



October 17, 2014

Mr. Richard Corey
Executive Officer
California Air Resources Board
1001 "I" Street
Sacramento, California 95814

Re: ARB Preliminary Determination on ODS offset invalidation

Dear Mr. Corey:

The American Carbon Registry (ACR), an ARB-approved Offset Project Registry (OPR) for the California cap-and-trade program, has carefully reviewed the *Preliminary Determination, Air Resources Board Compliance Offset Investigation, Destruction of Ozone Depleting Substances* ("Preliminary Determination"), issued on October 8, 2014. Herein, ACR provides information to aid ARB in making a final determination for potential invalidation of compliance offset credits (ARBOCs) issued for Ozone Depleting Substance (ODS) destruction events that took place at the Clean Harbors Incineration Facility in El Dorado, Arkansas.

As an OPR, ACR shares ARB's interest in ensuring the integrity of all offsets and the cap-and-trade program as a whole, while also ensuring that all relevant activities have been undertaken in compliance with applicable laws and regulations. We are also dedicated to the demonstration of robust market-based programs as the most efficient means to reduce emissions cost effectively. It is in this light that we respectfully request you review further the following three points in arriving at a final determination:

1. Whether the classification in the Preliminary Determination of R-11 and R-12 as U-code hazardous wastes under the Resource Conservation and Recovery Act was correct;
2. Whether a formal enforcement action by EPA should be needed before proceeding with an invalidation;
3. Sanctioning of the brine operation by the Arkansas Department of Environmental Quality (ADEQ).

1. Waste classification

While acknowledging ARB's diligence in determining that wastes derived from treatment of R-11 (CFC-11) and R-12 (CFC-12) are considered hazardous wastes under the Resource Conservation and Recovery Act (RCRA), this determination appears to be inconsistent with

previous EPA guidance as well as with operations of existing ODS destruction facilities.

As an example, we cite guidance from US EPA in a letter dated August 2, 1989, from Acting Chief Michael J. Petruska of the Waste Characterization Branch of the US EPA Office of Solid Waste and Emergency Response to James T. Allen, Chief of the Alternative Technology Division of the California Department of Health Services' Toxic Substances Control Division.

Mr. Petruska states "...CFCs used as refrigerants, do not meet any of the hazardous waste listings. Thus, a used CFC refrigerant is a hazardous waste only if it exhibits one or more of the characteristics of a hazardous waste."

Characteristic hazardous wastes, as defined in 40 Code of Federal Regulations (CFR) 261 Subpart C, exhibit the properties of ignitability, corrosivity, reactivity, and toxicity.¹ R-11 and R-12 are not considered characteristic hazardous wastes.

ARB's Preliminary Determination specifies U codes under RCRA for R-11 and R-12. U-listed wastes are widely understood to be limited to disposal of commercial chemical products that were manufactured but never used. It is our understanding that used CFC refrigerants removed from equipment and sent for disposal should not be classified as hazardous waste under waste code U. The R-11 and R-12 in question have been used and, therefore, would not be U-listed hazardous wastes.

Of note is that the EPA inspectors' reports did not specify that R-11 and R-12 were the hazardous wastes in the brine. Given that the Clean Harbors facility processes a wide range of wastes, the inspectors could have based their conclusions on other waste constituents in the brine.² This potential may warrant closer review by ARB. Statements in section II.B.2 of the Preliminary Determination assert that the aforementioned wastes are hazardous. In Section III.E, ARB again states that the ODS destroyed at the Clean Harbors facility are classified as U-listed hazardous wastes under RCRA. If the hazardous classification was based on other wastes processed into the brine with more definitive hazardous classifications, perhaps ARB would come to a different conclusion about invalidation, as ARB limits its invalidation determination to violations directly impacted by the offset project activity.

According to Section 95985(c)(2) of California's cap-and-trade regulation, ARB may determine an offset credit is invalid if "the offset project activity and implementation of the offset project was not in accordance with all local, state, or national environmental and health and safety regulations during the Reporting Period for which the ARB offset credit was issued." An "offset project" is defined as the "equipment, materials, items, or actions that are directly related to . . . the [generation of greenhouse gas reductions] within the offset project boundary."³ ARB's

¹Code of Federal Regulations, 40 Part 261 Subpart C, Characteristic Hazardous Waste:
<http://www.epa.gov/wastes/hazard/wastetypes/characteristic.htm>

² The EPA inspection report dated January 22, 2010 refers to Attachment 24 for a list of waste codes associated with incinerated material. Attachments were not available for ACR's review.

