrective Action Project Coordinator must be provided to EPA in writing at least ten (10) days prior to the change.

**VI.A.7.b.ii.** EPA may disapprove of Permittee's<sup>2</sup> Corrective Action Project Coordinator (original or replacement) at any time ~~based upon if it determines in the exercise of reasonable discretion that~~ the person's qualifications and ability are inadequate to effectively perform the role. In making such a determination, EPA will evaluate the experience of a person against ~~The qualifications of the Permittees' Corrective Action Project Coordinator (original or replacement) shall be subject to EPA's review, for verification that such person meets~~ minimum necessary technical background and experience requirements. All persons under the direction and supervision of the Permittees' Corrective Action Project Coordinator must possess all necessary professional licenses required by federal law and any applicable state or tribal law. EPA's disapproval of the Permittees' Corrective Action Project Coordinator is subject to review in accordance with the Informal Dispute Resolution provisions set forth in Permit Condition I.L.

**VI.A.7.c.** In those circumstances where Permittees must take action in less than the ~~forty-five (45)~~fifteen (15) day period referenced in Permit Condition VI.A.7., the information required by Permit Conditions VI.A.7.a. and VI.A.7.b. must be provided to EPA as soon as practicable. (See, e.g., Permit Condition VI.E.1.)



**VI.A.8.** Any activities performed pursuant to this Corrective Action Module shall be conducted in compliance with this Permit, and are subject to EPA approval as set forth herein. The Permittees should perform Corrective Action consistent with good scientific principles. For example, the Permittees should consider taking into account appropriate EPA guidance including, but not limited to, the following:

- “RCRA Corrective Action Plan” (OSWER Directive 9902.3-2A, May 1994);
- “Handbook of Groundwater Protection and Cleanup Policies for RCRA Corrective Action” (EPA, EPA530-R-04-030, April 2004);
- “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods” (EPA, SW-846), available at <http://www.epa.gov/epawaste/hazard/testmethods/sw846/online/index.htm>;
- Advance Notice of Proposed Rulemaking, “Corrective Action for Releases from Solid Waste Management Units at Hazardous Waste management Facilities” (EPA, 61 FR 19432 dated May 1, 1996), available at <http://www.epa.gov/docs/fedrgstr/EPA-WAST/1996/May/Day-01/pr-547.pdf>;
- “RCRA Public Participation Manual” (EPA, EPA/530/R-96/007, 1996), available at <http://www.epa.gov/epawaste/hazard/tsd/permit/pubpart/manual.htm>;
- “A Systematic Approach for Evaluation of Capture Zones at Pump and Treat Systems, Final Project Report” (EPA, EPA/600/R-08/003, January 2008), available at <http://www.epa.gov/ada/pbs/reports/600R08003.html>; and
- “RCRA Groundwater Monitoring Technical Enforcement Guidance Document” (OSWER Directive 9950.1, September 1986).

## **VI.B. Reporting Requirements**

**VI.B.1.** When requested by the Director, the Permittees shall submit to the Director for approval in accordance with Permit Condition I.G.5. signed and certified corrective action progress reports on a semi-annual basis in accordance with the deadlines specified in the Director’s request. Such corrective action progress reports shall contain:

**VI.B.1.a.** A discussion and summary of all corrective action-related activities undertaken during the time period;

**VI.B.1.b.** Summaries of all problems or potential problems encountered during the reporting period and actions taken to rectify these problems;

**VI.B.1.c.** Summaries of all findings made during the time period including summaries of laboratory data; and

**VI.B.1.d.** Projected work for the next reporting period.

**VI.B.2.** The Permittees shall maintain copies of other corrective action reports (e.g. inspection reports); geological and hydrogeological investigations; records of groundwater monitoring wells, including boring logs, and associated groundwater surface elevations; and all laboratory data, including raw data, for the active life of the Facility, and shall make them available to the Director upon request.

**VI.B.3.** The Director may require the Permittees to conduct new or more extensive assessments, investigations, or studies, as needed, based on information provided in these progress reports or other supporting information.

**VI.C. Results of the RCRA Facility Assessment (RFA)**

**VI.C.1.** The results and recommendations of the RCRA Facility Assessment can be found in the Final Permit Attachment RFA dated September 2016.

**VI.C.2.** The HWMUs, SWMUs, and AOCs are identified in Tables VI-1, VI-2, and VI-3.

**VI.D. Newly-Identified, Newly-Discovered, or Newly-Created AOCs, SWMUs and/or HWMUs**

**VI.D.1.a.** The Permittees shall notify the Director in writing of any newly-identified, newly-discovered, or newly created AOC(s), SWMU(s) and/or HWMU(s). This initial notice shall be provided no later than fifteen (15) calendar days after discovery of the newly-identified, newly-discovered, or newly-created AOC, SWMU and/or HWMU.

**VI.D.1.b.** No later than 60 days after identifying, discovering or creating any new AOC(s), SWMU(s), and/or HWMU(s), the Permittees shall initiate a permit modification in accordance with Permit Condition I.G.7. and 40 CFR § 270.42 to update Tables VI-1, VI-2, and/or VI-3 and Permit Attachment Section J, as appropriate, to add the new AOC(s), SWMU(s), and/or HWMU(s) to the table(s).



