INTERFAITH COMMUNITY ORGANIZATION, et al.,))
Plaintiff,))
v.	Civil Action No. 5-2097 (DMC)
HONEYWELL INTERNATIONAL INC., et al.,	,)
Defendant.)))
HACKENSACK RIVERKEEPER, INC., et al.	
Plaintiffs,	Civil Action No. 06-22
v.)	Consolidated under Docket No. 05-5955 (DMC-PS)
HONEYWELL INTERNATIONAL INC.,) et al.	
Defendants.)	

<u>MASS REMOVAL CONSENT DECREE</u>

Whereas, this Court entered a Final Judgment in *Interfaith Community Organization v. Honeywell International Inc.*, Case No. 95-2097("ICO v. Honeywell"), on June 30, 2003;

Whereas, paragraph 4 of the Final Judgment requires Honeywell International Inc. ("Honeywell") to "test and fully delineate the extent of chromium contamination in deep groundwater at the Site in order to ensure that this contaminated water does not discharge to the Hackensack River, or flow to any fresh water aquifer that is used as a water supply or to the bedrock. If it is found that chromium contaminated deep groundwater beneath the Site is discharging or threatening to discharge, into the Hackensack River or any other surface body or is migrating, or threatening to migrate into the bedrock or an area of a freshwater aquifer that is

used as a drinking water supply, Honeywell must take appropriate remedial actions necessary to prevent such discharge or migration. Depending on these test results, the Court will enter a further injunctive order setting forth the appropriate relief;" and

Whereas, under the oversight of the Special Master, Honeywell undertook a comprehensive investigation of the fate and transport of chromium contamination in the deep overburden and bedrock groundwater in the vicinity of Study Areas 5, 6, and 7; and

Whereas, Hackensack Riverkeeper, Inc., Lawrence Baker, Winston Clarke, and William Sheehan (collectively "Riverkeeper Plaintiffs") sued Honeywell in litigation captioned Hackensack Riverkeeper, Inc. v. Honeywell International Inc., D.N.J. Civ. No. 06-cv-0022 (consolidated with Jersey City Municipal Utilities Authority v. Honeywell International Inc., D.N.J., Civ. No. 05-cv-5993) seeking relief, among other things, for chromium contamination in the deep overburden and bedrock groundwater in the vicinity of Study Area 5 and Study Area 6; and

Whereas, as a result of Honeywell's investigation of the fate and transport of chromium contamination in the deep overburden and bedrock groundwater in the vicinity of Study Areas 5, 6, and 7, Honeywell recommended the construction of a deep groundwater extraction and treatment system ("GWET"); consisting of (a) the installation of interceptor wells on the DiFeo property to the north of Study Area 6 North to collect contaminated deep overburden groundwater; (b) the installation of a bedrock well near the southwestern corner of Study Area 7 to capture contaminated bedrock groundwater; and (c) an underground pipe system to transport the captured water to Honeywell's Treatment Plant for treatment to Honeywell's permitted discharge standards; and

Whereas, ICO and Honeywell concurred in Honeywell's proposed GWET system, the Special Master approved the GWET remedy, and this Court entered the October 6, 2006 Order Approving the Deep Overburden Groundwater Remediation and the August 19, 2008 Stipulation on Consent Regarding The Schedule for Implementation of Deep Groundwater Remedial Actions, which approved the implementation of the bedrock groundwater portion of the GWET remedy; and

Whereas, on August 29, 2008, this Court entered the Deep Overburden and Bedrock Groundwater Remedies Consent Order requiring Honeywell to implement the GWET remedy and resolving the Riverkeeper Plaintiffs' claims against Honeywell in the *Hackensack*Riverkeeper Litigation with respect to the Deep Overburden and Bedrock Groundwater; and

Whereas, in December 2008, Honeywell began operating the GWET system. As of the time of this Consent Decree, Honeywell is continuing to operate the GWET system and is capturing contaminated overburden and bedrock groundwater in the GWET system, and neither the Special Master nor any Party has recommended that the GWET system be terminated; and

