

STATE OF COLORADO

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Dedicated to protecting and improving the health and environment of the people of Colorado

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Colorado Department
of Public Health
and Environment

February 26, 2013

Mr. Brent Anderson, Esq.
IRG Redevelopment I, LLC
7991 Shaffer Parkway, Suite 300
Littleton, CO 80127

RE: CDPHE Comments on Lowry Vista Cap Penetration Plan for Subsurface Soil Borings on the Landfill Zone, Operable Unit 2 (OU2), Former Lowry Air Force Base, Colorado

Dear Mr. Anderson:

The Colorado Department of Public Health and Environment (“CDPHE”), Hazardous Materials and Waste Management Division (“the Department”) has completed its review of the above-referenced Cap Penetration Plan (undated, received February 6, 2013) [“CPP”]. The CPP was prepared by IRG Assumptions, LLC for IRG Redevelopment I, LLC (“IRGI”). The Department’s comments on the CPP are presented herein. The comments must be addressed and incorporated into a revised CPP, which must be submitted to the Department for its review and approval. Please note that revisions can be provided to the Department as replacement pages to the CPP. A complete electronic version of the revised CPP must also be provided to the Department.

The Department and IRGI are in the process of negotiating a Consent Agreement to establish a regulatory framework between the Department and IRGI. Additionally, the Department and IRGI are in the process of negotiating a Modified Environmental Covenant in accordance with the Colorado Environmental Covenants Statute, Colorado Revised Statute §25-15-317 – 25-15-326, that would allow IRGI to execute subsurface soil borings at OU2 in accordance with an approved CPP. The Consent Agreement and the Modified Environmental Covenant must be fully executed before any work under an approved CPP can commence.

OU2 was transferred by deed from the United States Air Force (“the Grantor”) to Lowry Economic Redevelopment Authority (“the Grantee”) via a Finding of Suitability for Early Transfer (“FOSET”) in January 2006. In addition to the above-referenced Modified Environmental Covenant, the FOSET includes the following environmental protection provisions to ensure protection of human health and the environment and to preclude any interference with ongoing or completed remediation activities. The deed provides the following Restrictive Covenants:

The Grantee shall not disturb the integrity of the final cover, liner(s), or any other components of the containment system, or the function of the monitoring systems unless necessary to comply with the requirements in the regulations of the Colorado Department of Public Health and Environment.

It is the intent of the Grantor and Grantee that these Restrictive Covenants bind the Grantee and shall run with the land and are perpetual, unless modified or terminated pursuant to this paragraph. It is also the intent of the Grantor and the Grantee that the Grantor will retain the right to enforce the Restrictive Covenants through the chain of title, in addition to any State law that permits the State to enforce the Restrictive Covenants. The Grantee or its successors and assigns may request that the Air Force approve a modification or termination of any of the Restrictive Covenants. The Air Force shall review any submitted information and may request additional information. Grantor recognizes that future Grantees may change the Environmental Covenants in accordance with the Environmental Covenant Statute including but not limited to providing for limited disturbance of the final cover of OU2. Grantor agrees to consider such changes set forth in the Environmental Covenant for its Restrictive Covenant. No modification or termination of a Restrictive Covenant shall be effective unless the Air Force has approved such modification or termination in writing, which approval shall not be unreasonably withheld or delayed.

Pursuant to the requirements of the FOSET Restrictive Covenants, the Air Force must provide written approval of the Modified Environmental Covenant and the final version of the CPP prior to recording, execution, or effectiveness.

The Department's comments on the CPP are as follows:

Comment 1. The CPP must include a dated title page.

Comment 2. Section 2.0, Environmental Covenant and Use Restrictions, states that a copy of the "most current covenant" is provided in (Attachment A). However, Attachment A contains an unexecuted draft version of a possible Modified Environmental Covenant, which (once executed and approved by the Air Force) would allow cap penetrations in accordance with an approved version of the CPP. Attachment A will need to be updated to include the final executed Modified Environmental Covenant.

Comment 3. Section 4.0, Site Investigation Requirements, states that "IRGI and prospective buyers will need to perform landfill cap subsurface investigations..." In Section 4.0 or elsewhere in the document, the CPP must specify that all parties desiring to perform subsurface investigations at OU2 must provide financial assurance to the Department in accordance with the Colorado Hazardous Waste Regulations ("the Regulations"), 6 CCR 1007-3, Part 266.

Comment 4. The CPP must incorporate a notification provision. Following Department approval of each subsurface investigation work plan and corresponding financial assurance requirements, the Department requires IRGI to provide the Department with written notification of at least five calendar days identifying the planned subsurface investigation start date.

Comment 5. Section 4.2.3, Bentonite Seal: A requirement must be added to Section 4.2.3 that specifies a minimum hydration time for the bentonite seal prior to installing casing grout. Sufficient time (typically 3 to 4 hours or more) must be allowed for the bentonite seal to hydrate

and form a low permeable seal before grout is placed into the annular space above the bentonite seal.