**VI.D.2.** Within ninety (90) days after the after identifying, discovering or creating any new AOC(s), SWMU(s), and/or HWMU(s), the Permittees shall submit an Assessment Report for any newly-identified, newly-discovered or newly created AOC, SWMU and/or HWMU to the Director for approval in accordance with Permit Condition I.G.5. At a minimum, the Report shall provide the following information for each newly-identified, newly-discovered, or newly-created AOC, SWMU and/or HWMU:

**VI.D.2.a.** The location of each such AOC, SWMU and/or HWMU in relation to other AOCs, SWMUs, HWMUs, building numbers, or other descriptive landmarks;

**VI.D.2.b.** The type and function of the AOC, SWMU and/or HWMU;

**VI.D.2.c.** The general dimensions, capacities, and structural description of the AOC, SWMU and/or HWMU (supply all available drawings);

**VI.D.2.d.** The period during which the AOC, SWMU and/or HWMU was operated;

**VI.D.2.e.** Waste characterization information for all wastes that have been or are being managed at the AOC, SWMU and/or HWMU;

**VI.D.2.f.** A description of any release (or suspected release) of hazardous waste and/or constituents originating from the AOC, SWMU, and/or HWMU including planned or unplanned releases to the air and any other media. Include information on the date of release, type of hazardous waste and/or constituents, quantity released, nature of the release, extent of release migration, and cause of release (e.g., overflow, broken pipe, tank leak). Also provide any available data which characterizes the nature and extent of environmental contamination, including the results of air, soil and/or groundwater sampling and analysis efforts. Also submit any existing monitoring information that shows that a release of hazardous waste and/or constituents has not occurred or is not occurring; and

**VI.D.2.g.** Whether or not any further Permit Modification(s) to incorporate additional information about the newly-discovered AOC, SWMU and/or HWMU(s) into the Permit is appropriate. The Permittees shall submit a Permit Modification request in accordance with Permit Condition I.G.8. if the approved Assessment Report determines that such modification is warranted.

**VI.D.3.** Based on the results of the approved Assessment Report, the Director will determine whether there is a need for further investigations at specific unit(s) or areas covered in the Assessment Report. If the Director determines that such investigations are needed, the Director will require the Permittees to prepare a RCRA Facility Investigation (RFI) Work Plan in accordance with Permit Condition VI.F.

**VI.E. Newly-Discovered Releases**

**VI.E.1.** The Permittees shall notify the Director, in writing, of any newly-discovered spills or releases of hazardous waste ~~to the environment~~. This notification shall be submitted in two parts as set forth in Permit Conditions VI.E.1.a. and VI.E.1.b. Releases that are less than or equal to a quantity of one (1) pound and immediately contained and cleaned up are not subject to this Permit Condition VI.E.1. The Permittees shall investigate and, if necessary, remediate the discovered spill(s) or release(s). Such spills or releases may be from newly-identified or newly-created AOCs, SWMUs and/or HWMUs, from AOCs, SWMUs and/or HWMUs at which the Director had previously determined that no further investigation was necessary, or from AOCs, SWMUs and/or HWMUs investigated as part of this Permit or otherwise identified in Tables VI-1, VI-2, or VI-3.

**VI.E.1.a.** First, within fifteen (15) calendar days of discovery of the release, the Permittees shall submit in writing an initial notification of the discovery. This notification shall alert the Director to the magnitude of the threat to human health and/or the environment.

**VI.E.1.b.** Second, within sixty (60) days of discovery of the release, the Permittees must submit a written report. The report shall discuss the Permittee's efforts to investigate and/or remediate the discovered release and shall specifically include:

- the concentrations and estimated quantities of any hazardous waste and/or constituents released;
- the known, or expected, pathway(s) through which the contamination is migrating (or may migrate), and the extent, rate, and direction of that migration;
- the projected fate and transport of the release;



- the likely exposure pathway(s) for potential receptors, and the consequences of exposure to these receptors; and
- an outline of proposed Interim Corrective Measures to control the release, as well as a schedule for implementing the Interim Corrective Measures. The schedule must be justified by a discussion of possible consequences arising from any delay in implementing Interim Corrective Measures.

~~VI.E.2. Within sixty (60) days of discovery of a spill or release, the Permittees shall initiate a permit modification in accordance with Permit Condition I.G.7. and 40 CFR § 270.42 to update Tables VI-1, VI-2 and/or VI-3 and Permit Attachment Section J, as appropriate, to add the spill or release to the table(s). The Permittees shall include the hazardous waste constituents that were released and the actions taken to clean up or mitigate the spill or release in the revised Permit Attachment Section J.~~

VI.E.3. Within ninety (90) days of discovery of a release, the Permittees shall submit to the Director for approval in accordance with Permit Condition I.G.5. a Report describing the Interim Corrective Measures activities taken to date and whether or not additional investigation or implementation of corrective measures are warranted. This Report shall include the reporting requirements specified in Permit Condition VI.B. If the approved Interim Corrective Measures Report concludes that additional investigation or corrective measures are required, the Permittees shall submit a request for a permit modification to investigate and perform additional Interim Corrective Measures in accordance with Permit Condition I.G.8.

VI.E.4. If the approved Interim Corrective Measures Report concludes that there is a need for further investigations or implementation of corrective measures, the Director will require the Permittees to prepare a RCRA Facility Investigation (RFI) Work Plan in accordance with Permit Condition VI.F. The Director's decision to require the submittal of an RFI Work Plan is subject to the dispute resolution procedures set forth in Permit Condition I.L.

VI.E.5 If the Director requires preparation of an RFI Work Plan for a specific spill or release incident, the Permittee shall initiate a permit modification in accordance with Permit Condition I.G.7. and 40 CFR § 270.42 to update Tables VI-1, VI-2 and/or VI-3 and Permit Attachment Section J, as appropriate, to add the spill or release to the table(s). The Permittee shall include the hazardous waste constituents that were released and the actions taken to clean up or mitigate the spill or release in the revised Permit Attachment Section J.

#### VI.F. RCRA Facility Investigation (RFI) Work Plan

**VI.F.1.** If, under Permit Conditions VI.D.3. or VI.E.4., the Director determines that an RFI is necessary for any newly-discovered or newly-created AOC, SWMU or HWMU or for a newly discovered release, or to further investigate an existing AOC, SWMU, or HWMU, the Permittees shall submit an RFI Work Plan, within the time period specified by the Director, to the Director for approval in accordance with Permit Condition I.G.5. The Director's decision to require the submittal of an RFI Work Plan is subject to the dispute resolution procedures set forth in Permit Condition I.L.