Whereas, Paragraph 7 of this Court's August 29, 2008 Deep Overburden and Bedrock Groundwater Remedies Consent Order identified the possibility that additional investigative and/or remedial actions might be required to address the Deep Overburden Groundwater; and

Whereas, after further evaluation and analysis of the deep overburden groundwater before the Special Master, the Parties have agreed to, and the Special Master has recommended the provisions of this Consent Decree pursuant to the provisions of Paragraph 7 of this Court's Deep Overburden and Bedrock Groundwater Remedies Consent Order;

NOW, THEREFORE, it is ORDERED and DECREED AS FOLLOWS:

- 1. **Definitions**. (a) Terms used in this Consent Decree shall have the same definitions as those set forth in Article I of this Court's Deep Overburden and Bedrock Groundwater Remedies Consent Order, entered on August 29, 2008.
- (b) The term "Additional Remedial Activities" shall mean those additional remedial actions taken pursuant to Paragraphs 4 and 5 of this Consent Order to address chromium contamination in the Deep Overburden Groundwater.
- 2. Entry of Order in Both Cases. This Consent Order shall be entered in both *ICO v. Honeywell* and *Riverkeeper v. Honeywell*.
- 3. Special Master's Jurisdiction. The additional deep overburden remedies provided for herein are hereby referred to the Special Master pursuant to Rule 53 of the Federal Rules of Civil Procedure under the same terms and provisions as set forth in Paragraphs 4 through 6 of the Deep Overburden and Groundwater Remedies Consent Order.
- 4. Additional Deep Overburden Remedy Honeywell shall undertake the following Additional Remedial Activities with respect to the Deep Overburden Groundwater:
- a. Honeywell shall use a total of four wells for the injection of a chemical reductant whose purpose will be to reduce hexavalent chromium present in the Deep Overburden Groundwater to trivalent chromium. Honeywell may use existing wells or, alternatively, install new wells for the purposes of injecting the reductant. One of the wells shall be located on the eastern side of Route 440. Neither existing wells DP-1 and DP-2, nor the existing GWET system extraction wells shall be used for injection purposes.
- b. Honeywell shall inject the chemical reductant several times a year at one or more wells, depending on the rate at which the well or well(s) are capable of accepting and dispersing the reductant in the Deep Overburden Groundwater. Honeywell shall use reasonable

efforts to inject reductant at a cumulative annual rate that is equivalent, based on stoichiometry, to an amount sufficient to reduce 10 tons of hexavalent chromium per year. The time between injection events will depend on the strength of the specific reductant solution selected for use. Honeywell and Plaintiffs agree that Honeywell will initially attempt to inject an entire tanker truck of reductant at a single well before moving to another well, but that Honeywell may inject the reductant at more than one well at a time if a single well is not accepting or dispersing the reductant at a sufficient rate.

- c. Honeywell shall follow each reductant episode with the injection of clean water in the injection wells that have received the reductant. Honeywell agrees that it will attempt to inject at least twice the volume of clean water as the volume of reductant injected at each well.
- d. Honeywell shall develop a monitoring plan that includes (a) sampling of each of the four injection wells prior to startup; (b) sampling of any particular injection well before an injection event at that well during the first year and before every third injection event at that well thereafter; and (c) sampling of four monitoring wells and the two down gradient GWET pumping wells once prior to startup and then once every six months. Sampling pursuant to the monitoring plan shall be conducted on filtered and unfiltered samples for total chromium, hexavalent chromium, and calcium, and on filtered samples for dissolved iron.
- 5. Periodic Re-evaluation of the Additional Remedial Activities. (a) Honeywell shall conduct two periodic remedial performance evaluations of the Additional Remedial Activities. The first evaluation shall be conducted based on the first 24 months of performance of the Additional Remedial Activities and shall be submitted to the Parties and the Special Master no later than 27 months after the initiation of the Additional Remedial Activities. The second

evaluation shall be conducted based on 5 years of performance of the Additional Remedial Activities and shall be submitted to the Parties and the Special Master no later than 5 years and 3 months after the initiation of the Additional Remedial Activities. In conducting each evaluation, Honeywell shall submit a report assessing the practicability, cost-effectiveness, and necessity of the Additional Remedial Activities that have already occurred and estimating the practicability, cost-effectiveness, and necessity of the Additional Remedial Activities that are yet to occur, if any.