³ Article 5, Subarticle 2, §95802(175) of California's cap-and-trade regulation.

revisions to § 95973(b) of California's cap-and-trade regulation seem to both clarify and emphasize the importance of a direct relationship between non-compliance and the offset project itself. If this was the intent of ARB's revisions, any alleged RCRA violations that are determined to be unrelated to the implementation of any offset project are arguably irrelevant to the validity of the offset credits at issue.

It appears ARB's Preliminary Determination to invalidate credits is based on a hazardous waste classification of the ODS-derived waste. As noted, EPA guidance exists to suggest that the wastes were, in fact, not hazardous, which removes the link between the alleged violation and the offset project activities.

2. Lack of Formal Enforcement Action

The ARB compliance offset credit review announced on May 29, 2014 was triggered by an April 25, 2014 Consent Agreement and Final Order (CAFO)⁴ between Clean Harbors and the US Environmental Protection Agency (EPA) related to two particular Clean Harbors operations: 1) The brine recycling operation, including classification, handling and management of brine; and 2) The carbon canister monitoring operation, including the management of canisters on RCRA permitted storage tanks to control air emissions.

ACR reviewed the CAFO, and observes that the CAFO does not represent an admission regarding the facts underlying the alleged violations on the part of Clean Harbors. Indeed, the CAFO clearly states that Clean Harbors "neither admits nor denies the specific factual allegations..." The absence of an admission, or any judicial ruling on the matter suggests the EPA inspectors' assertions should be considered alleged violations. No formal enforcement action has been taken. An inspectors' report, which is not a formal enforcement action, appears to fall short of the threshold required for an incident to be considered a violation under the cap-and-trade regulation, as revised effective July 1, 2014.

3. Sanctioning of the Brine Operation by Arkansas Department of Environmental Quality

The regulation clearly states that all relevant activities associated with the generation of offsets need to be in compliance with applicable laws and regulations. It does not address potential differences between federal and state interpretations. In this case, the handling and sale of the brine had been sanctioned by the Arkansas Department of Environmental Quality (ADEQ). The activity was conducted in a transparent manner and was believed to be legal by both Clean Harbors and ADEQ. In the absence of a formal enforcement action, it is difficult to judge whether EPA would ultimately overrule the State's sanctioning of the brine operation.

From the beginning of the investigation, ARB has affirmed that the offsets examined represent "real, quantified, and verified reductions." The environmental integrity of the offsets is not in doubt.

⁴ US EPA Consent Agreement and Final Order in the Matter of Clean Harbors El Dorado LLC (April 2014)

ARB has followed the spirit of the revised regulation § 95973(b), which both clarify and emphasize the importance of a direct relationship between non-compliance and the offset project itself by basing its determination on whether the ODS-derived wastes were hazardous under RCRA. As noted, EPA guidance exists to suggest that the wastes were, in fact, not hazardous, which would remove the link between the alleged violation and the offset project activities.

No formal enforcement action (or otherwise clear non-compliance) occurred. This threshold is specified in the revised version of the regulation.

Lastly, handling and sale of the brine had been sanctioned by the Arkansas Department of Environmental Quality (ADEQ). The activity was conducted in a transparent manner and was believed to be legal by both Clean Harbors and ADEQ.

According to Section 95985(c) of California's cap-and-trade regulation, "ARB **may** determine that an ARB offset credit is invalid ..." Further, Section 95985(f)(4) states, "The Executive Officer will have 30 calendar days after all information is submitted under this section to make a final determination that one or more conditions listed pursuant to section 95985(c) has occurred and **whether** to invalidate ARB offset credits". The regulation clearly allows ARB discretion in determining whether or not offsets should be invalidated.

ACR respectfully requests that ARB review its decision and exercise its discretion to not invalidate any offsets. The project activity can credibly be viewed to have been in compliance, and the resulting offsets represent actual reductions in greenhouse gas emissions.

Should ARB decide to proceed with offset invalidation, ACR requests that the final determination include an explanation of the parameters that frame ARB's decision so as to provide clear guidance for future offset project reviews.

ACR appreciates the opportunity to provide our comments related to ARB's investigation of ODS offset credits generated at Clean Harbors. We would be pleased to discuss these issues further, by phone or in person, as the ARB establishes a final determination. Please don't hesitate to contact me directly with any questions or for further clarifications.

Sincerely,



John Kadyszewski
Director, American Carbon Registry
an enterprise of Winrock International
jkadyszewski@winrock.org