**VI.F.2.** The RFI Work Plan must identify the AOCs, SWMUs, and/or HWMUs, releases of hazardous waste and/or constituents, and media of concern which require corrective action. The RFI Work Plan shall describe the objectives of the investigation and the overall technical and analytical approach to completing all actions necessary to characterize the nature, direction, rate, movement, and concentration of releases of hazardous waste and/or constituents from specific AOCs, SWMUs, HWMUs or groups of AOCs, SWMUs, or HWMUs and their actual or potential receptors. The RFI Work Plan shall detail all proposed activities and procedures to be conducted at the area and/or unit, the schedule for implementing and completing such investigations, an outline of the RFI Report required in Permit Condition VI.G.1., and the overall management of the RFI. The RFI Work Plan should be consistent with good scientific principles. For example, the Permittees should consider taking into account screening levels consistent with the EPA's health and ecological based guidance effective at the time of implementation, and EPA's current corrective action guidance, including RCRA Facility Investigation (RFI) Guidance, OSWER Directive 9502.00-6C, dated May 1989.

**VI.F.3.** The RFI Work Plan shall discuss sampling and data collection quality assurance and data management procedures, including formats for documenting and tracking data and other results of investigations, and health and safety procedures for conducting the field work.

**VI.F.4.** The Director may review for approval as part of the RFI Work Plan any plans, reports or other material developed pursuant to Permit Conditions VI.D. and/or VI.E.

**VI.G. RCRA Facility Investigation (RFI) Final Report**

**VI.G.1.** The Permittees shall develop and submit an RFI Final Report if the Director determines that an RFI is necessary as described in VI.F.1. The Permittees should conduct the RCRA Facility Investigation and prepare the RFI Final Report consistent with good scientific principles. ~~For example, the Permittees should consider taking into account appropriate EPA guidance including, but not limited to, EPA's RCRA Facility Investigation Guidance, OSWER Directive 9502.00-6C, dated May 1989.~~

**VI.G.2.** Within the time period specified in the schedule included in the approved RFI Work Plan, the Permittees shall submit an RFI Final Report to the Director for approval in accordance with Permit Condition I.G.5.

**VI.G.3.** The RFI Final Report shall describe the procedures, methods, and results of all facility investigations of AOCs, SWMUs and/or HWMUs and their releases, including information on the type and extent of contamination at the Facility, sources and migration pathways, and actual or potential receptors. The RFI Final Report shall present all information necessary to support further corrective action decisions at the area(s) and/or unit(s).

**VI.G.4.** The RFI Final Report shall also include the Permittee's recommendations, if any, regarding any appropriate modifications to the conditions of this Permit, based on the results of the RFI in accordance with Permit Condition I.G.8. and 40 CFR Part 270.

**VI.H. Interim Corrective Measures Implementation at the Direction of EPA**

**VI.H.1.** If, at any time, the Director determines that a release or potential release of hazardous waste and/or constituents at the Facility poses or may present a threat to human health or the environment, the Director will notify the Permittees that they must submit to the Director, for approval in accordance with Permit Condition I.G.5., an Interim Corrective Measures Work Plan, for conducting Interim Corrective Measures designed to minimize the threat to human health and the environment. The Director will provide direction to the Permittees regarding the appropriate time frame for submittal of such Interim Corrective Measures Work Plan. Implementation by the Permittees of treatment or containment activities during "immediate response," as defined in 40 CFR § 264.1(g)(2), to a discharge of hazardous waste and/or constituents, or an imminent and substantial threat of a discharge of hazardous waste and/or constituents, or a discharge of material which, when discharged, becomes a hazardous waste, is not subject to this Permit. Actions taken to address the discharge after the immediate response is completed are subject to this Permit.

**VI.H.1.a.** The Interim Corrective Measures Work Plan shall include a schedule for implementation of Interim Corrective Measures and the submittal of an Interim Corrective Measures Report.

**VI.H.2.** Except as set forth in Permit Condition VI.H.5, the Director's decision to require the submittal of an Interim Corrective Measures Work Plan is subject to the dispute resolution procedures set forth in Permit Condition I.L. The following factors may be considered by the Director in determining the need for additional Interim Corrective Measures:



- VI.H.2.a.** Time required to develop and implement a final remedy;
- VI.H.2.b.** Actual and potential exposure of human and environmental receptors;
- VI.H.2.c.** Actual and potential contamination of drinking water supplies and sensitive ecosystems;
- VI.H.2.d.** Potential for further degradation of the medium absent the additional Interim Corrective Measures;
- VI.H.2.e.** Presence of hazardous waste in containers or tanks that may pose a threat of release;
- VI.H.2.f.** Presence and concentration of hazardous waste and/or constituents in soils, ground water, surface water, or air;
- VI.H.2.g.** Weather conditions that may affect the current levels of contamination or potential for exposure;
- VI.H.2.h.** Risks of fire, explosion, or accident; and
- VI.H.2.i.** Other situations that may pose a threat to human health or the environment.

**VI.H.3.** Upon the Director's approval of the Interim Corrective Measures Work Plan, the Permittees shall implement the Interim Corrective Measures according to the approved schedule.

**VI.H.4.** Within the time period set forth in the schedule in the approved Interim Corrective Measures Work Plan, the Permittees shall submit to the Director for approval in accordance with Permit Condition I.G.5. a Report describing the Interim Corrective Measures activities taken to date and whether or not additional investigation or implementation of corrective measures are warranted. This Report shall include the reporting requirements specified in Permit Condition VI.B. If the approved Interim Corrective Measures Report concludes that additional investigation or corrective measures are required, and/or that there is a need for further investigations or implementation of corrective measures, the Director will require the Permittees to prepare a RCRA Facility Investigation (RFI) Work Plan in accordance with Permit Condition VI.F.