(b) Upon the submission of Honeywell's first periodic evaluation pursuant to Paragraph 5(a) above, any Party may propose (a) modification of the Additional Remedial Activities, (b) substitution of alternative remedial activities for the Additional Remedial Activities, or (c) the prompt termination of some or all Additional Remedial Activities. There shall be no presumption in favor of, or against, any proposed modification, substitution, or termination of any Additional Remedial Alternatives, and each Party shall retain its legal rights to advocate for or against further remediation pursuant to Paragraph 7 of the Deep Overburden and Bedrock Groundwater Remedies Consent Order. Any such proposal shall be submitted to the New Jersey Department of Environmental Protection for review and comment. The New Jersey Department of Environmental Protection shall have 30 days to provide comments, if any, to the Parties. Any proposal, including any revisions suggested by the New Jersey Department of Environmental Protection, shall be Subject to Comment by the Parties and Approval by the Special Master Any proposal approved by the Special Master shall be submitted to the Court for approval. If a substitute or modification is approved, Honeywell shall be responsible for its implementation, monitoring, maintenance, operation, repair, and replacement as if such substitute or modification constituted an Additional Remedial Activity.

6. Termination of Additional Remedial Activities.

- (a) Unless the duration of the Additional Remedial Activities has been extended or shortened pursuant to the review process set forth in Paragraph 5(b), and provided Honeywell is continuing with the Additional Remedial Activities set forth in Paragraph 4 and not a substitute or modification pursuant to Paragraph 5(b), Honeywell's obligations to conduct the Additional Remedial Activities shall terminate at the earlier of (i) five (5) years after Honeywell initiates the first reductant injection pursuant to Paragraph 4; or (ii) when an amount of reductant stoichiometrically sufficient to reduce 50 tons of hexavalent chromium has been injected into the S3 Sands.
- (b) If Honeywell is not continuing with the Additional Remedial Activities set forth in Paragraph 4, but is instead implementing a substitute or modification pursuant to Paragraph 5(b), Honeywell's obligations to conduct the Additional Remedial Activities shall terminate as provided in the Court-approved plan for the substitute or modification.
- (c) Upon termination of the Additional Remedial Activities pursuant to Paragraph 6(a), each Party shall retain its legal rights to advocate for or against further remediation pursuant to Paragraph 7 of the Deep Overburden and Bedrock Groundwater Remedies Consent Order.
- (d) In any event, the Additional Remedial Activities shall terminate no later than the time at which continued operation of the Additional Remedial Activities or any substitute or modification pursuant to Paragraph 5(b) would not achieve any significant further reduction in hexavalent chromium contamination in the S3 Sands.
- 7. Incorporation of Certain Provisions of the Deep Overburden and Bedrock
 Groundwater Remedies Consent Order. Paragraphs 13 through 26 and 30 through 34 of the
 "Deep Overburden and Bedrock Groundwater Remedies Consent Order shall be extended to

cover and apply to the Additional Remedial Activities, and the Parties' actions with respect thereto. In particular, the Additional Remedial Activities shall constitute "further investigative or remedial actions taken by Honeywell" for financial assurance purposes pursuant to Paragraph 15 of the Deep Overburden and Bedrock Groundwater Remedies Consent Order.

8. Signatures This Consent Order may be signed simultaneously or in counterparts by the respective signatories, which shall be as fully valid and binding as if a single document was signed by all of the signatories.

Consented to and approved for entry:

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APPROVED AND ENTERED as an ORDER of this Court on this

day of j

2009. JOIO

> Hon. Dennis M. Cavanaugh United States District Judge