- Comment 6.** Section 4.4, IDW Management and Equipment Decontamination: The definition of investigation-derived waste (“IDW”) must be clarified in the CPP. Because all subsurface investigations performed pursuant to the CPP will be within the OU2 landfill cap boundary, all material beneath the landfill cap (i.e., all material beneath the upper 2 feet) that is brought to the surface must be considered IDW, and must be properly disposed as either solid waste or hazardous waste as defined in the Regulations.
- Comment 7.** Section 4.4, IDW Management and Equipment Decontamination: In addition to the constituents listed in Section 4.4, IDW must also be analyzed for gross alpha particle activity.
- Comment 8.** Section 4.4.3, Liquid Investigation-Derived Waste: The CPP must stipulate that approval from CDPHE and the Colorado Division of Water Resources must be obtained prior to using the liquid IDW for dust suppression.
- Comment 9.** Section 4.6, Dewatering Procedures: The CPP must stipulate that in addition to CDPHE, approval from the Colorado Division of Water Resources must be obtained prior to land-applying dewatered groundwater.
- Comment 10.** Section 5.0, Hazardous Materials and Wastes: The CPP must clarify the role and purpose of the “*LAC oversight coordinator.*”
- Comment 11.** Section 7.0, Cap Penetration Documentation: The CPP must indicate that written reports will be submitted to the Department within 45 days following completion of work associated with each approved subsurface investigation work plan. Section 7.0 states that the report will “*include the disposition of any IDW generated during the field effort...*” The word “any” must be changed to “all.” Additionally, the CPP must indicate that each written report will include copies of all IDW manifests.
- Comment 12.** Attachment B, Section 2.0, Site Background, states that LAC conducted an extensive review of historical aerial photographs. However, the CPP (Section 3.0) states that IRGI conducted the review of historical photographs. This apparent discrepancy must be corrected.
- Comment 13.** Attachment B, Section 3.0, Scope/Specified Procedures, page 4, indicates that IRGI will provide a Colorado-certified asbestos building inspector (“CABI”) “*for oversight of such activities to assure that materials are handled properly.*” The word “oversight” implies that the IRGI CABI will not necessarily observe all soil disturbing activities associated with cap penetrations. However, Section 4.0, page 10, of the CPP states that a CABI will observe all soil disturbing activity. This apparent discrepancy must be corrected.
- Comment 14.** Attachment B, Section 3.1, Geotechnical Borings: The third full paragraph in Section 3.1 makes reference to the “*IRGI Oversight Coordinator.*” Attachment B must be revised to clarify the qualifications of the IRGI Oversight Coordinator. Is the IRGI Oversight Coordinator also the IRGI CABI?

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Comment 15. Attachment B, Section 3.2, Subsurface Investigation Borings: The third full paragraph on page 6 makes reference to the “*LAC Oversight Coordinator.*” The qualifications and role of the LAC Oversight Coordinator must be clarified in Attachment B. Is the LAC Oversight Coordinator also the IRGI CABI?

Comment 16. Attachment B, Section 3.2.1, Subsurface Borings to Evaluate/Confirm Trench Locations: The first paragraph includes the following sentence: “*All borings will cease once waste has been identified and in no case will borings be advanced further than the upper four feet of any waste body discovered.*” This sentence is not included in the CPP. Is it IRGI’s intent to allow prospective buyers to advance borings greater than four feet into waste? If not, then this sentence should also be included in the CPP. If so, then the CPP should specifically state that it’s IRGI’s intent to allow prospective buyers to advance borings greater than four feet into waste.

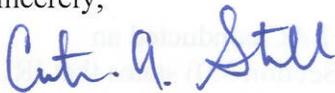
Comment 17. Attachment B, Section 3.3.1, Soil Gas Probe Installation, includes the following sentence: “*The deepest soil gas probe will be installed just above the waste/fill interface...*” The term “just above” must be defined (e.g., within six inches of the waste/fill interface, etc.).

Comment 18. Attachment B, Section 4.0, Data Evaluation and Reporting: Section 4.0 states that the report will “*include the disposition of any IDW generated during the field effort...*” The word “any” must be changed to “all.” Additionally, Attachment B must indicate that the written report will include copies of all IDW manifests.

Please note that the Department is authorized to bill for its review of technical submittals. As discussed with you during a meeting on October 3, 2012, the Department will bill its time pursuant to Section 1.7 of the Regulations Pertaining to Solid Waste Sites and Facilities (6 CCR 1007-2, Part 1). An invoice for the Department’s review of the above-referenced document will be transmitted under separate cover.

If there are any questions concerning this letter, or if you would like to discuss this letter, please contact Curt Stovall at (303) 692-2295 (e-mail: curtis.stovall@state.co.us).

Sincerely,



Curt Stovall, P.E., Project Manager
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