**VI.H.5.** If, at any time, the Director determines that a release or potential release of hazardous waste and/or constituents at the Facility poses or may present an imminent or emergency threat to human health or the environment, the Director will notify the Permittees that they must conduct Emergency Interim Corrective Measures as instructed by the Director. Such Emergency Interim Corrective Measures shall be limited to that necessary to address or resolve the urgency associated with and/or emergency nature of any such threat to human health or the environment. The Director's decision to require such Emergency Interim Corrective Measures may be subject to the informal dispute resolution procedures of Permit Condition I.L., but the Permittees shall implement such Emergency Interim Corrective Measures, as instructed by the Director, simultaneously during any such invocation of informal dispute resolution under this Permit.

#### **VI.I. Corrective Measures Study**

**VI.I.1.** If the Director has reason to believe that an AOC, SWMU and/or HWMU has released concentrations of hazardous constituents in excess of the EPA's current health- and ecological-based levels, or if the Director determines that contaminants present at levels below the EPA's current health-based levels pose a threat to human health or the environment given site-specific exposure conditions, the Director may require a Corrective Measures Study (CMS) and, if so, will notify the Permittees in writing. This notice will identify the hazardous constituents(s) which have exceeded action levels as well as those which have been determined to present a potential threat to human health or the environment given site-specific exposure conditions. The Director's decision to require a CMS is subject to the dispute resolution procedures set forth in Permit Condition I.L.

**VI.I.2.** No later than sixty (60) calendar days after the Permittees have received notification from the Director, under Permit Condition VI.I.1., of the need for a CMS, the Permittees shall submit to the Director for approval in accordance with Permit Condition I.G.5., a Work Plan, with a schedule, for conducting a CMS. Upon the Director's approval of the CMS Work Plan, the Permittees shall implement the CMS according to the approved schedule. The CMS should be consistent with the EPA's guidance.

**VI.I.3.** The Permittees shall submit a CMS Final Report to the Director for approval in accordance with Permit Condition I.G.5. and according to the schedule approved by the Director pursuant to Permit Condition VI.I.2. The CMS Final Report shall summarize the results of the investigations for each remedy, and of any bench-scale



or pilot tests conducted. The CMS Final Report must include an evaluation of each remedial alternative, and a proposal for corrective measures implementation. The CMS Final Report shall contain adequate information to support the Director in the remedy selection decision-making process, described in Permit Condition VI.J.

#### **VI.J. Remedy Selection**

If, based on the results contained in the RFI Final Report, CMS Final Report, or any further evaluations of additional remedies, the Director determines that it is appropriate to select a corrective action remedy for the facility, the Director will propose to select a remedy that will: (1) be protective of human health and the environment; (2) meet the concentration levels of hazardous constituents in each medium that the remedy must achieve to be protective of human health and the environment; (3) control the source(s) of release(s) so as to reduce or eliminate, to the maximum extent practicable, further releases that might pose a threat or potential threat to human health and the environment; and (4) meet all applicable waste management requirements. The Director's selection of a corrective action remedy is subject to the dispute resolution procedures set forth in Permit Condition I.L.

#### **VI.K. Permit Modification**

Based on information the Permittees submit in the RFI Final Report, the CMS Final Report, or other information, the Permittees or the Director may initiate a modification to this Permit for selection and implementation of the remedy, pursuant to 40 CFR §§ 270.41 or 270.42, and/or to create or make changes to a Corrective Action Schedule of Compliance for this Permit. Any modification relating to selection and implementation of a remedy may include conditions that require submittal by the Permittees of corrective measures design, implementation, and monitoring plans.

#### **VI.L. No Further Action**

**VI.L.1.** Based on the results of any investigation, study, assessment, interim measure and/or corrective action and any other relevant information, the Permittees may submit an application to the Director for a permit modification in accordance with 40 CFR § 270.42(c) to terminate all or a portion of a Corrective Action Schedule of Compliance. This permit modification application must contain information demonstrating that there are no releases of hazardous wastes or hazardous constituents from HWMU(s), SWMU(s) and/or AOC(s) at the Facility that pose a threat to human health or the environment, as well as information required in 40 CFR § 270.42(c), which incorporates by reference 40 CFR §§270.13 through 270.22,

270.62, and 270.63. Relevant information to be included in the application shall include, at a minimum:

- Depth of Released Contamination into Soil.
- Impact on Groundwater or Surface Water
- Constituents Sampled
- Data Quality Objectives
- Sampling Method
- Laboratory Results of Analysis
- Data Quality
- Results of Cleanup Verification Sampling

**VI.L.2.** If, based on review of the Permittees's request for a permit modification, any investigation, study, assessment, interim measure and/or corrective action and any other relevant information, including comments received during any relevant public comment period, the Director determines that releases or suspected releases which were investigated are either non-existent or do not pose a threat to either human health or the environment, the Director will grant the requested modification.

**VI.L.3.** A determination of no further action shall not preclude the Director from requiring further investigations, studies, or remediation at a later date, if new information or subsequent analysis indicates a release or likelihood of a release from a HWMU, SWMU and/or AOC or that the Facility is likely to pose a threat to human health or the environment. In such a case, the Director will initiate a modification according to the procedures set forth in 40 CFR § 270.41, to rescind the determination made in accordance with this Permit Condition VI.L.

**VI.M. Corrective Action Beyond the Facility Boundary**

If the Director determines that further actions beyond those provided in a Corrective Action Schedule of Compliance, or changes to that which is stated herein, are warranted, the Director will create or modify such Schedule of Compliance and/or other Permit Condition(s) in



accordance with the permit modification processes set forth in 40 CFR § 270.41. The Director's decision to create or modify such Schedule of Compliance and/or other Permit Condition(s) is subject to the dispute resolution procedures set forth in Permit Condition I.L. [See 40 CFR § 270.41.]

#### VI.N. Financial Assurance for Corrective Action

**VI.N.1.** A proposal for establishing a financial assurance mechanism for either performance of any of the work described in a Corrective Action Schedule of Compliance or implementation of any other remedy in accordance with this Permit, including construction of such corrective action or remedy, shall be submitted to the Director for approval in accordance with Permit Condition I.G.5., simultaneously with the request for a permit modification required under Permit Condition VI.K. The proposal shall contain, at a minimum:

- A cost estimate for construction, operation, maintenance, and monitoring of the selected corrective action or remedy for a period of 20 years including assumptions used to make the cost estimate;
- A description of the financial assurance mechanism that will be used; and
- A schedule for establishing the mechanism.

**VI.N.3.** The mechanism by which financial assurance is secured -- for either performance of any of the work described in a Corrective Action Schedule of Compliance or implementation of any other remedy in accordance with this Permit -- may include surety bonds, insurance policies (issued by an independent commercial insurer), letters of credit, or any other mechanism acceptable to the Director as described in any permit modification undertaken in accordance with Permit Condition VI.K. The mechanism shall be established to allow the U.S. Environmental Protection Agency to direct the funds to ensure construction, operation, maintenance and/or monitoring occur as required by this Permit.

#### VI.O. Quality Assurance and Quality Control

**VI.O.1.** As part of any work plan(s) required by this Module, the Permittees shall include a Quality Assurance Project Plan ("QAPP"), for the Director's review and approval in accordance with Permit Condition I.G.5. The QAPP shall address quality assurance, quality control, and chain of custody procedures for any sampling, monitoring and analytical activities. The Permittees shall follow "EPA Requirements for Quality

Assurance Project Plans (QA/R-5)” (EPA/240/B-01/003, March 2001 (Reissued May 2006)), “Guidance for Quality Assurance Project Plans (QA/G-5)” (EPA/240/R-02/009, December 2002), and “EPA Requirements for Quality Management Plans (QA/R-2)” (EPA/240/b-01/002, March 2001) as well as other applicable documents identified by the Director.

**VI.O.2.** As part of any work plan(s), the Permittees shall include Data Quality Objectives for any data collection activity to ensure that data of known and appropriate quality are obtained and that data are sufficient to support their intended use as required by this Module.

**VI.O.3.** The Permittees shall ensure that laboratories used by the Permittees for analysis perform such analysis according to the latest approved edition of “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods” (also known as SW-846) or other methods approved by EPA. If methods other than EPA methods are to be used, the Permittees shall specify all such protocols in the appropriate work plan(s). In accordance with the procedures set forth in Permit Condition I.G.5., the Director may reject any data that does not meet the requirements of the approved work plan(s) and EPA analytical methods and may require resampling and additional analysis.

**VI.O.4.** The Permittees shall ensure that all laboratories employed for analyses participate in a quality assurance/quality control (“QA/QC”) program equivalent to the program that EPA follows. The Permittees shall, on the Director’s request, make arrangements for EPA to conduct a performance and QA/QC audit of the laboratories chosen by the Permittees, whether before, during, or after sample analyses. Upon the Director’s request, the Permittees shall have the laboratories perform analyses of samples provided by EPA to demonstrate laboratory QA/QC and performance. If the audit reveals deficiencies in a laboratory’s performance or QA/QC, the Permittees shall submit a plan to address the deficiencies and the Director may require resampling and additional analysis. Requests by the Director in accordance with this Permit Condition VI.O.4. are subject to the informal dispute resolution provisions of Permit Condition I.L.

**VI.O.5.** The Director may require the Permittees to change laboratories for reasons including, but not limited to: QA/QC, performance, conflict of interest, or confidential agency audit information. In the event the Director requires a laboratory change, the Permittees shall propose two alternative laboratories within thirty (30)



calendar days. Once the Director approves of the laboratory change, the Permittees shall ensure that laboratory service shall be made available within fifteen (15) calendar days. The Director's requirement(s) and approval(s) pursuant to this Permit Condition VI.O.5. are subject to the informal dispute resolution provisions of Permit Condition I.L.

**TABLE VI-1 - HAZARDOUS WASTE MANAGEMENT UNIT IDENTIFICATION,  
 NEW UNIT NAME**

No.	HWMU Type/Designation	Location	General Dimensions and Structural Description	Date Unit was First Operated	Identification of Wastes Managed in Unit	Releases from Unit
1	Spent carbon reactivation furnace - RF-1 and Associated Equipment (Dewater screw)	South of RF-2	Furnace shell – carbon steel; internal firebrick lining and block insulation;  hearth and furnace roof constructed with firebrick; furnace roof is comprised of firebrick backed with block insulation and castable insulation; bottom hearth is insulated with block insulation and castable insulation	August 1992; Shut down in 1996	Spent activated carbon. See Part B Application for list of applicable waste codes	None

**TABLE VI-1 - HAZARDOUS WASTE MANAGEMENT UNIT IDENTIFICATION,  
 NEW UNIT NAME**

No.	HWMU Type/Designation	Location	General Dimensions and Structural Description	Date Unit was First Operated	Identification of Wastes Managed in Unit	Releases from Unit
2	Spent carbon reactivation furnace RF-2 and Associated Equipment (Dewater Screw, Weigh Belt)	East of warehouse	<p>Furnace shell – carbon steel; internally lined with firebrick and block insulation; hearths and furnace roof constructed with firebrick; furnace roof is comprised of firebrick backed with block insulation and castable insulation;</p> <p>bottom hearth is insulated with block insulation and castable insulation;</p> <p>Continuously seal welded internally to assure an air-tight assembly.</p> <p>Dewatering screw length 17 ft; diameter 8 in.</p>	July 1996 to present	Spent activated carbon. See Part B Application for list of applicable waste codes	None



**TABLE VI-1 - HAZARDOUS WASTE MANAGEMENT UNIT IDENTIFICATION,  
 NEW UNIT NAME**

No.	HWMU Type/Designation	Location	General Dimensions and Structural Description	Date Unit was First Operated	Identification of Wastes Managed in Unit	Releases from Unit
3	3 RF-1 Air pollution control equipment					
	Afterburner	RF-1 structure	Refractory lined steel	1992 to 1996	Spent activated carbon. See Part B Application for list of applicable waste codes	None
	<del>Venturi scrubber</del>	<del>RF-1 structure</del>	<del>Hastelloy-G</del>	<del>1992 to 1996</del>	<del>Spent activated carbon. See Part B Application for list of applicable waste codes</del>	<del>None</del>
	Packed bed scrubber	RF-1 structure	Fiberglass	1992 to 1996	Spent activated carbon. See Part B Application for list of applicable waste codes	None
	<del>Emissions stack</del>	<del>RF-1 structure</del>	<del>Mild steel</del>	<del>1992 to 1996</del>	<del>Spent activated carbon. See Part B Application for list of applicable waste codes</del>	<del>None</del>
4	RF-2 Air pollution control equipment					

**TABLE VI-1 - HAZARDOUS WASTE MANAGEMENT UNIT IDENTIFICATION,  
 NEW UNIT NAME**

No.	HWMU Type/Designation	Location	General Dimensions and Structural Description	Date Unit was First Operated	Identification of Wastes Managed in Unit	Releases from Unit
	Afterburner	RF-2 structure	Refractory lined steel cylinder chamber	1996 to present	Spent activated carbon. See Part B Application for list of applicable waste codes	None
	Venturi scrubber	RF-2 structure	Hastelloy C	1996 to present	Spent activated carbon. See Part B Application for list of applicable waste codes	None
	Packed bed scrubber	RF-2 structure	Fiberglass	1996 to present	Spent activated carbon. See Part B Application for list of applicable waste codes	None
	Wet electrostatic precipitator	RF-2 structure	Fiberglass/AL6XN	1996 to present	Spent activated carbon. See Part B Application for list of applicable waste codes	None
	Induced draft fan	RF-2 structure	300-series SS	1996 to present	Spent activated carbon. See Part B Application for list of applicable waste codes	None



**TABLE VI-1 - HAZARDOUS WASTE MANAGEMENT UNIT IDENTIFICATION,  
 NEW UNIT NAME**

No.	HWMU Type/Designation	Location	General Dimensions and Structural Description	Date Unit was First Operated	Identification of Wastes Managed in Unit	Releases from Unit
	<del>Emissions stack</del>	<del>RF-2 structure</del>	<del>Fiberglass surrounded by a mild steel shell</del>	<del>1996 to present</del>	<del>Spent activated carbon. See Part B Application for list of applicable waste codes</del>	<del>None</del>
5	Spent carbon unloading hopper H-1	North end of facility on containment	5000 lb capacity; mild steel	1996 to present	Spent activated carbon. See Part B Application for list of applicable waste codes	None
6	Spent carbon unloading hopper H-2	Inside warehouse facing east wall	500 lb capacity; mild steel	August 1992 to present	Spent activated carbon. See Part B Application for list of applicable waste codes	None
7	Hopper air pollution control equipment piping and baghouse	North end of facility on containment	Ducting, baghouse and fan are mild steel	1992 to present	Spent activated carbon. See Part B Application for list of applicable waste codes	None
8	Spent carbon slurry and recycle water transfer system	Inside warehouse on containment	4" pipes hopper to tank; 3" pipes T-tank to furnace feed tank; 300-series SS	1992 to present	Spent activated carbon. See Part B Application for list of applicable waste codes	None

**TABLE VI-1 - HAZARDOUS WASTE MANAGEMENT UNIT IDENTIFICATION,  
 NEW UNIT NAME**

No.	HWMU Type/Designation	Location	General Dimensions and Structural Description	Date Unit was First Operated	Identification of Wastes Managed in Unit	Releases from Unit
9	Spent carbon storage warehouse	Inside warehouse	80 ft by 80 ft concrete/ metal	1992 to present	Spent activated carbon. See Part B Application for list of applicable waste codes	None
10	Spent carbon slurry storage tank, T-1	East of warehouse within containment	8319 gal design capacity	Used tank (1956); 1992 to present	Spent activated carbon. See Part B Application for list of applicable waste codes	None
11	Spent carbon slurry storage tank, T-2	East of warehouse within containment	8319 gal design capacity	Used tank (1956); 1992 to present	Spent activated carbon. See Part B Application for list of applicable waste codes	None
12	Spent carbon slurry storage tank, T-5	East of warehouse within containment	8319 gal design capacity	Used tank (1956); 1992 to present	Spent activated carbon. See Part B Application for list of applicable waste codes	None
13	Spent carbon slurry storage tank, T-6	East of warehouse within containment	8319 gal design capacity	Used tank (1956); 1992 to present	Spent activated carbon. See Part B Application for list of applicable waste codes	None



**TABLE VI-1 - HAZARDOUS WASTE MANAGEMENT UNIT IDENTIFICATION,  
NEW UNIT NAME**

No.	HWMU Type/Designation	Location	General Dimensions and Structural Description	Date Unit was First Operated	Identification of Wastes Managed in Unit	Releases from Unit
14	Furnace Feed System Tank T-8 and Ancillary Equipment	RF-1 Structure	905 gal 300 series SS	August 1992 to 1996	Spent activated carbon. See Part B Application for list of applicable waste codes	None
15	T-18 and Ancillary Equipment	RF-2 structure	6500 gal 300-series SS	July 1996 to present	Spent activated carbon. See Part B Application for list of applicable waste codes	None
16	Wastewater conveyance piping to wastewater treatment tank	East of RF-2 structure	3" PVC piping	August 1992	Spent activated carbon. See Part B Application for list of applicable waste codes	None
17	Spent carbon storage warehouse barrel washer	Next to H-2 in warehouse	2 ft by 3 ft 300 series stainless steel	1992 to present	Spent activated carbon. See Part B Application for list of applicable waste codes	None
18	<del>Carbon adsorber - PV1000</del>	<del>North of Containment Pad for Storage Tanks</del>	<del>1000 lb carbon capacity; mild steel.</del>	<del>August 1992</del>	<del>Spent activated carbon. See Part B Application for list of applicable waste codes</del>	<del>None</del>

**TABLE VI-1 - HAZARDOUS WASTE MANAGEMENT UNIT IDENTIFICATION,  
 NEW UNIT NAME**

No.	HWMU Type/Designation	Location	General Dimensions and Structural Description	Date Unit was First Operated	Identification of Wastes Managed in Unit	Releases from Unit
19	Carbon adsorber WS-1	Beside spent carbon storage tank	2 x 2000 lb carbon capacity. Mild steel	1992 to present	Spent activated carbon. See Part B Application for list of applicable waste codes	None
20	Carbon adsorber WS-2	Beside H-1	5000 lb carbon capacity Fiberglass	1992 to present	Spent activated carbon. See Part B Application for list of applicable waste codes	None
21	Carbon adsorber WS-3	Beside RF-2	1000 lb carbon capacity Mild steel	1996 to present	Spent activated carbon. See Part B Application for list of applicable waste codes	See Section J.2 of the Part B Application
22	<del>Slurry transfer inclined plate settler tank</del>	<del>Adjacent to the venturi scrubber</del>	<del>Mild steel</del>	<del>1992 to 1994</del>	<del>Spent activated carbon. See Part B Application for list of applicable waste codes</del>	<del>See Section J.2 of the Part B Application</del>
23	<del>Scrubber recycle tank T-17</del>	<del>Beside RF-1</del>	<del>Mild steel</del>	<del>1992 to 1996</del>	<del>Spent activated carbon. See Part B Application for list of applicable waste codes</del>	<del>None</del>



**TABLE VI-1 - HAZARDOUS WASTE MANAGEMENT UNIT IDENTIFICATION,  
 NEW UNIT NAME**

No.	HWMU Type/Designation	Location	General Dimensions and Structural Description	Date Unit was First Operated	Identification of Wastes Managed in Unit	Releases from Unit
24	Filter press	Next to scrubber system for RF-1	Mild steel with polypropylene plates	1992 to 1994	Spent activated carbon. See Part B Application for list of applicable waste codes	None
25	New Facility Discharge Piping System	New piping bypasses Lift Station to POTW	6" PVC	February 1996	Spent activated carbon. See Part B Application for list of applicable waste codes	None

**TABLE VI-2 - SOLID WASTE MANAGEMENT UNIT IDENTIFICATION**

<b>No.</b>	<b>SWMU Type/Designation</b>	<b>Location</b>	<b>General Dimensions and Structural Description</b>	<b>Date Unit was First Operated</b>	<b>Identification of Wastes Managed in Unit</b>	<b>Releases from Unit</b>
1	Bermed containment area	East of Warehouse	Approx 180' x 55'; concrete	August 1992	Spent activated carbon. See Part A Application for list of applicable waste codes	None
2	Sump by H-1	South of H-1	3'-4" square; concrete	July 1996	Spent activated carbon. See Part A Application for list of applicable waste codes	None
3	Sump by storage tank, T-9	East of warehouse in between T-9 and RF-2	3'-4" square sump; U-drain 30' long x 16" wide; concrete	August 1992 to present	Spent activated carbon. See Part A Application for list of applicable waste codes	None
4	Recycled motive water storage tank, T-9	East of warehouse on containment	10,500 gal 316 series stainless steel	1996 to present	Spent activated carbon. See Part A Application for list of applicable waste codes	None
5	Rainwater and motive water storage tank, T-12	East of warehouse on containment	25,080 gal Mild steel	1992. Removed from service in 2002.	Spent activated carbon. See Part A Application for list of applicable waste codes	None



**TABLE VI-2 - SOLID WASTE MANAGEMENT UNIT IDENTIFICATION**

<b>No.</b>	<b>SWMU Type/Designation</b>	<b>Location</b>	<b>General Dimensions and Structural Description</b>	<b>Date Unit was First Operated</b>	<b>Identification of Wastes Managed in Unit</b>	<b>Releases from Unit</b>
6	Wastewater storage tank, T-11 System	East of the warehouse and south of RF -2	10' Dia x 20' H; Approx 12,000 gal fiberglass	August 1992 to present	Spent activated carbon. See Part A Application for list of applicable waste codes	None
7	Sump by cooling screw under Venturi scrubber tank	East of warehouse beside RF-2	3'-4" square; concrete	July 1996 to present	Spent activated carbon. See Part A Application for list of applicable waste codes	None
8	RF-2 scrubber water equalization tank, T-19	Under RF-2 Structure	Approx. 1000 gal Fiberglass	July 1996 to present	Spent activated carbon. See Part A Application for list of applicable waste codes	None
9	Hazardous waste debris bin	North of warehouse on asphalt pavement	20 - 40 cubic yards Mild steel	August 1992 to present	Spent activated carbon. See Part A Application for list of applicable waste codes	None
10	Spent carbon storage warehouse grated trenches and sump	Warehouse in containment area	Trench 3 ft, 4 in square sump U-drain 50 ft long, 16 in wide; cross drain sections 40 ft long 16 in wide Concrete	1992 to present	Spent activated carbon. See Part A Application for list of applicable waste codes	None

**TABLE VI-2 - SOLID WASTE MANAGEMENT UNIT IDENTIFICATION**

<b>No.</b>	<b>SWMU Type/Designation</b>	<b>Location</b>	<b>General Dimensions and Structural Description</b>	<b>Date Unit was First Operated</b>	<b>Identification of Wastes Managed in Unit</b>	<b>Releases from Unit</b>
<b>11</b>	Hopper concrete pad	Outside H-1 structure	Approx 60' x 44'; concrete	July 1996	Spent activated carbon. See Part A Application for list of applicable waste codes	None
<b>12</b>	WWTP	Inside warehouse	Fiberglass, mild steel modular water treatment system. Separate containment.	October 2003 to present	Spent activated carbon. See Part A Application for list of applicable waste codes	None
<b>13</b>	Wastewater lift station and piping system (old)	At the end of access road to plant. Old piping from Tank T-11 to the Lift Station	Approx. height 15 ft; outside diameter 5 ft Lift Station: mild steel/concrete/fiberglass Old piping system PVC.	1992 to 1996	Spent activated carbon. See Part A Application for list of applicable waste codes	None
<b>14</b>	Spent carbon unloading and transfer area asphalt pad	North area of facility	Approx. 44 ft by 80 ft	August 1996 to present	Spent activated carbon. See Part A Application for list of applicable waste codes	None
<b>15</b>	Satellite Accumulation Area	North side of warehouse	< 55 gallons (metal or plastic)	August 1992 to present	Various Debris	None
<b>16</b>	Satellite Accumulation Area	South side of drum containment	< 55 gallons (metal or plastic)	August 1992 to present	Various Debris	None
<b>17</b>	Satellite Accumulation Area	East of Control Room	< 55 gallons (metal or plastic)	August 1992 to present	Various Debris	None



**TABLE VI-2 - SOLID WASTE MANAGEMENT UNIT IDENTIFICATION**

<b>No.</b>	<b>SWMU Type/Designation</b>	<b>Location</b>	<b>General Dimensions and Structural Description</b>	<b>Date Unit was First Operated</b>	<b>Identification of Wastes Managed in Unit</b>	<b>Releases from Unit</b>
18	Satellite Accumulation Area	Laboratory in Admin Building	< 55 gallons (metal or plastic)	August 1996 to present	Laboratory Debris and laboratory Testing	None
19	Satellite Accumulation Area	Underneath Spent Carbon Baghouse	< 55 gallons (metal or plastic)	August 1992 to present	Spent Carbon Dust from Baghouse	

**TABLE VI-3 - AREAS OF CONCERN (AOC) IDENTIFICATION TABLE,  
NEW UNIT NAME**

<b>No.</b>	<b>Description of AOC</b>	<b>Location</b>	<b>Management Requirements at Closure</b>
1	Spent carbon unloading and transfer area.	AOC 1 is entirely contained within SWMU14.	Sampling. See Closure Plan Tank Area and Unloading Area Sample Locations 5 & 7.
2	Tank area concrete containment pad	AOC 2 is entirely contained within SWMU 1.	Sampling. See Closure Plan Tank Area and Unloading Area Sample Location 3.
3	Receiving area/pad	AOC 3 is entirely contained within SWMU14.	Sampling. See Closure Plan Tank Area and Unloading Area Sample Location 8.
4	Hopper H-1 loading/unloading area	See HWMU 5 for more detail on this unit	Sampling. See Closure Plan Tank Area and Unloading Area Sample Locations 4 & 5.
5	Hopper H-2 loading/unloading area	See HWMU 6 for more detail on this unit	Sampling. See Closure Plan Container Area Sample Locations 1 & 2.
6	Spent carbon storage warehouse	See HWMU 9 for more detail on this unit	Sampling. See Closure Plan Container Area Sample Locations 1, 2, & 3.
7	Furnace feed systems	See HWMUs 14 and 15 for more details on these units	Sampling. See Closure Plan RF-1 and RF-2 Process Area Sample Locations 1 & 2
8	Recycled motive water tank T-9	See SWMU 4 for more details on this unit	Sampling. See Closure Plan Tank Area and Unloading Area Sample Location 6.
9	Rainwater, Dewatering Screw, and Motive Water Storage Tank T-12	See SWMU 5 for more details on this unit	Sampling. See Closure Plan Tank Area and Unloading Area Sample Location 2.



**TABLE VI-3 - AREAS OF CONCERN (AOC) IDENTIFICATION TABLE,**  
**NEW UNIT NAME**

<b>No.</b>	<b>Description of AOC</b>	<b>Location</b>	<b>Management Requirements at Closure</b>
10	Spent carbon storage warehouse barrel washer	See HWMU 17 for more details on this unit	Sampling. See Closure Plan Container Area Sample Locations 1, 2, & 3.
11	Bermed concrete pad in process area	AOC 2 is entirely contained within SWMU 1. See SWMU 1 for more detail on this unit	Sampling. See Closure Plan RF-1 and RF-2 Process Area Sample Locations 1, 2, & 3.
12	Sump by unloading hopper H-1	See SWMU 2 for more details on this unit	Sampling. See Closure Plan Tank Area and Unloading Area Sample Location 4.
13	Sump by storage tank T-9	See SWMU 3 for more details on this unit	Sampling. See Closure Plan Tank Area and Unloading Area Sample Location 6.
14	Spent carbon storage tanks and carbon adsorbers	Please see HWMUs 10, 11, 12, & 13 and HWMUs 19, 20, & 21 for more details on these units	Sampling. See Closure Plan Tank Area and Unloading Area Sample Locations 1, 2, & 3.

